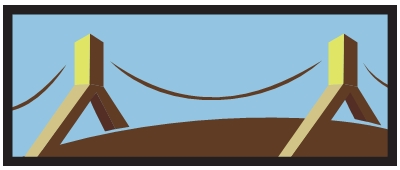
2111 SOUTH PACIFIC AVENUE PROJECT

Air Quality Technical Report



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Air Quality Analysis

1. Introduction

This report analyzes the air emissions generated by construction and operation of the Proposed Project at 2111 South Pacific Avenue. The analysis also evaluates the consistency of the Project with the air quality policies set forth within the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP) and the City of Los Angeles (City) General Plan. The analysis of Project-generated air emissions focuses on whether the Project would cause an exceedance of an ambient air quality standard or SCAQMD significance threshold. Calculation worksheets, assumptions, and model outputs used in the analysis are included in the attached Appendix.

2. Environmental Setting

a) Regulatory Framework

(1) Federal

(a) Clean Air Act

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years, with the most recent amendments in 1990. At the federal level, the United States Environmental Protection Agency (USEPA) is responsible for implementation of some portions of the CAA (e.g., certain mobile source and other requirements). Other portions of the CAA (e.g., stationary source requirements) are implemented by state and local agencies. In California, the CCAA is administered by the California Air Resources Board (CARB) at the state level and by the air quality management districts and air pollution control districts at the regional and local levels.

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the National Ambient Air Quality Standards (NAAQS). These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA which are most applicable to the Project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).

NAAQS have been established for seven major air pollutants: CO (carbon monoxide), NO_2 (nitrogen dioxide), O_3 (ozone), $PM_{2.5}$ (particulate matter, 2.5 microns), PM_{10} (particulate matter, 10 microns), SO_2 (sulfur dioxide), and Pb (lead).

The CAA requires USEPA to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the NAAQS have been achieved. Title I provisions are implemented for the purpose of attaining NAAQS. The federal standards are summarized in **Table 1**. USEPA has classified the Los Angeles County portion of the South Coast Air Basin (Basin) as a nonattainment area for O_3, $PM_{2.5}$, and Pb.

Table 1
State and National Ambient Air Quality Standards and Attainment Status for LA County

Pollutant	Averaging Period	California		Federal	
		Standards	Attainment Status	Standards	Attainment Status
Ozone (O_3)	1-hour	0.09 ppm (180 µg/m^3)	Non-attainment	--	--
	8-hour	0.070 ppm (137 µg/m^3)	N/A[1]	0.070 ppm (137 µg/m^3)	Non-attainment
Respirable Particulate Matter (PM_{10})	24-hour	50 µg/m^3	Non-attainment	150 µg/m^3	Maintenance
	Annual Arithmetic Mean	20 µg/m^3	Non-attainment	--	--
Fine Particulate Matter ($PM_{2.5}$)	24-hour	--	--	35 µg/m^3	Non-attainment
	Annual Arithmetic Mean	12 µg/m^3	Non-attainment	12 µg/m^3	Non-attainment
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Maintenance
	8-hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Maintenance
Nitrogen Dioxide (NO_2)	1-hour	0.18 ppm (338 µg/m^3)	Attainment	100 ppb (188 µg/m^3)	Maintenance
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Attainment	53 ppb (100 µg/m^3)	Maintenance
Sulfur Dioxide (SO_2)	1-hour	0.25 ppm (655 µg/m^3)	Attainment	75 ppb (196 µg/m^3)	Attainment
	24-hour	0.04 ppm (105 µg/m^3)	Attainment	--	--
Lead (Pb)	30-day average	1.5 µg/m^3	Attainment	--	--
	Calendar Quarter	--	--	0.15 µg/m^3	Non-attainment
Visibility Reducing Particles	8-hour	Extinction of 0.07 per kilometer	N/A	No Federal Standards	
Sulfates (SO_4)	24-hour	25 µg/m^3	Attainment	No Federal Standards	
Hydrogen Sulfide (H_2S)	1-hour	0.03 ppm (42 µg/m^3)	Unclassified	No Federal Standards	
Vinyl Chloride	24-hour	0.01 ppm (26 µg/m^3)	N/A	No Federal Standards	

[1]N/A = not available
Source: CARB, Ambient Air Quality Standards, and attainment status, 2019 (www.arb.ca.gov/desig/adm/adm.htm).

CAA Title II pertains to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline and automobile pollution control devices are examples of the mechanisms the USEPA uses to regulate mobile air emission sources. The provisions of Title II have resulted in tailpipe emission standards for vehicles, which have been strengthened in recent years to improve air quality. For example, the standards for NO_X emissions have been lowered substantially and the specification requirements for cleaner burning gasoline are more stringent.

The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. USEPA has jurisdiction over emission sources outside state waters (e.g., beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet stricter emission standards established by CARB. USEPA adopted multiple tiers of emission standards to reduce emissions from non-road diesel engines (e.g., diesel-powered construction equipment) by integrating engine and fuel controls as a system to gain the greatest emission reductions.

The first federal standards (Tier 1) for new non-road (or off-road) diesel engines were adopted in 1994 for engines over 50 horsepower, to be phased-in from 1996 to 2000. On August 27, 1998, USEPA introduced Tier 1 standards for equipment under 37 kW (50 horsepower) and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. The Tier 1 through 3 standards were met through advanced engine design, with no or only limited use of exhaust gas after-treatment (oxidation catalysts). Tier 3 standards for NO_X and hydrocarbon are similar in stringency to the 2004 standards for highway engines. However, Tier 3 standards for particulate matter were never adopted. On May 11, 2004, USEPA signed the final rule introducing Tier 4 emission standards, which were phased-in between 2008 and 2015. The Tier 4 standards require that emissions of particulate matter and NO_x be further reduced by about 90 percent. Such emission reductions are achieved through the use of control technologies, including advanced exhaust gas after-treatment.

(2) State

(a) California Clean Air Act

In addition to being subject to the requirements of CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). In California, CCAA is administered by CARB at the state level and by the air quality management districts and air pollution control districts at the regional and local levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for meeting the state requirements of the CAA, administering the CCAA, and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA, as amended in 1992, requires all air districts in the State to endeavor to achieve and maintain the CAAQS. CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

CARB regulates mobile air pollution sources, such as motor vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as

consumer products and certain off-road equipment. CARB established passenger vehicle fuel specifications in March 1996. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels. The State standards are summarized in **Table 1**.

The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS thresholds have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as nonattainment. Under the CCAA, the non-desert Los Angeles County portion of the Basin is designated as a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$.

(b) Toxic Air Contaminant Identification and Control Act

The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. CARB's statewide comprehensive air toxics program was established in the early 1980s. The Toxic Air Contaminant Identification and Control Act created California's program to reduce exposure to air toxics. Under the Toxic Air Contaminant Identification and Control Act, CARB is required to use certain criteria in the prioritization for the identification and control of air toxics. In selecting substances for review, CARB must consider criteria relating to "the risk of harm to public health, amount or potential amount of emissions, manner of, and exposure to, usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community" [Health and Safety Code Section 39666(f)].

The Toxic Air Contaminant Identification and Control Act also requires CARB to use available information gathered from the Air Toxics "Hot Spots" Information and Assessment Act program to include in the prioritization of compounds. CARB identified particulate emissions from diesel-fueled engines (diesel PM) TACs in August 1998. Following the identification process, CARB was required by law to determine if there is a need for further control, which led to the risk management phase of the program.

For the risk management phase, CARB formed the Diesel Advisory Committee to assist in the development of a risk management guidance document and a risk reduction plan. With the assistance of the Diesel Advisory Committee and its subcommittees, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. The Board approved these documents on September 28, 2000, paving the way for the next step in the regulatory process: the control measure phase. During the control measure phase, specific Statewide regulations designed to further reduce diesel particulate matter (PM) emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce diesel PM emissions. Breathing Hydrogen Sulfide (H_2S) at levels above the state standard could result in exposure to a disagreeable rotten eggs odor. The State does not regulate other odors.

(c) California Air Toxics Program

The California Air Toxics Program was established in 1983, when the California Legislature adopted Assembly Bill (AB) 1807 to establish a two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air.[1] In the risk identification step, CARB and the Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified, or "listed," as a TAC in California. Since inception of the program, a number of such substances have been listed, including benzene, chloroform, formaldehyde, and particulate emissions from diesel-fueled engines, among others.[2] In 1993, the California Legislature amended the program to identify the 189 federal hazardous air pollutants as TACs.

In the risk management step, CARB reviews emission sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on results of that review, CARB has promulgated a number of airborne toxic control measures (ATCMs), both for mobile and stationary sources. In 2004, CARB adopted an ATCM to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel PM and other TACs. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given time.

In addition to limiting exhaust from idling trucks, CARB adopted regulations on July 26, 2007 for off-road diesel construction equipment such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles to reduce emissions by installation of diesel particulate filters and encouraging the replacement of older, dirtier engines with newer emission-controlled models. Implementation is staggered based on fleet size, with the largest operators having begun compliance in 2014.[3]

(d) Assembly Bill 2588 Air Toxics "Hot Spots" Program

The AB 1807 program is supplemented by the AB 2588 Air Toxics "Hot Spots" program, which was established by the California Legislature in 1987. Under this program, facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks if present. In 1992, the AB 2588 program was amended by Senate Bill (SB) 1731 to require facilities that pose a significant health risk to the community to reduce their risk through implementation of a risk management plan.

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1 CARB, California Air Toxics Program, www.arb.ca.gov/toxics/toxics.htm, last reviewed by CARB September 24, 2015.

2 CARB, Toxic Air Contaminant Identification List, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed by CARB July 18, 2011.

3 CARB, In-Use Off-Road Diesel-Fueled Fleets Regulation, www.arb.ca.gov/msprog/ordiesel/ordiesel.htm, last reviewed by CARB July 28, 2016.

(e) Air Quality and Land Use Handbook: A Community Health Perspective

CARB published the *Air Quality and Land Use Handbook* (CARB Handbook) on April 28, 2005 to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines.

(f) California Code of Regulations

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended or repealed by the state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in CCR Title 13 states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) used during construction shall be limited to five minutes at any location. In addition, Section 93115 in CCR Title 17 states that operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

(3) Regional

(a) South Coast Air Quality Management District

The SCAQMD was created in 1977 to coordinate air quality planning efforts throughout Southern California. SCAQMD is the agency principally responsible for comprehensive air pollution control in the region. Specifically, SCAQMD is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain the CAAQS and NAAQS in the district. SCAQMD has jurisdiction over an area of 10,743 square miles consisting of Orange County; the non-desert portions of Los Angeles, Riverside, and San Bernardino counties; and the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. The Basin portion of SCAQMD's jurisdiction covers an area of 6,745 square miles. The Basin includes all of Orange County and the non-desert portions of Los Angeles (including the Project Area), Riverside, and San Bernardino counties. The Basin is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east; and the San Diego County line to the south.

Programs that were developed by SCAQMD to attain and maintain the CAAQS and NAAQS include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. SCAQMD 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 projects in the SCAQMD jurisdiction are subject to SCAQMD rules and regulations, including, but not limited to the following:

- Rule 401 Visible Emissions – This rule prohibits an air discharge that results in a plume that is as dark or darker than what is designated as No. 1 Ringelmann Chart by the United States Bureau of Mines for an aggregate of three minutes in any one hour.

- Rule 402 Nuisance – This rule prohibits the discharge of "such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of people or the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property."

- Rule 403 Fugitive Dust – This rule requires that future projects reduce the amount of particulate matter entrained in the ambient air as a result of fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions from any active operation, open storage pile, or disturbed surface area.

(b) Air Quality Management Plan

The 2016 Air Quality Management Plan (AQMP) was adopted in April 2017 and represents the most updated regional blueprint for achieving federal air quality standards. The 2016 AQMP adapts previously conducted regional air quality analyses to account for the recent unexpected drought conditions and presents a revised approach to demonstrated attainment of the 2006 24-hour $PM_{2.5}$ NAAQS for the Basin. Additionally, the 2016 AQMP relied upon a comprehensive analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures to evaluate strategies for reducing NO_X emissions sufficiently to meet the upcoming ozone deadline standards.

(c) Multiple Air Toxics Exposure Study IV

To date, the most comprehensive study on air toxics in the Basin is the Multiple Air Toxics Exposure Study IV (MATES-IV).[4] The monitoring program measured more than 30 air pollutants, including both gases and particulates. The monitoring study was accompanied by a computer modeling study in which the SCAQMD estimated the risk of cancer from breathing toxic air pollution throughout the region based on emissions and weather data. MATES-IV found that the cancer risk in the region from carcinogenic air pollutants ranges from about 320 to 480 in a million, though OEHHA methodologies place average basinwide risk at approximately 897 in a million. About 90 percent of the risk is attributed to emissions associated with mobile sources, with the remainder attributed to toxics emitted from stationary sources, which include large industrial

[4] The SCAQMD is updating the monitoring, modeling, and analysis. The final MATES-V study is due in Fall 2019.

operations, such as refineries and metal processing facilities, as well as smaller businesses such as gas stations and chrome plating. The results indicate that diesel PM is the major contributor to air toxics risk, accounting on average for about 68 percent of the total risk.

(d) Southern California Association of Governments (SCAG)

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements, including the Transportation Conformity Rule and other applicable federal, state, and air district laws and regulations. As the federally designated Metropolitan Planning Organization (MPO) for the six-county Southern California region, SCAG is required by law to ensure that transportation activities "conform" to, and are supportive of, the goals of regional and state air quality plans to attain the NAAQS. In addition, SCAG is a co-producer, with the SCAQMD, of the transportation strategy and transportation control measure sections of the AQMP for the Air Basin.

SCAG adopted the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) on April 7, 2016.[5,6] The 2016–2040 RTP/SCS reaffirms the land use policies that were incorporated into SCAG's prior 2012–2035 RTP/SCS. These foundational policies, which guided the development of the plan's land use strategies, include the following:

- Identify regional strategic areas for infill and investment;
- Structure the plan on a three-tiered system of centers development;
- Develop "Complete Communities";
- Develop nodes on a corridor;
- Plan for additional housing and jobs near transit;
- Plan for changing demand in types of housing;
- Continue to protect stable, existing single-family areas;
- Ensure adequate access to open space and preservation of habitat; and
- Incorporate local input and feedback on future growth.

The 2016–2040 RTP/SCS recognizes that transportation investments and future land use patterns are inextricably linked, and continued recognition of this close relationship will help the region make choices that sustain existing resources and expand efficiency, mobility, and accessibility for people across the region. In particular, the 2016–2040 RTP/SCS draws a closer connection between where people live and work, and it offers a blueprint for how Southern California can grow more sustainably. The 2016–2040 RTP/SCS also includes strategies focused on compact infill development and economic growth by building the infrastructure the region

5 SCAG, Final 2016–2040 RTP/SCS.

6 CARB, Executive Order G-16-066, SCAG 2016 SCS ARB Acceptance of GHG Quantification Determination, June 2016.

needs to promote the smooth flow of goods and easier access to jobs, services, educational facilities, healthcare and more.

The 2016–2040 RTP/SCS states that the SCAG region was home to about 18.3 million people in 2012 and included approximately 5.9 million homes and 7.4 million jobs.[7] By 2040, the integrated growth forecast projects these figures will increase by 3.8 million people, with nearly 1.5 million more homes and 2.4 million more jobs.

(4) Local

(a) City of Los Angeles General Plan Air Quality Element

The Air Quality Element of the City's General Plan was adopted on November 24, 1992, and sets forth the goals, objectives, and policies, which guide the City in the implementation of its air quality improvement programs and strategies. The Air Quality Element acknowledges the interrelationships among transportation and land use planning in meeting the City's mobility and air quality goals.

The Air Quality Element includes six key goals:

Goal 1: Good air quality in an environment of continued population growth and healthy economic structure.

Goal 2: Less reliance on single-occupant vehicles with fewer commute and non-work trips.

Goal 3: Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand management techniques.

Goal 4: Minimize impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.

Goal 5: Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels and the implementation of conservation measures including passive measures such as site orientation and tree planting.

Goal 6: Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

(b) Clean Up Green Up Ordinance

[7] The SCAG 2016–2040 RTP/SCS is based on year 2012 demographic data with growth forecasts developed for 2020, 2035, and 2040.

The City of Los Angeles adopted a Clean Up Green Up Ordinance (Ordinance Number 184,245) on April 13, 2016, which among other provisions, includes provisions related to ventilation system filter efficiency in mechanically ventilated buildings. This ordinance added Sections 95.314.3 and 99.04.504.6 to the Los Angeles Municipal Code (LAMC) and amended Section 99.05.504.5.3 to implement building standards and requirements to address cumulative health impacts resulting from incompatible land use patterns.

(c) California Environmental Quality Act

In accordance with CEQA requirements, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The City uses the SCAQMD's *CEQA Air Quality Handbook* and SCAQMD's supplemental online guidance/information for the environmental review of plans and development proposals within its jurisdiction.

(d) Land Use Compatibility

In November 2012, the Los Angeles City Planning Commission (CPC) issued an advisory notice (Zoning Information 2427) regarding the siting of sensitive land uses within 1,000 feet of freeways. The CPC deemed 1,000 feet to be a conservative distance to evaluate projects that house populations considered to be more at-risk from the negative effects of air pollution caused by freeway proximity. The CPC advised that applicants of projects requiring discretionary approval, located within 1,000 feet of a freeway and contemplating residential units and other sensitive uses (e.g., hospitals, schools, retirement homes) perform a Health Risk Assessment (HRA). The Project Site is more than 1,000 feet of any freeway, as it is 1.58 miles south of the terminus of the SR-110 freeway.

The City of Los Angeles adopted a Clean Up Green Up Ordinance (Ordinance Number 184,245) on April 13, 2016, which among other provisions, includes provisions related to ventilation system filter efficiency in mechanically ventilated buildings located within specified distances from a freeway. This ordinance added Sections 95.314.3 and 99.04.504.6 to the Los Angeles Municipal Code (LAMC) and amended Section 99.05.504.5.3 to implement building standards and requirements to address cumulative health impacts resulting from incompatible land use patterns.

On April 12, 2018, the City updated its guidance on siting land uses near freeways, resulting in an updated Advisory Notice effective September 17, 2018 requiring all proposed projects within 1,000 feet of a freeway adhere to the Citywide Design Guidelines, including those that address freeway proximity. It also recommended that projects consider avoiding location of sensitive uses like schools, day care facilities, and senior care centers in such projects, locate open space areas as far from the freeway as possible when the size of the site permits, locate non-habitable uses (e.g., parking structures) nearest the freeway, and screen project sites with substantial vegetation and/or a wall barrier. The Advisory Notice also informs project applicants of the regulatory

requirements of the Clean Up Green Up Ordinance. Requirements for preparing HRAs were removed.

b) Existing Conditions

(1) Pollutants and Effects

(a) State and Federal Criteria Pollutants

Air quality is defined by ambient air concentrations of seven specific pollutants identified by the USEPA to be of concern with respect to health and welfare of the general public. These specific pollutants, known as "criteria air pollutants," are defined as pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants include carbon monoxide (CO), ground-level ozone (O_3), nitrogen oxides (NO_X), sulfur oxides (SO_X), particulate matter ten microns or less in diameter (PM_{10}), particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), and lead (Pb). The following descriptions of each criteria air pollutant and their health effects are based on information provided by the SCAQMD.[8]

Carbon Monoxide (CO). CO is primarily emitted from combustion processes and motor vehicles due to incomplete combustion of fuel. Elevated concentrations of CO weaken the heart's contractions and lower the amount of oxygen carried by the blood. It is especially dangerous for people with chronic heart disease. Inhalation of CO can cause nausea, dizziness, and headaches at moderate concentrations and can be fatal at high concentrations.

Ozone (O_3). O_3 is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_X)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. An elevated level of O_3 irritates the lungs and breathing passages, causing coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency.

Nitrogen Dioxide (NO_2). NO_2 is a byproduct of fuel combustion and major sources include power plants, large industrial facilities, and motor vehicles. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), which reacts quickly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO_2 also contributes to the formation of PM_{10}. Nitrogen oxides irritate the nose and throat, and increase one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO_X is as a precursor to the formation of ozone.

[8] SCAQMD, Final Program Environmental Impact Report for the 2012 AQMP, December 7, 2012.

Sulfur Dioxide (SO_2). Sulfur oxides (SO_X) are compounds of sulfur and oxygen molecules. SO_2 is the pre- dominant form found in the lower atmosphere and is a product of burning sulfur or burning materials that contain sulfur. Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of sulfur dioxide aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO_2 potentially causes wheezing, shortness of breath, and coughing. High levels of particulates appear to worsen the effect of sulfur dioxide, and long-term exposures to both pollutants leads to higher rates of respiratory illness.

Particulate Matter (PM_{10} and $PM_{2.5}$). The human body naturally prevents the entry of larger particles into the body. However, small particles, with an aerodynamic diameter equal to or less than 10 microns (PM_{10}), and even smaller particles with an aerodynamic diameter equal to or less than 2.5 microns ($PM_{2.5}$), can enter the body and become trapped in the nose, throat, and upper respiratory tract. These small particulates can potentially aggravate existing heart and lung diseases, change the body's defenses against inhaled materials, and damage lung tissue. The elderly, children, and those with chronic lung or heart disease are most sensitive to PM_{10} and $PM_{2.5}$. Lung impairment can persist for two to three weeks after exposure to high levels of particulate matter. Some types of particulates can become toxic after inhalation due to the presence of certain chemicals and their reaction with internal body fluids.

Lead (Pb). Lead is emitted from industrial facilities and from the sanding or removal of old lead-based paint. Smelting or processing the metal is the primary source of lead emissions, which is primarily a regional pollutant. Lead affects the brain and other parts of the body's nervous system. Exposure to lead in very young children impairs the development of the nervous system, kidneys, and blood forming processes in the body.

(b) State-only Criteria Pollutants

Visibility-Reducing Particles. Deterioration of visibility is one of the most obvious manifestations of air pollution and plays a major role in the public's perception of air quality. Visibility reduction from air pollution is often due to the presence of sulfur and NO_X, as well as PM.

Sulfates (SO_4^{2-}). Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized during the combustion process and subsequently converted to sulfate compounds in the atmosphere. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, due to fact that they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide (H_2S). H_2S is a colorless gas with the odor of rotten eggs, formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer

gas and natural gas and can be emitted as the result of geothermal energy exploitation. Breathing H_2S at levels above the state standard could result in exposure to a very disagreeable odor.

Vinyl Chloride. Vinyl chloride is a colorless, flammable gas at ambient temperature and pressure. It is also highly toxic and is classified as a known carcinogen by the American Conference of Governmental Industrial Hygienists and the International Agency for Research on Cancer. At room temperature, vinyl chloride is a gas with a sickly-sweet odor that is easily condensed. However, it is stored at cooler temperatures as a liquid. Due to the hazardous nature of vinyl chloride to human health, there are no end products that use vinyl chloride in its monomer form. Vinyl chloride is a chemical intermediate, not a final product. It is an important industrial chemical chiefly used to produce polyvinyl chloride (PVC). The process involves vinyl chloride liquid fed to polymerization reactors where it is converted from a monomer to a polymer PVC. The final product of the polymerization process is PVC in either a flake or pellet form. Billions of pounds of PVC are sold on the global market each year. From its flake or pellet form, PVC is sold to companies that heat and mold the PVC into end products such as PVC pipe and bottles. Vinyl chloride emissions are historically associated primarily with landfills.

(2) Toxic Air Contaminants

TACs refer to a diverse group of "non-criteria" air pollutants that can affect human health but have not had ambient air quality standards established for them. This is not because they are fundamentally different from the pollutants discussed above but because their effects tend to be local rather than regional. TACs are classified as carcinogenic (i.e., can cause cancer) and noncarcinogenic (i.e., can cause acute and chronic impacts to different target organ systems, such as eyes, respiratory, reproductive, developmental, nervous, and cardiovascular.

CARB and OEHHA determine if a substance should be formally identified, or "listed," as a TAC in California. A complete list of these substances is maintained on CARB's website.[9]

Diesel particulate matter (DPM), which is emitted in the exhaust from diesel engines, was listed by the state as a TAC in 1998. DPM has historically been used as a surrogate measure of exposure for all diesel exhaust emissions. DPM consists of fine particles (fine particles have a diameter less than 2.5 micrometer (µm)), including a subgroup of ultrafine particles (ultrafine particles have a diameter less than 0.1 µm). Collectively, these particles have a large surface area which makes them an excellent medium for absorbing organics. The visible emissions in diesel exhaust include carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and cancer-causing substances.

Exposure to DPM may be a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. DPM levels and resultant potential health effects may be higher in close proximity to heavily traveled roadways with substantial truck traffic or near industrial facilities. According to CARB, DPM exposure may lead to the following

[9] CARB, Toxic Air Contaminant Identification List, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed by CARB July 18, 2011.

adverse health effects: (1) aggravated asthma; (2) chronic bronchitis; (3) increased respiratory and cardiovascular hospitalizations; (4) decreased lung function in children; (5) lung cancer; and (6) premature deaths for people with heart or lung disease.[10,11]

(3) Volatile Organic Compounds

VOCs are typically formed from combustion of fuels and/or released through evaporation of organic liquids. Some VOCs are also classified by the state as toxic air contaminants. While there are no specific VOC ambient air quality standards, VOC is a prime component (along with NO_X) of the photochemical processes by which such criteria pollutants as ozone, nitrogen dioxide, and certain fine particles are formed. They are, thus, regulated as "precursors" to the formation of those criteria pollutants.

(4) Project Site

The Project Site is located within the South Coast Air Basin (the Basin); named so because of its geographical formation is that of a basin, with the surrounding mountains trapping the air and its pollutants in the valleys or basins below. The 6,745-square-mile Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. It is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east; and the San Diego County line to the south. Ambient pollution concentrations recorded in Los Angeles County portion of the Basin are among the highest in the four counties comprising the Basin. USEPA has classified Los Angeles County as nonattainment areas for O_3, $PM_{2.5}$, and lead. This classification denotes that the Basin does not meet the NAAQS for these pollutants. In addition, under the CCAA, the Los Angeles County portion of the Basin is designated as a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. The air quality within the Basin is primarily influenced by a wide range of emissions sources, such as dense population centers, heavy vehicular traffic, industry, and meteorology.

Air pollutant emissions are generated in the local vicinity by stationary and area-wide sources, such as commercial activity, space and water heating, landscaping maintenance, consumer products, and mobile sources primarily consisting of automobile traffic.

(a) Air Pollution Climatology[12]

The topography and climate of Southern California combine to make the Basin an area of high air pollution potential. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cooler surface layer which inhibits the pollutants from dispersing upward. Light winds during the summer further limit

10 CARB, Overview: Diesel Exhaust and Health, www.arb.ca.gov/research/diesel/diesel-health.htm, last reviewed by CARB April 12, 2016.

11 CARB, Fact Sheet: Diesel Particulate Matter Health Risk Assessment Study for the West Oakland Community: Preliminary Summary of Results, March 2008.

12 AQMD, Final Program Environmental Impact Report for the 2012 AQMP, December 7, 2012.

ventilation. Additionally, abundant sunlight triggers photochemical reactions which produce O_3 and the majority of particulate matter.

(b) Air Monitoring Data

The SCAQMD monitors air quality conditions at 38 source receptor areas (SRA) throughout the Basin. The Project Site is located in SCAQMD's South Coastal LA County receptor area. Historical data from the area was used to characterize existing conditions in the vicinity of the Project area. **Table 2** shows pollutant levels, State and Federal standards, and the number of exceedances recorded in the area from 2016 through 2018. The one-hour State standard for O_3 was not exceeded during this three-year period, the daily State standard for PM_{10} was exceeded 21 times while the daily federal standard for $PM_{2.5}$ was exceeded seven times. CO and NO_2 levels did not exceed the CAAQS from 2016 through 2018 for 1-hour (and 8-hour for CO).

Table 2
Ambient Air Quality Data

Pollutants and State and Federal Standards	Maximum Concentrations and Frequencies of Exceedance Standards		
	2016	2017	2018
Ozone (O_3)			
Maximum 1-hour Concentration (ppm)	0.079	0.082	0.074
Days > 0.09 ppm (State 1-hour standard)	0	0	0
Days > 0.070 ppm (Federal 8-hour standard)	0	0	0
Carbon Dioxide (CO_2)			
Maximum 1-hour Concentration (ppm)	3.3	3.9	4.7
Days > 20 ppm (State 1-hour standard)	0	0	0
Maximum 8-hour Concentration (ppm)	2.2	2.6	2.1
Days > 9.0 ppm (State 8-hour standard)	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum 1-hour Concentration (ppm)	0.0756	0.0895	0.0853
Days > 0.18 ppm (State 1-hour standard)	0	0	0
PM_{10}			
Maximum 24-hour Concentration (µg/m^3)	75	79	55
Days > 50 µg/m^3 (State 24-hour standard)	8	9	4
$PM_{2.5}$			
Maximum 24-hour Concentration (µg/m^3)	29.4	56.3	47.1
Days > 35 µg/m^3 (Federal 24-hour standard)	0	5	2
Sulfur Dioxide (SO_2)			
Maximum 24-hour Concentration (ppb)	17.8	19.7	10.5
Days > 0.04 ppm (State 24-hour standard)	0	0	0

ppm = parts by volume per million of air.
µg/m^3 = micrograms per cubic meter.
N/A = not available at this monitoring station.
Source: SCAQMD annual monitoring data (http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year) accessed October 22, 2019. Data derived from the higher of the South Coastal LA County 2 and 3 receptors.

(c) Existing Health Risk in the Surrounding Area

Based on the MATES-IV model, the calculated cancer risk in the Project area is approximately 1,471 in a million.[13] The cancer risk in this area is predominately related to nearby sources of diesel particulate matter (e.g., SR-110 freeway to the north, Ports of Long Beach and Los Angeles to the east). In general, the risk at the Project Site is higher than the average across the South Coast Air Basin.

The Office of Environmental Health Hazard Assessment, on behalf of CalEPA, provides a screening tool called CalEnviroScreen that can be used to help identify California communities disproportionately burdened by multiple sources of pollution. According to CalEnviroScreen, the Project site is located in the 80-85th percentile, which means the Project site is higher than average in comparison to other communities within California.[14]

(d) Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following groups who are most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The Project Site is located in the San Pedro neighborhood of Los Angeles, a mixed neighborhood with commercial and retail uses on Pacific Avenue. As a result, sensitive receptors within 1,000 feet of the Project Site include but are not limited to the following that are representative of receptors in the area:

- Multi-family residences, 523 West 21th Street; 25 feet west of the Project site.
- Multi-family residences, 2041 South Pacific Avenue; as close as 65 feet north of the Project site to the main residence.
- Multi-family residences, 2102 South Pacific Avenue; 70 feet east of the Project site.
- Pacific View Guest Home, 2300 South Pacific Avenue; 360 feet south of the Project site.

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[13] SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-IV), MATES IV Interactive Carcinogenicity Map, 2015, https://scaqmd-online.maps.arcgis.com/apps/webappviewer/index.html?id=470c30bc6daf4ef6a43f0082973ff45f, accessed October 22, 2019.

[14] Office of Environmental Health Hazard Assessment, CalEnviroScreen 3.0 MAP, https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30, accessed October 22, 2019.

(e) Existing Project Site Emissions

The Project Site is currently occupied by a 1,490 square-foot restaurant and bar with an accompanying surface parking lot. As shown in **Table 3**, the majority of emissions are from the 170 vehicles that travel to and from the Project Site each day.

Table 3
Current Daily Operations Emissions

Emissions Source	Daily Emissions (Pounds Per Day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	<1	<1	<1	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	<1	1	3	<1	<1	<1
Net Regional Total	**<1**	**1**	**3**	**<1**	**1**	**<1**
Source: DKA Planning, 2019 based on CalEEMod 2016.3.2 model runs.						

3. Project Impacts

a) Methodology

The air quality analysis conducted for the Project is consistent with the methods described in the SCAQMD CEQA Air Quality Handbook (1993 edition), as well as the updates to the CEQA Air Quality Handbook, as provided on the SCAQMD website. The SCAQMD recommends the use of the California Emissions Estimator Model (CalEEMod, version 2016.3.2) as a tool for quantifying emissions of air pollutants that will be generated by constructing and operating development projects. The analyses focus on the potential change in air quality conditions due to Project implementation. Air pollutant emissions would result from both construction and operation of the Project. Specific methodologies used to evaluate these emissions are discussed below.

(1) Construction

Sources of air pollutant emissions associated with construction activities include heavy-duty off-road diesel equipment and vehicular traffic to and from the Project construction site. Project-specific information was provided describing the schedule of construction activities and the equipment inventory required from the Applicant. Details pertaining to the schedule and equipment can be found in the attached Appendix. The CalEEMod model provides default values for daily equipment usage rates and worker trip lengths, as well as emission factors for heavy-duty equipment, passenger vehicles, and haul trucks that have been derived by the CARB. Maximum daily emissions were quantified for each construction activity based on the number of equipment and daily hours of use, in addition to vehicle trips to and from the Project Site.

The SCAQMD recommends that air pollutant emissions be assessed for both regional scale and localized impacts. The regional emissions analysis includes both on-site and off-site sources of

emissions, while the localized emissions analysis focuses only on sources of emissions that would be located on the Project Site.

Localized impacts were analyzed in accordance with the SCAQMD Localized Significance Threshold (LST) methodology.[15] The localized effects from on-site portion of daily emissions were evaluated at sensitive receptor locations potentially impacted by the Project according to the SCAQMD's localized significance thresholds (LST) methodology, which uses on-site mass emission look-up tables and Project-specific modeling, where appropriate.[16] SCAQMD provides LSTs applicable to the following criteria pollutants: NO_X, CO, PM_{10}, and $PM_{2.5}$. SCAQMD does not provide an LST for SO_2 since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant. Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. The mass rate look-up tables were developed for each source receptor area and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. SCAQMD provides LST mass rate look-up tables for projects with active construction areas that are less than or equal to five acres. If the project exceeds the LST look-up values, then the SCAQMD recommends that project-specific air quality modeling must be performed. Please refer to **Threshold b** below, for the analysis of localized impacts from on-site construction activities. In accordance with SCAQMD guidance, maximum daily emissions of NO_X, CO, PM_{10}, and $PM_{2.5}$ from on-site sources during each construction activity were compared to LST values for a one-acre site having sensitive receptors within 25 meters (82 feet).[17]

The Basin is divided into 38 SRAs, each with its own set of maximum allowable LST values for on-site emissions sources during construction and operations based on locally monitored air quality. The Project Site is located in the South Coastal LA County SRA. Maximum on-site emissions resulting from construction activities were quantified and assessed against the applicable LST values for this SRA.

The significance criteria and analysis methodologies in the SCAQMD's CEQA Air Quality Handbook were used in evaluating impacts in the context of the CEQA significance criteria listed below. The SCAQMD LSTs for NO_2, CO, and PM_{10} were initially published in June 2003 and

15 SCAQMD, Final Localized Significance Methodology, revised July 2008.
16 SCAQMD, LST Methodology Appendix C-Mass Rate LST Look-Up Table, October 2009.
17 SCAQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2008.

revised in July 2008.[18] The LSTs for $PM_{2.5}$ were established in October 2006.[19] Updated LSTs were published on the SCAQMD website on October 21, 2009.[20] **Table 3** presents the significance criteria for both construction and operational emissions.

Table 3
SCAQMD Construction Emissions Thresholds

Criteria Pollutant	Construction Emissions		Operation Emissions
	Regional	Localized /a/	
Volatile Organic Compounds (VOC)	75	--	55
Nitrogen Oxides (NO_X)	100	57	55
Carbon Monoxide (CO)	550	585	550
Sulfur Oxides (SO_X)	150	--	150
Respirable Particulates (PM_{10})	150	4	150
Fine Particulates ($PM_{2.5}$)	55	3	55

In pounds per day for the South Coastal LA SRA
/a/ Localized significance thresholds assumed a 1-acre and 25-meter (82-foot) receptor distance, which are the smallest Project Site and shortest distance used for analysis in the LST guidance document. The SCAQMD has not developed LST values for VOC or SO_X.
Source: SCAQMD

(2) Operations

CalEEMod also generates estimates of daily and annual emissions of air pollutants resulting from future operation of a project. Operational emissions of air pollutants are produced by mobile sources (vehicular travel) and stationary sources (utilities demand). The Project Site is serviced by the Los Angeles Department of Water and Power (LADWP), for which CalEEMod has derived default emissions factors for electricity and natural gas usage that are applied to the size and land use type of the Project in question. CalEEMod also generates estimated operational emissions associated water use, wastewater generation, and solid waste disposal.

Similar to construction, SCAQMD's CalEEMod software was used for the evaluation of Project emissions during operation. CalEEMod was used to calculate on-road fugitive dust, architectural coatings, landscape equipment, energy use, mobile source, and stationary source emissions. To determine if a significant air quality impact would occur, the net increase in regional and local operational emissions generated by the Project was compared against the SCAQMD's significance thresholds.[21]

[18] SCAQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2008.

[19] SCAQMD, Final – Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds, October 2006.

[20] SCAQMD, Final Localized Significance Threshold Methodology Appendix C – Mass Rate LST Look-Up Tables, October 21, 2009.

[21] SCAQMD, SCAQMD Air Quality Significance Thresholds, revised March 2015. SCAQMD based these thresholds, in part on the federal Clean Air Act and, to enable defining "significant" for CEQA purposes, defined the setting as the South Coast Air Basin. (See SCAQMD, CEQA Air Quality Handbook, April 1993, pp. 6-1-6-2).

(3) Toxic Air Contaminants Impacts (Construction and Operations)

Potential TAC impacts are evaluated by conducting a qualitative analysis consistent with the CARB Handbook followed by a more detailed analysis (i.e., dispersion modeling), as necessary. The qualitative analysis consists of reviewing the Project to identify any new or modified TAC emissions sources. If the qualitative evaluation does not rule out significant impacts from a new source, or modification of an existing TAC emissions source, a more detailed analysis is conducted.

b) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

Appendix G of the State CEQA Guidelines provides a set of screening questions that are intended to assist lead agencies when assessing a project's potential impacts with regards to air quality. The City has adopted these standards as the applicable thresholds of significance for the Project. These questions ask whether the Project would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard;

c) Expose sensitive receptors to substantial pollutant concentrations; or

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people).

(2) 2006 L.A. CEQA Thresholds Guide and SCAQMD Thresholds

For this analysis the Appendix G Thresholds are relied upon. The analysis utilizes factors and considerations identified in the 2006 L.A. CEQA Thresholds Guide (Thresholds Guide) and SCAQMD Thresholds, as appropriate, to assist in answering the Appendix G Threshold questions.

(a) Construction

The Thresholds Guide states that the determination of significance shall be made on a case-by-case basis, considering the following criteria to evaluate construction-related air emissions:

(i) Combustion Emissions from Construction Equipment

- Type, number of pieces and usage for each type of construction equipment;
- Estimated fuel usage and type of fuel (diesel, natural gas) for each type of equipment; and
- Emission factors for each type of equipment.

(ii) Fugitive Dust—Grading, Excavation and Hauling

- Amount of soil to be disturbed on-site or moved off-site;
- Emission factors for disturbed soil;
- Duration of grading, excavation and hauling activities;
- Type and number of pieces of equipment to be used; and
- Projected haul route.

(iii) Fugitive Dust—Heavy-Duty Equipment Travel on Unpaved Road

- Length and type of road;
- Type, number of pieces, weight and usage of equipment; and
- Type of soil.

(iv) Other Mobile Source Emissions

- Number and average length of construction worker trips to Project Site, per day; and
- Duration of construction activities.

In addition, the following criteria set forth in the SCAQMD's *CEQA Air Quality Handbook* serve as quantitative air quality standards to be used to evaluate project impacts under the Appendix G Thresholds. Under these thresholds, a significant threshold would occur when:[22]

- Regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 100 pounds per day for NO_X; (2) 75 pounds a day for VOC; (3) 150 pounds per day for PM_{10} or SO_X; (4) 55 pounds per day for $PM_{2.5}$; and (5) 550 pounds per day for CO.

[22] SCAQMD, SCAQMD Air Quality Significance Thresholds, revised March 2015.

- Maximum on-site daily localized emissions exceed the LST, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 ppm [23,000 µg/m^3] over a 1-hour period or 9.0 ppm [10,350 µg/m^3] averaged over an 8-hour period) and NO_2 (0.18 ppm [339 µg/m^3] over a 1-hour period, 0.1 ppm [188 µg/m^3] over a three-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm [57 µg/m^3] averaged over an annual period).

- Maximum on-site localized PM_{10} or $PM_{2.5}$ emissions during construction exceed the applicable LSTs, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed the incremental 24-hour threshold of 10.4 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.

(b) Operation

The Thresholds Guide bases the determination of significance of operational air quality impacts on criteria set forth in the SCAQMD's *CEQA Air Quality Handbook*.[23] However, as discussed above, the City has chosen to use Appendix G as the thresholds of significance for this analysis. Accordingly, the following serve as quantitative air quality standards to be used to evaluate project impacts under the Appendix G thresholds. Under these thresholds, a significant threshold would occur when:

- Operational emissions exceed 10 tons per year of volatile organic gases or any of the following SCAQMD prescribed threshold levels: (1) 55 pounds a day for VOC;[24] (2) 55 pounds per day for NO_X; (3) 550 pounds per day for CO; (4) 150 pounds per day for SO_X; (5) 150 pounds per day for PM_{10}; and (6) 55 pounds per day for $PM_{2.5}$.[25,26]

- Maximum on-site daily localized emissions exceed the LST, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 parts per million (ppm) over a 1-hour period or 9.0 ppm averaged over an 8-hour period) and NO_2 (0.18 ppm over a 1-hour period, 0.1 ppm over a 3-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm averaged over an annual period).[27]

[23] SCAQMD, SCAQMD Air Quality Significance Thresholds, revised March 2015.

[24] For purposes of this analysis, emissions of VOC and reactive organic compounds (ROG) are used interchangeably since ROG represents approximately 99.9 percent of VOC emissions.

[25] City of Los Angeles, L.A. CEQA Thresholds Guide, 2006, p. B.2-5.

[26] SCAQMD Air Quality Significance Thresholds, www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf, last updated March 2015.

[27] SCAQMD, Final Localized Significance Threshold Methodology, revised July 2008.

- Maximum on-site localized operational PM_{10} and $PM_{2.5}$ emissions exceed the incremental 24-hour threshold of 2.5 µg/m^3 or 1.0 µg/m^3 PM_{10} averaged over an annual period.[28]

- The Project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively; or

- The Project creates an odor nuisance pursuant to SCAQMD Rule 402.

(c) Toxic Air Contaminants

The Thresholds Guide states that the determination of significance shall be made on a case-by-case basis, considering the following criteria to evaluate TACs:

- Would the project use, store, or process carcinogenic or non-carcinogenic toxic air contaminants which could result in airborne emissions?

In assessing impacts related to TACs in this section, the City will use Appendix G as the thresholds of significance. The criteria identified above from the Thresholds Guide will be used where applicable and relevant to assist in analyzing the Appendix G thresholds. In addition, the following criteria set forth in the SCAQMD's *CEQA Air Quality Handbook* serve as quantitative air quality standards to be used to evaluate project impacts under Appendix G thresholds. Under these thresholds, a significant threshold would occur when:[29]

- The Project results in the exposure of sensitive receptors to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0.[30] For projects with a maximum incremental cancer risk between 1 in one million and 10 in one million, a project would result in a significant impact if the cancer burden exceeds 0.5 excess cancer cases.

(d) Consistency with Applicable Air Quality Plans

CEQA Guidelines Section 15125 requires an analysis of project consistency with applicable governmental plans and policies. This analysis is conducted to assess potential project impacts against Threshold (a) from the Appendix G thresholds. In accordance with the SCAQMD's *CEQA Air Quality Handbook*, the following criteria shall be used to evaluate a project's consistency with SCAQMD and SCAG regional plans and policies, including the AQMP, consistent with the Appendix G thresholds:[31]

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28 SCAQMD, Final—Methodology to Calculate Particulate Matter (PM) 2.5 and $PM_{2.5}$ Significance Thresholds, October 2006.

29 SCAQMD, CEQA Air Quality Handbook, April 1993, Chapter 6 (Determining the Air Quality Significance of a Project) and Chapter 10 (Assessing Toxic Air Pollutants).

30 Hazard index is the ratio of a toxic air contaminant's concentration divided by its Reference Concentration, or safe exposure level. If the hazard index exceeds one, people are exposed to levels of TACs that may pose noncancer health risks.

31 SCAQMD, CEQA Air Quality Handbook, April 1993, p. 12-3.

- Will the Project result in any of the following:
  - An increase in the frequency or severity of existing air quality violations;
  - Cause or contribute to new air quality violations; or
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP?
- Will the Project exceed the assumptions utilized in preparing the AQMP?
  - Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
  - Does the Project include air quality mitigation measures; or
  - To what extent is Project development consistent with the AQMP land use policies?

The Project's impacts with respect to these criteria are discussed to assess the consistency with the SCAQMD's AQMP and SCAG regional plans and policies. In addition, the Project's consistency with the City of Los Angeles General Plan Air Quality Element is discussed.

c) Project Design Features

The Project would comply with the 2017 Los Angeles Green Building Code (LAGBC),[32] which builds upon and sets higher standards than those in the 2016 California Green Building Standards Code (CalGreen, effective January 1, 2017).[33]

Further energy efficiency and sustainability features would include native plants and drip/subsurface irrigation systems, individual metering or sub metering for water use, leak detection systems, and provisions for electric vehicle charging.

The Project's infill location would promote the concentration of development in an urban location with extensive infrastructure and access to public transit facilities. The Project's proximity to public transportation in the San Pedro neighborhood would reduce vehicle miles traveled for residents. Services include Metro local bus service (i.e., Route 246), Metro Silver Line, and DASH San Pedro shuttle service. The Project would also promote bicycle transportation by providing 8 short- and 76 long-term bicycle parking spaces, pursuant to LAMC section 12.21 A.4.

d) Analysis of Project Impacts

Threshold a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

[32] LA Department of Building and Safety: http://ladbs.org/forms-publications/forms/green-building

[33] California Building Codes: http://www.bsc.ca.gov/Codes.aspx

(1) SCAQMD CEQA Air Quality Handbook Policy Analysis and SCAG 2016-2040 RTP/SCS Consistency

The following analysis addresses the Project's consistency with applicable SCAQMD and SCAG policies, including the SCAQMD's 2016 AQMP and growth projections within the SCAG 2016–2040 RTP/SCS. In accordance with the procedures established in the SCAQMD's *CEQA Air Quality Handbook*, the following criteria are required to be addressed in order to determine the Project's consistency with applicable SCAQMD and SCAG policies:

- Would the project result in any of the following:
  - An increase in the frequency or severity of existing air quality violations; or
  - Cause or contribute to new air quality violations; or
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- Would the project exceed the assumptions utilized in preparing the AQMP?
  - Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based;
  - Does the Project include air quality mitigation measures; or
  - To what extent is Project development consistent with the AQMP land use policies?

With respect to the first criterion, as discussed below, localized concentrations of NO_2 as NO_X, CO, PM_{10}, and $PM_{2.5}$ have been analyzed for the Project. SO_2 emissions would be negligible during construction and long-term operations, and, therefore, would not have the potential to cause or affect a violation of the SO_2 ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

Particulate matter is the primary pollutant of concern during construction activities, and, therefore, the Project's PM_{10} and $PM_{2.5}$ emissions during construction were analyzed in order to: (1) ascertain potential effects on localized concentrations; and (2) determine if there is a potential for such emissions to cause or affect a violation of the ambient air quality standards for PM_{10} and $PM_{2.5}$. As demonstrated in the analysis below (see **Table 6** later in this section), the increases in PM_{10} and $PM_{2.5}$ emissions during construction would not exceed the SCAQMD-recommended significance thresholds at sensitive receptors in proximity to the Project Site.

Additionally, the Project's maximum potential NO_X and CO daily emissions during construction were analyzed to ascertain potential effects on localized concentrations and to determine if there

is a potential for such emissions to cause or affect a violation of an applicable ambient air quality standard. As shown in **Table 6,** NO_X and CO would not exceed the SCAQMD-recommended localized significance thresholds. Therefore, Project construction would not result in a significant impact with regard to localized air quality.

Because the Project would not introduce any substantial stationary sources of emissions, CO is the preferred benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations.[34] As indicated under Threshold (d), no intersections would require a CO hotspot analysis, and impacts would be less than significant. Therefore, the Project would not increase the frequency or severity of an existing CO violation or cause or contribute to new CO violations.

As discussed below, an analysis of potential localized operational impacts from on-site activities was conducted. As demonstrated in the analysis below (see **Table 7** later in this section), localized NO_2 as NO_X, CO, PM_{10}, and $PM_{2.5}$ operational impacts would be less than significant. Therefore, the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.

With respect to the determination of consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2016–2040 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with applicable population, housing, and employment growth projections; (2) project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis with respect to each of these three criteria.

- Is the project consistent with the population, housing, and employment growth projections upon which AQMP forecasted emission levels are based?

A project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 2016 AQMP, two sources of data form the basis for the projections of air pollutant emissions: the City of Los Angeles General Plan and SCAG's RTP. The General Plan serves as a comprehensive, long-term plan for future development of the City.

The 2016–2040 RTP/SCS provides socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review. According to the California Department of Finance, the population for the City of Los Angeles in 2017 was approximately

[34] SCAQMD, CEQA Air Quality Handbook, Chapter 12, Assessing Consistency with Applicable Regional Plans, 1993.

4,041,707 persons. In 2040, the City of Los Angeles is anticipated to have a population of approximately 4,609,400 persons. Based on a household size factor of 2.43 persons per household in the City in 2017, the Project is estimated to generate a residential population of 246 persons at full buildout, which would represent approximately 0.05 percent of the population growth forecasted by SCAG in the City of Los Angeles between 2017 and 2040.

Development of the Project also would result in approximately four employment positions on-site from the 1,800 square feet of retail space. According to the 2016–2040 RTP/SCS, the employment forecast for the City of Los Angeles in 2012 was approximately 1,696,400 employees. In 2040, the City of Los Angeles is anticipated to have approximately 2,169,100 employees. Thus, the Project's estimated four employees would constitute approximately 0.0007 percent of the employment growth forecasted between 2012 and 2040. When considering the three to four jobs that would be eliminated through demolition of the existing bar, there would be no net increase in jobs on-site. Because the Project's resulting residential and job growth would fall well within the growth forecasts for the City and similar projections form the basis of the 2016 AQMP, it can be concluded that the Project would be consistent with the projections in the AQMP.

- Does the project implement feasible air quality mitigation measures?

As discussed below under Thresholds (b), (c), and (d), the Project would not result in any significant air quality impacts and therefore would not require mitigation. In addition, the Project would comply with all applicable regulatory standards as required by SCAQMD. Furthermore, with compliance with the regulatory requirements identified above, no significant air quality impacts would occur. As such, the proposed Project meets this AQMP consistency criterion.

- To what extent is project development consistent with the land use policies set forth in the AQMP?

With regard to land use developments such as the Project, the AQMP's air quality policies focus on the reduction of vehicle trips and vehicle miles traveled (VMT). The Project would serve to implement a number of land use policies of the City of Los Angeles, SCAQMD, and SCAG. The Project would be designed and constructed to support and promote environmental sustainability. The Project represents an infill development within an existing urbanized area that would concentrate more housing. "Green" principles are incorporated throughout the Project to comply with the City of Los Angeles Green Building Code and the California Green Building Standards Code (CALGreen) through energy conservation, water conservation, and waste reduction features.

The air quality plan applicable to the Project area is the 2016 AQMP. The 2016 AQMP is the SCAQMD plan for improving regional air quality in the Basin. The 2016 AQMP is the current management plan for continued progression toward clean air and compliance with State and federal requirements. It includes a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on- and off-road mobile sources and area sources. The

2016 AQMP also incorporates current scientific information and meteorological air quality models. It also updates the federally approved 8-hour O_3 control plan with new commitments for short-term NO_X and VOC reductions. The 2016 AQMP includes short-term control measures related to facility modernization, energy efficiency, good management practices, market incentives, and emissions growth management.

As demonstrated in the following analyses, the Project would not result in significant regional emissions. The 2016 AQMP adapts previously conducted regional air quality analyses to account for the recent unexpected drought conditions and presents a revised approach to demonstrated attainment of the 2006 24-hour $PM_{2.5}$ NAAQS for the Basin. Directly applicable to the Project, the 2016 AQMP proposes robust NO_X reductions from residential appliances. The Project would be required to comply with all new and existing regulatory measures set forth by the SCAQMD. Implementation of the Project would not interfere with air pollution control measures listed in the 2016 AQMP.

The Project Site is classified as "Neighborhood Commercial" in the General Plan Framework and the Community Plan, a classification that allows residential and retail uses proposed by the Project. As such, the RTP/SCS' assumptions about growth in the City accommodate housing growth on this site. As a result, the Project would be consistent with the growth assumptions in the City's General Plan. Because the AQMP accommodates growth forecasts from local General Plans, the emissions associated with this Project are accounted for and mitigated in the region's air quality attainment plans. The air quality impacts of development on the Project Site are accommodated in the region's emissions inventory for the 2016 RTP/SCS and 2016 AQMP. **Therefore, the Project would result in less-than significant impacts related to consistency with the AQMP.**

(2) City of Los Angeles Policies

The Project would offer convenient access to public transit and opportunities for walking and biking, thereby facilitating a reduction in VMT, in addition to bicycle parking. In addition, the Project would be consistent with the existing land use pattern in the vicinity that concentrates urban density along major arterials and near transit options. The Project also includes primary entrances for pedestrians and bicyclists that would be safe, easily accessible, and a short distance from transit. These transit services include Services include Metro local bus service (i.e., Route 246), Metro Silver Line, and DASH San Pedro shuttle service. The Project would also promote bicycle transportation by providing bicycle parking spaces, pursuant to LAMC section 12.21 A.4.

The Project would be consistent with applicable policies of the Air Quality Element. The Project would implement sustainability features that would reduce vehicular trips, reduce VMT, and encourage use of alternative modes of transportation.

The City's General Plan Air Quality Element identifies 30 policies with specific strategies for advancing the City's clean air goals. As illustrated in **Table 4**, the Project is consistent with the

applicable policies in the Air Quality Element. **Therefore, the Project would result in less-than significant impacts related to consistency with the Air Quality Element.**

Table 4
Project Consistency With City Of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
Policy 1.3.1. Minimize particulate emissions from construction sites.	**Consistent.** The Project would minimize particulate emissions during construction through best practices and/or SCAQMD rules.
Policy 1.3.2. Minimize particulate emissions from unpaved roads and parking lots associated with vehicular traffic.	**Consistent.** The Project would minimize particulate emissions from unpaved facilities through best practices and/or SCAQMD rules.
Policy 2.1.1. Utilize compressed work weeks and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in order to reduce vehicle trips and/or VMT as an employer and encourage the private sector to do the same to reduce work trips and traffic congestion.	**Consistent.** The future retail tenants could implement work-based transportation demand management programs. Transit use will benefit from the substantial service in the vicinity of the project, including Metro local bus service (i.e., Route 246), Metro Silver Line, and DASH San Pedro shuttle service. The Project would also promote bicycle transportation by providing 8-short and 76 long-term bicycle parking spaces, pursuant to LAMC section 12.21 A.4.
Policy 2.1.2. Facilitate and encourage the use of telecommunications (i.e., telecommuting) in both the public and private sectors, in order to reduce work trips.	**Consistent.** The future retail tenants could implement telecommunications programs to reduce commute traffic.
Policy 2.2.1. Discourage single-occupant vehicle use through a variety of measures such as market incentive strategies, mode-shift incentives, trip reduction plans and ridesharing subsidies.	**Consistent.** The future retail tenants could implement market-based incentive plans to promote alternative transportation modes. Transit use will benefit from the substantial service in the vicinity of the project, including Metro local bus service (i.e., Route 246), Metro Silver Line, and DASH San Pedro shuttle service. The Project would also promote bicycle transportation by providing 8-short and 76 long-term bicycle parking spaces, pursuant to LAMC section 12.21 A.4.
Policy 2.2.2. Encourage multi-occupant vehicle travel and discourage single-occupant vehicle travel by instituting parking management practices.	**Consistent.** The future retail tenants could implement parking management strategies to promote alternative transportation modes. Transit use will benefit from the substantial service in the vicinity of the project, including Metro local bus service (i.e., Route 246), Metro Silver Line, and DASH San Pedro shuttle service. The Project would also promote bicycle transportation by providing 8-short and 76 long-term bicycle parking spaces, pursuant to LAMC section 12.21 A.4.
Policy 2.2.3. Minimize the use of single-occupant vehicles associated with special events or in areas and times of high levels of pedestrian activities.	**Not Applicable.** The Project would not include facilities for special events.
Policy 3.2.1. Manage traffic congestion during peak hours.	**Consistent.** The Project is primarily a residential development that generally produces less than half the trip generation of comparably-sized retail, office, and commercial land uses.
Policy 4.1.1. Coordinate with all appropriate regional agencies on the implementation of strategies for the integration of land use, transportation, and air quality policies.	**Consistent.** The Project is being entitled through the City of Los Angeles, which coordinates with SCAG, Metro, and other regional agencies on the coordination of land use, air quality, and transportation policies.

Table 4
Project Consistency With City Of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
Policy 4.1.2. Ensure that project level review and approval of land use development remains at the local level.	**Consistent.** The Project would be entitled and environmentally cleared at the local level.
Policy 4.2.1. Revise the City's General Plan/Community Plans to achieve a more compact, efficient urban form and to promote more transit-oriented development and mixed-use development.	**Not Applicable.** This policy calls for City updates to its General Plan.
Policy 4.2.2. Improve accessibility for the City's residents to places of employment, shopping centers and other establishments.	**Consistent.** The Project would be infill development that would provide residents with proximate access to jobs, shopping, and other uses.
Policy 4.2.3. Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.	**Consistent.** The mixed-use project is compatible with alternative transportation modes. Transit use will benefit from the substantial service in the vicinity of the project, including Metro local bus service (i.e., Route 246), Metro Silver Line, and DASH San Pedro shuttle service. The Project would also promote bicycle transportation by providing 8-short and 76 long-term bicycle parking spaces, pursuant to LAMC section 12.21 A.4.
Policy 4.2.4. Require that air quality impacts be a consideration in the review and approval of all discretionary projects.	**Consistent.** The Project's air quality impacts are analyzed in this document.
Policy 4.2.5. Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.	**Consistent.** The mixed-use project is compatible with alternative transportation modes. Transit use will benefit from the substantial service in the vicinity of the project, including Metro local bus service (i.e., Route 246), Metro Silver Line, and DASH San Pedro shuttle service. The Project would also promote bicycle transportation by providing 8-short and 76 long-term bicycle parking spaces, pursuant to LAMC section 12.21 A.4.
Policy 4.3.1. Revise the City's General Plan/Community Plans to ensure that new or relocated sensitive receptors are located to minimize significant health risks posed by air pollution sources.	**Not Applicable.** This policy calls for City updates to its General Plan.
Policy 4.3.2. Revise the City's General Plan/Community Plans to ensure that new or relocated major air pollution sources are located to minimize significant health risks to sensitive receptors.	**Not Applicable.** This policy calls for City updates to its General Plan.
Policy 5.1.1. Make improvements in Harbor and airport operations and facilities in order to reduce air emissions.	**Not Applicable.** This policy calls for cleaner operations of the City's water port and airport facilities.
Policy 5.1.2. Effect a reduction in energy consumption and shift to non-polluting sources of energy in its buildings and operations.	**Not Applicable.** This policy calls for cleaner operations of the City's buildings and operations.
Policy 5.1.3. Have the Department of Water and Power make improvements at its in-basin power plants in order to reduce air emissions.	**Not Applicable.** This policy calls for cleaner operations of the City's Water and Power energy plants.
Policy 5.1.4. Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.	**Consistent.** The Proposed Project would be consistent with this policy by complying with Title 24, CALGreen, and other requirements to reduce solid waste and energy consumption.

Table 4
Project Consistency With City Of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
Policy 5.2.1. Reduce emissions from its own vehicles by continuing scheduled maintenance, inspection and vehicle replacement programs; by adhering to the State of California's emissions testing and monitoring programs; by using alternative fuel vehicles wherever feasible, in accordance with regulatory agencies and City Council policies.	**Not Applicable.** This policy calls for the City to gradually reduce the fleet emissions inventory from its vehicles through use of alternative fuels, improved maintenance practices, and related operational improvements.
Policy 5.3.1. Support the development and use of equipment powered by electric of low-emitting fuels.	**Consistent.** The Project would be designed to meet the applicable requirements of the States Green Building Standards Code and the City of Los Angeles' Green Building Code.
Policy 6.1.1. Raise awareness through public-information and education programs of the actions that individuals can take to reduce air emissions.	**Not Applicable.** This policy calls for the City to promote clean air awareness through its public awareness programs.
Source: DKA Planning, 2019.	

Threshold b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?

(1) Construction

A cumulatively considerable net increase would occur if the project's construction impacts substantially contribute to air quality violations when considering other projects that may undertake construction activities at the same time. Individual projects that generate emissions that do not exceed SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. SCAQMD neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to be used to assess the impacts associated with these emissions.

Construction-related emissions were estimated using the SCAQMD's CalEEMod 2016.3.2 model using assumptions from the Project's developer, including the Project's construction schedule of at least 19 months. **Table 5** summarizes the potential construction schedule that was modeled for air quality impacts.

Table 5
Potential Construction Schedule

Phase	Duration	Notes
Demolition	Month 1	1,581 tons of debris hauled up to 41 miles away
Grading	Months 2-3.5	20,000 cubic yards of soil export hauled up to 41 miles away
Building Construction	Months 3.5-19	
Architectural Coatings	Months 11-15	
Source: DKA Planning, 2019		

The Project would be required to comply with the following regulations, as applicable:

- SCAQMD Rule 403, would reduce the amount of particulate matter entrained in ambient air as a result of anthropogenic fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

- SCAQMD Rule 1113, which limits the VOC content of architectural coatings.

- SCAQMD Rule 402, which states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

- In accordance with Section 2485 in Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (with gross vehicle weight over 10,000 pounds) during construction would be limited to five minutes at any location.

- In accordance with Section 93115 in Title 17 of the California Code of Regulations, operation of any stationary, diesel-fueled, compression-ignition engines would meet specific fuel and fuel additive requirements and emissions standards.

(a) Regional Emissions

Construction activity has the potential to create air quality impacts through the use of heavy-duty construction equipment, haul trucks, and through vehicle trips generated by construction workers and vendors traveling to and from the Project Site. Fugitive dust emissions would primarily result from grading activities. NO_X emissions would primarily result from the use of construction equipment and truck trips. During the building finishing phase, paving and the application of architectural coatings (e.g., paints) would potentially release VOCs (regulated by SCAQMD Rule 1113). The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

As stated above, it is mandatory for all construction projects in the Basin to comply with SCAQMD Rule 403 for Fugitive Dust. Rule 403 control requirements include measures to prevent the generation of visible dust plumes. Measures include, but are not limited to, applying water and/or soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system or other control measures to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project Site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce regional $PM_{2.5}$ and PM_{10} emissions associated with construction activities by approximately 61 percent.

This analysis also assumes a single-trip haul distance of up to 41 miles to an off-site landfill. However, closer locations may be determined feasible, which would result in lower emissions for the Project.

As shown in **Table 6,** the construction of the Project will produce VOC, NO_X, CO, SO_X, PM_{10} and $PM_{2.5}$ emissions that do not exceed the SCAQMD's regional thresholds. As a result, construction of the Project would not contribute substantially to an existing violation of air quality standards for regional pollutants (e.g., ozone). **This impact is considered less than significant.**

Table 6
Estimated Daily Construction Daily Emissions - Unmitigated

Construction Phase Year	Daily Emissions (Pounds Per Day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2020	4	82	33	<1	5	2
2021	7	15	18	<1	2	1
Maximum Regional Total	**7**	**52**	**25**	**<1**	**4**	**2**
Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Maximum Localized Total	**2**	**18**	**17**	**<1**	**1**	**1**
Localized Threshold	**--**	**57**	**585**	**--**	**4**	**3**
Exceed Threshold?	**N/A**	**No**	**No**	**N/A**	**No**	**No**

The construction dates are used for the modeling of air quality emissions in the CalEEMod software. If construction activities commence later than what is assumed in the environmental analysis, the actual emissions would be lower than analyzed because of the increasing penetration of newer equipment with lower certified emission levels. Assumes implementation of SCAQMD Rule 403 (Fugitive Dust Emissions)
Source: DKA Planning, 2019 based on CalEEMod 2016.3.2 model runs. LST analyses based on 1-acre site with 25-meter distances to receptors in South Coastal LA County source receptor area.

(b) Localized Emissions

In addition to maximum daily regional emissions, maximum localized (onsite) emissions were quantified for each construction activity. The localized construction air quality analysis was conducted using the methodology promulgated by the SCAQMD. Look-up tables provided by the SCAQMD were used to determine localized construction emissions thresholds for the Project.[35] LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are based on the most recent background ambient air quality monitoring data (2016-2018) for the Project area.

Maximum on-site daily construction emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ were calculated using CalEEMod and compared to the applicable SCAQMD LSTs for the South Coastal LA SRA based on construction site acreage that is less than or equal to one acre. Potential impacts were evaluated at the closest off-site sensitive receptor, which are the residences on either side of the Project Site, immediately adjacent to the Project Site. The closest receptor distance on the SCAQMD mass rate LST look-up tables is 25 meters.

[35] SCAQMD, LST Methodology Appendix C-Mass Rate LST Look-up Table, revised October 2009.

As shown in **Table 6,** above**,** the Project would produce emissions that do not exceed the SCAQMD's recommended localized standards of significance for NO_2 and CO during the construction phase. Similarly, construction activities would not produce PM_{10} and $PM_{2.5}$ emissions that exceed localized thresholds recommended by the SCAQMD.

These estimates assume the use of Best Available Control Measures (BACM) that address fugitive dust emissions of PM_{10} and $PM_{2.5}$ through SCAQMD Rule 403. This would include watering portions of the site that are disturbed during grading activities and minimizing tracking of dirt onto local streets. **Therefore, construction impacts on localized air quality are considered less than significant.**

A cumulatively considerable net increase would occur if the project's construction impacts substantially contribute to air quality violations when considering other projects that may undertake construction activities at the same time.

Construction of the Project would not contribute significantly to cumulative emissions of any non-attainment regional pollutants. For regional ozone precursors, the Project would not exceed SCAQMD mass emission thresholds for ozone precursors during construction. Similarly, regional emissions of PM_{10} and $PM_{2.5}$ would not exceed mass thresholds established by the SCAQMD. **Therefore, construction emissions impact on regional criteria pollutant emissions would be considered less than significant.**

When considering local impacts, cumulative construction emissions are considered when projects are within close proximity of each other that could result in larger impacts on local sensitive receptors. Construction of the Project itself would not produce cumulative considerable emissions of localized nonattainment pollutants PM_{10} and $PM_{2.5}$, as the anticipated emissions would not exceed LST thresholds set by the SCAQMD. **Therefore, construction emissions impact on localized criteria pollutant emissions would be considered less than significant.**

If any related projects were to undertake construction concurrently with the Project, localized CO, $PM_{2.5}$, PM_{10}, and NO_2 concentrations would be further increased. However, the application of LST thresholds to this project would help ensure that it does not produce localized hotspots of CO, $PM_{2.5}$, PM_{10}, and NO_2. This and any related projects that would exceed LST thresholds (after mitigation) could perform dispersion modeling to confirm whether health-based air quality standards would be violated. The SCAQMD's LST thresholds recognize the influence of a receptor's proximity, setting mass emissions thresholds for PM_{10} and $PM_{2.5}$ that generally double with every doubling of distance.

There is an existing regional cumulative impact associated with O_3, NO_2, PM_{10}, and $PM_{2.5}$ because the Basin is designated as a State and/or federal nonattainment air basin for these pollutants. However, an individual Project can emit these pollutants without significantly contributing to this cumulative impact depending on the magnitude of emissions. As discussed above, construction and operational emissions would not exceed any applicable SCAQMD thresholds of significance.

With respect to the Project's construction-related air quality emissions and cumulative Air Basin-wide conditions, the SCAQMD has developed strategies (e.g., SCAQMD Rule 403) to reduce criteria pollutant emissions outlined in the AQMP pursuant to Federal CAA mandates. As stated above, the Project would comply with applicable regulatory requirements, including the SCAQMD Rule 403 requirements. Per SCAQMD rules and mandates as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, all construction projects Air Basin-wide would comply with these same regulatory requirements and would implement all feasible mitigation measures when significant impacts are identified.

According to the SCAQMD, individual projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. As shown in **Table 6,** Project construction daily emissions would not exceed any of the SCAQMD's regional or localized thresholds. **Therefore, the Project's contribution to cumulative construction-related regional or localized emissions would not be cumulatively considerable and, thus, would be less than significant.**

(2) Operation

Operational emissions of criteria pollutants would come from area sources and mobile sources. Area sources include natural gas for space heating and water heating, gasoline-powered landscaping and maintenance equipment, consumer products such as household cleaners, and architectural coatings for routine maintenance. CalEEMod program generates estimates of emissions from energy use based on the land use type and size. The Project will also produce long-term air quality impacts to the region primarily from motor vehicles that access the Project site. The Project could add up to 432 net vehicle trips on a peak weekday at the start of operations in 2021.[36]

As shown in **Table 7**, the Project would not exceed the SCAQMD's regional or localized significance thresholds. The Project operational impacts on long-term air pollution would be considered less than significant. **Therefore, the operational impacts of the Project on regional and localized air quality are considered less than significant.**

[36] City of Los Angeles, Traffic Impact Assessment for the Proposed Residential/Retail Project located at 2111 South Pacific; October 22, 2019.

Table 7
Estimated Daily Operations Emissions - Unmitigated

Emissions Source	Daily Emissions (Pounds Per Day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Sources	2	<1	8	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	1	5	15	<1	**4**	1
Gross Regional Total	**3**	**6**	**24**	**<1**	**4**	**1**
Existing Total	-<1	-1	-3	-<1	-1	-<1
Net Regional Total	**3**	**5**	**21**	**<1**	**3**	**1**
Regional Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Net Localized Total	**1**	**<1**	**3**	**<1**	**<1**	**<1**
Localized Significance Threshold	**N/A**	**57**	**585**	**--**	**1**	**1**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

LST analyses based on 1-acre site with 25-meter distances to receptors in South Coastal LA County source receptor area.
Source: DKA Planning, 2019 based on CalEEMod 2016.3.2 model runs

As for cumulative operational impacts, the proposed land use will not produce cumulatively considerable emissions of nonattainment pollutants at the regional or local level. The Project would not include major sources of combustion or fugitive dust. As a result, its localized emissions of PM_{10} and $PM_{2.5}$ would be minimal. Likewise, existing land uses in the area include land uses that do not produce substantial emissions of localized nonattainment pollutants. As shown in **Table 7**, Project operation daily emissions would not exceed any of the SCAQMD's regional or localized thresholds. Because the Project's air quality impacts would not exceed the SCAQMD's operational thresholds of significance. **Therefore, the Project's contribution to cumulative operation-related regional or localized emissions would not be cumulatively considerable and, thus, would be less than significant.**

Threshold c) Would the project expose sensitive receptors to substantial pollutant concentrations?

There are several sensitive receptors within 1,000 feet of the Project Site that could be exposed to air pollution from construction and operation of the Proposed Project. These include but are not limited to the following:

- Multi-family residences, 523 West 21th Street; 25 feet west of the Project site.
- Multi-family residences, 2041 South Pacific Avenue; as close as 65 feet north of the Project site to the main residence.
- Multi-family residences, 2102 South Pacific Avenue; 70 feet east of the Project site.
- Pacific View Guest Home, 2300 South Pacific Avenue; 360 feet south of the Project site.

(1) Construction

Construction of the Project could expose sensitive receptors to substantial pollutant concentrations if maximum daily emissions of regulated pollutants generated by sources located on and/or near the Project site exceeded the applicable LST values presented in **Table 3**, or if construction activities generated significant emissions of TACs that could result in carcinogenic risks or non-carcinogenic hazards exceeding the SCAQMD Air Quality Significance Thresholds of 10 excess cancers per million or non-carcinogenic Hazard Index greater than 1.0, respectively. As discussed above, the LST values were derived by the SCAQMD for the criteria pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$ to prevent the occurrence of concentrations exceeding the air quality standards at sensitive receptor locations based on proximity and construction site size.

As shown in **Table 6**, during construction of the Project, maximum daily localized unmitigated emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ from sources on the Project site would remain below each of the respective LST values. Unmitigated maximum daily localized emissions would not exceed any of the localized standards for receptors that are generally within 25 meters of the Proposed Project's construction activities. Therefore, based on SCAQMD guidance, localized emissions of criteria pollutants would not have the potential to expose sensitive receptors to substantial concentrations that would present a public health concern.

The primary TAC that would be generated by construction activities is diesel PM, which would be released from the exhaust stacks of construction equipment. The construction emissions modeling conservatively assumed that all equipment present on the Project Site would be operating simultaneously and continuously throughout most of the day, while in all likelihood this would rarely be the case. Average daily emissions of diesel PM would be less than one pound per day throughout the course of Project construction. Therefore, the magnitude of daily diesel PM emissions, would not be sufficient to result in substantial pollutant concentrations at off-site locations nearby.

Furthermore, according to SCAQMD methodology, health risks from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 30-year period will contract cancer based on the use of standard risk-assessment methodology. The entire duration of construction activities associated with implementation of the Project is anticipated to be at least 19 months, and the magnitude of daily diesel PM emissions will vary over this time period. No residual emissions and corresponding individual cancer risk are anticipated after construction. Because there is such a short-term exposure period, construction TAC emissions would result in a less-than significant impact. **Therefore, construction of the Project would not expose sensitive receptors to substantial diesel PM concentrations, and this impact would be less than significant.**

(2) Operation

The Project Site would be developed with land uses that are not typically associated with TAC emissions. Typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes (e.g., chrome plating, electrical manufacturing, petroleum refinery). The Project would not include these types of potential industrial manufacturing process sources. It is expected that quantities of hazardous TACs generated on-site (e.g., cleaning solvents, paints, landscape pesticides) for the types of proposed land uses would be below thresholds warranting further study under California Accidental Release Program.

When considering potential air quality impacts under CEQA, consideration is given to the location of sensitive receptors within close proximity of land uses that emit TACs. CARB has published and adopted the Air Quality and Land Use Handbook: A Community Health Perspective, which provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities).[37]

The SCAQMD adopted similar recommendations in its Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.[38] Together, the CARB and SCAQMD guidelines recommend siting distances for both the development of sensitive land uses in proximity to TAC sources and the addition of new TAC sources in proximity to existing sensitive land uses.

The primary sources of potential air toxics associated with Project operations include DPM from delivery trucks (e.g., truck traffic on local streets and idling on adjacent streets) and to a lesser extent, facility operations (e.g., natural gas fired boilers). However, these activities, and the land uses associated with the Project, are not considered land uses that generate substantial TAC emissions. It should be noted that the SCAQMD recommends that health risk assessments (HRAs) be conducted for substantial individual sources of DPM (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions.[39] Based on this guidance, the Project would not include these types of land uses and is not considered to be a substantial source of DPM warranting a refined HRA since daily truck trips to the Project Site would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units. In addition, the CARB-mandated ATCM limits diesel-fueled commercial vehicles (delivery trucks) to idle for no more than five minutes at any given time, which would further limit diesel particulate emissions.

As the Project would not contain substantial TAC sources and is consistent with the CARB and SCAQMD guidelines, the Project would not result in the exposure of off-site sensitive receptors

37 CARB, Air Quality and Land Use Handbook, a Community Health Perspective, April 2005.

38 SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.

39 SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, 2002.

to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0, and potential TAC impacts would be less than significant.

The Project would generate long-term emissions on-site from area and energy sources that would generate negligible pollutant concentrations of CO, NO_2, $PM_{2.5}$, or PM_{10} at nearby sensitive receptors. While long-term operations of the Project would generate traffic that produces off-site emissions, these would not result in exceedances of CO air quality standards at roadways in the area due to three key factors. First, CO hotspots are extremely rare and only occur in the presence of unusual atmospheric conditions and extremely cold conditions, neither of which applies to this Project area. Second, auto-related emissions of CO continue to decline because of advances in fuel combustion technology in the vehicle fleet. Finally, the Project would not contribute to the levels of congestion that would be needed to produce the amount of emissions needed to trigger a potential CO hotspot.[40]

Finally, the Project would not result in any substantial emissions of TACs during the construction or operations phase. During the construction phase, the primary air quality impacts would be associated with the combustion of diesel fuels, which produce exhaust-related particulate matter that is considered a toxic air contaminant by CARB based on chronic exposure to these emissions.[41] However, construction activities would not produce chronic, long-term exposure to diesel particulate matter. During long-term project operations, the Project does not include typical sources of acutely and chronically hazardous TACs such as industrial manufacturing processes and automotive repair facilities. As a result, the Project would not create substantial concentrations of TACs.

Because of the Project Site's distance from any freeways (1.58 miles south of the SR-110 freeway terminus), HVAC systems will not require filtration rated at MERV-13 or higher. This project design feature mandated by the City will reduce exposure of future residents to any TACs associated with freeway traffic to the north of the Project Site.

In addition, the SCAQMD recommends that health risk assessments be conducted for substantial sources of diesel particulate emissions (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.[42] The Project would not generate a substantial number of truck trips. Based on the limited activity of TAC sources, the Project would not warrant the need for a health risk assessment associated with on-site activities. **Therefore, the Proposed Project's operational impacts on local sensitive receptors would be less than significant.**

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40 Caltrans, Transportation Project-Level Carbon Monoxide Protocol, updated October 13, 2010.

41 California Office of Environmental Health Hazard Assessment. Health Effects of Diesel Exhaust. www. http://oehha.ca.gov/public_info/facts/dieselfacts.html

42 SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.

Threshold e) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The Proposed Project would not result in activities that create objectionable odors. The Proposed Project is a residential and retail project that would not include any land uses typically associated with unpleasant odors and local nuisances (e.g., rendering facilities, dry cleaners). SCAQMD regulations that govern nuisances (i.e., Rule 402, Nuisances) would regulate any occasional odors associated. As a result, any odor impacts from the Project would be considered **less than significant**.

e) Cumulative Impacts

SCAQMD recommends that any construction-related emissions and operational emissions from individual development projects that exceed the project-specific mass daily emissions thresholds identified above also be considered cumulatively considerable.[43] Individual projects that generate emissions not in excess of SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. SCAQMD neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to be used to assess the impacts associated with these emissions.

(1) AQMP Consistency

Cumulative development is not expected to result in a significant impact in terms of conflicting with, or obstructing implementation of the 2016 AQMP. As discussed previously, growth considered to be consistent with the AQMP would not interfere with attainment because this growth is included in the projections utilized in the formulation of the AQMP. Consequently, as long as growth in the Basin is within the projections for growth identified in the 2016 RTP/SCS, implementation of the AQMP will not be obstructed by such growth. In addition, as discussed previously, the population growth resulting from the Project would be consistent with the growth projections of the AQMP. Each related project would implement feasible air quality mitigation measures to reduce the criteria air pollutants, if required due to any significant emissions impacts. In addition, each related project would be evaluated for its consistency with the land use policies set forth in the AQMP. **Therefore, the Project's contribution to the cumulative impact would not be cumulatively considerable and, therefore, would be less than significant.**

(2) Construction

As discussed above, the Project's construction-related air quality emissions and cumulative impacts would be less than significant. Individual projects that generate emissions that do not exceed SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. SCAQMD neither recommends quantified analyses of the emissions

[43] White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions, SCAQMD Board Meeting, September 5, 2003, Agenda No. 29, Appendix D, p. D-3.

generated by a set of cumulative development projects nor provides thresholds of significance to be used to assess the impacts associated with these emissions.

The Project would comply with regulatory requirements, including the SCAQMD Rule 403 requirements listed above. Based on SCAQMD guidance, individual construction projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. As shown above, construction-related daily emissions at the Project Site would not exceed any of the SCAQMD's regional or localized significance thresholds. **Therefore, the Project's contribution to cumulative air quality impacts due to localized emissions would not be cumulatively considerable and, therefore, would be less than significant.**

Similar to the Project, the greatest potential for TAC emissions at each related project would generally involve diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 30-year period will contract cancer, based on the use of standard risk-assessment methodology. Construction activities are temporary and short-term events, thus construction activities at each related project would not result in a long-term substantial source of TAC emissions. Additionally, the SCAQMD CEQA guidance does not require a health risk assessment for short-term construction emissions. It is therefore not meaningful to evaluate long-term cancer impacts from construction activities, which occur over relatively short durations. **As such, given the short-term nature of these activities, cumulative toxic emission impacts during construction would be less than significant.**

(3) Operation

As discussed above, the Project's operational air quality emissions and cumulative impacts would be less than significant. According to the SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. As operational emissions would not exceed any of the SCAQMD's regional or localized significance thresholds, the emissions of non-attainment pollutants and precursors generated by Project operations would not be cumulatively considerable.

With respect to TAC emissions, neither the Project nor any of the related projects (which are largely residential, retail/commercial, and office in nature), would represent a substantial source of TAC emissions, which are typically associated with large-scale industrial, manufacturing, and transportation hub facilities. The Project and related projects would be consistent with the recommended screening level siting distances for TAC sources, as set forth in CARB's Land Use Guidelines, and the Project and related projects would not result in a cumulative impact requiring further evaluation. However, the related projects could generate minimal TAC emissions related to the use of consumer products and landscape maintenance activities, among other things.

Pursuant to AB 1807, which directs the CARB to identify substances as TACs and adopt airborne toxic control measures to control such substances, the SCAQMD has adopted numerous rules (primarily in Regulation XIV) that specifically address TAC emissions. These SCAQMD rules have resulted in and will continue to result in substantial Basin-wide TAC emissions reductions. As such, cumulative TAC emissions during long-term operations would be less than significant. **Therefore, the Project would not result in any substantial sources of TACs that have been identified by the CARB's Land Use Guidelines, and thus, would not contribute to a cumulative impact.**

f) Mitigation Measures

None required.

TECHNICAL APPENDIX

TECHNICAL APPENDIX

2111 South Pacific Avenue Existing - Los Angeles-South Coast County, Summer

2111 South Pacific Avenue Existing

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High Turnover (Sit Down Restaurant)	1.49	1000sqft	0.56	1,490.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Developer information

Construction Phase - Developer information

Off-road Equipment -

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Trips and VMT - Developer information. Assumes 14 CY haul truck capacity

Demolition - Developer information

Grading - Developer information

Vehicle Trips - City of Los Angeles Memo, Traffic Impact Assessment for the Propsoed Residential/Retail Project Located at 2111 South Pacific; October 22, 2013

Woodstoves - Developer information

Construction Off-road Equipment Mitigation - Assumes SCAQMD Rule 403 control efficiencies

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	46
tblLandUse	LotAcreage	0.03	0.56
tblTripsAndVMT	HaulingTripNumber	0.00	3,335.00
tblVehicleTrips	ST_TR	158.37	114.10
tblVehicleTrips	SU_TR	131.84	114.10
tblVehicleTrips	WD_TR	127.15	114.10

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0333	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004
Energy	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829
Mobile	0.2823	1.1060	2.6090	7.0200e-003	0.4927	8.0800e-003	0.5008	0.1319	7.5900e-003	0.1395		713.3922	713.3922	0.0458		714.5383
Total	**0.3258**	**1.1983**	**2.6867**	**7.5700e-003**	**0.4927**	**0.0151**	**0.5078**	**0.1319**	**0.0146**	**0.1465**		**824.2168**	**824.2168**	**0.0480**	**2.0300e-003**	**826.0215**

Mitigated Operational

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

Category	lb/day										lb/day					
Area	0.0333	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004
Energy	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829
Mobile	0.2823	1.1060	2.6090	7.0200e-003	0.4927	8.0800e-003	0.5008	0.1319	7.5900e-003	0.1395		713.3922	713.3922	0.0458		714.5383
Total	**0.3258**	**1.1983**	**2.6867**	**7.5700e-003**	**0.4927**	**0.0151**	**0.5078**	**0.1319**	**0.0146**	**0.1465**		**824.2168**	**824.2168**	**0.0480**	**2.0300e-003**	**826.0215**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2823	1.1060	2.6090	7.0200e-003	0.4927	8.0800e-003	0.5008	0.1319	7.5900e-003	0.1395		713.3922	713.3922	0.0458		714.5383
Unmitigated	0.2823	1.1060	2.6090	7.0200e-003	0.4927	8.0800e-003	0.5008	0.1319	7.5900e-003	0.1395		713.3922	713.3922	0.0458		714.5383

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	170.01	170.01	170.01	231,693	231,693
Total	170.01	170.01	170.01	231,693	231,693

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829
NaturalGas Unmitigated	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	942.007	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829
Total		**0.0102**	**0.0924**	**0.0776**	**5.5000e-004**		**7.0200e-003**	**7.0200e-003**		**7.0200e-003**	**7.0200e-003**		**110.8243**	**110.8243**	**2.1200e-003**	**2.0300e-003**	**111.4829**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0.942007	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829
Total		**0.0102**	**0.0924**	**0.0776**	**5.5000e-004**		**7.0200e-003**	**7.0200e-003**		**7.0200e-003**	**7.0200e-003**		**110.8243**	**110.8243**	**2.1200e-003**	**2.0300e-003**	**111.4829**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0333	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004
Unmitigated	0.0333	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.7800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0295					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004
Total	**0.0333**	**0.0000**	**1.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**3.3000e-004**	**3.3000e-004**	**0.0000**		**3.5000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.7800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0295					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004
Total	**0.0333**	**0.0000**	**1.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**3.3000e-004**	**3.3000e-004**	**0.0000**		**3.5000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

2111 South Pacific Avenue Existing

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High Turnover (Sit Down Restaurant)	1.49	1000sqft	0.56	1,490.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Developer information

Construction Phase - Developer information

Off-road Equipment -

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Trips and VMT - Developer information. Assumes 14 CY haul truck capacity

Demolition - Developer information

Grading - Developer information

Vehicle Trips - City of Los Angeles Memo, Traffic Impact Assessment for the Propsoed Residential/Retail Project Located at 2111 South Pacific; October 22, 2012

Woodstoves - Developer information

Construction Off-road Equipment Mitigation - Assumes SCAQMD Rule 403 control efficiencies

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tblVehicleTrips	ST_TR	158.37	114.10
tblVehicleTrips	SU_TR	131.84	114.10
tblVehicleTrips	WD_TR	127.15	114.10

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.0800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	1.8500e-003	0.0169	0.0142	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	54.9788	54.9788	1.2200e-003	5.2000e-004	55.1628
Mobile	0.0483	0.2074	0.4742	1.2300e-003	0.0880	1.4800e-003	0.0894	0.0236	1.3900e-003	0.0250	0.0000	113.5786	113.5786	7.6100e-003	0.0000	113.7689
Waste						0.0000	0.0000		0.0000	0.0000	3.5990	0.0000	3.5990	0.2127	0.0000	8.9164
Water						0.0000	0.0000		0.0000	0.0000	0.1435	3.4586	3.6020	0.0148	3.6000e-004	4.0812
Total	**0.0563**	**0.2242**	**0.4883**	**1.3300e-003**	**0.0880**	**2.7600e-003**	**0.0907**	**0.0236**	**2.6700e-003**	**0.0263**	**3.7425**	**172.0160**	**175.7585**	**0.2364**	**8.8000e-004**	**181.9294**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.0800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	1.8500e-003	0.0169	0.0142	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	54.9788	54.9788	1.2200e-003	5.2000e-004	55.1628
Mobile	0.0483	0.2074	0.4742	1.2300e-003	0.0880	1.4800e-003	0.0894	0.0236	1.3900e-003	0.0250	0.0000	113.5786	113.5786	7.6100e-003	0.0000	113.7689
Waste						0.0000	0.0000		0.0000	0.0000	3.5990	0.0000	3.5990	0.2127	0.0000	8.9164
Water						0.0000	0.0000		0.0000	0.0000	0.1435	3.4586	3.6020	0.0148	3.6000e-004	4.0812
Total	**0.0563**	**0.2242**	**0.4883**	**1.3300e-003**	**0.0880**	**2.7600e-003**	**0.0907**	**0.0236**	**2.6700e-003**	**0.0263**	**3.7425**	**172.0160**	**175.7585**	**0.2364**	**8.8000e-004**	**181.9294**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0483	0.2074	0.4742	1.2300e-003	0.0880	1.4800e-003	0.0894	0.0236	1.3900e-003	0.0250	0.0000	113.5786	113.5786	7.6100e-003	0.0000	113.7689
Unmitigated	0.0483	0.2074	0.4742	1.2300e-003	0.0880	1.4800e-003	0.0894	0.0236	1.3900e-003	0.0250	0.0000	113.5786	113.5786	7.6100e-003	0.0000	113.7689

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	170.01	170.01	170.01	231,693	231,693
Total	170.01	170.01	170.01	231,693	231,693

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	36.6306	36.6306	8.7000e-004	1.8000e-004	36.7056
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	36.6306	36.6306	8.7000e-004	1.8000e-004	36.7056
NaturalGas Mitigated	1.8500e-003	0.0169	0.0142	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3482	18.3482	3.5000e-004	3.4000e-004	18.4572
NaturalGas Unmitigated	1.8500e-003	0.0169	0.0142	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3482	18.3482	3.5000e-004	3.4000e-004	18.4572

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High Turnover (Sit Down Restaurant)	343832	1.8500e-003	0.0169	0.0142	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3482	18.3482	3.5000e-004	3.4000e-004	18.4572
Total		**1.8500e-003**	**0.0169**	**0.0142**	**1.0000e-004**		**1.2800e-003**	**1.2800e-003**		**1.2800e-003**	**1.2800e-003**	**0.0000**	**18.3482**	**18.3482**	**3.5000e-004**	**3.4000e-004**	**18.4572**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High Turnover (Sit Down Restaurant)	343832	1.8500e-003	0.0169	0.0142	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3482	18.3482	3.5000e-004	3.4000e-004	18.4572
Total		**1.8500e-003**	**0.0169**	**0.0142**	**1.0000e-004**		**1.2800e-003**	**1.2800e-003**		**1.2800e-003**	**1.2800e-003**	**0.0000**	**18.3482**	**18.3482**	**3.5000e-004**	**3.4000e-004**	**18.4572**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	65768.6	36.6306	8.7000e-004	1.8000e-004	36.7056
Total		**36.6306**	**8.7000e-004**	**1.8000e-004**	**36.7056**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	65768.6	36.6306	8.7000e-004	1.8000e-004	36.7056
Total		**36.6306**	**8.7000e-004**	**1.8000e-004**	**36.7056**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.0800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	6.0800e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**6.0700e-003**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.3800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**6.0700e-003**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.6020	0.0148	3.6000e-004	4.0812
Unmitigated	3.6020	0.0148	3.6000e-004	4.0812

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	0.452265 / 0.028868	3.6020	0.0148	3.6000e-004	4.0812
Total		**3.6020**	**0.0148**	**3.6000e-004**	**4.0812**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	0.452265 / 0.028868	3.6020	0.0148	3.6000e-004	4.0812
Total		**3.6020**	**0.0148**	**3.6000e-004**	**4.0812**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.5990	0.2127	0.0000	8.9164
Unmitigated	3.5990	0.2127	0.0000	8.9164

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	17.73	3.5990	0.2127	0.0000	8.9164
Total		**3.5990**	**0.2127**	**0.0000**	**8.9164**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	17.73	3.5990	0.2127	0.0000	8.9164
Total		**3.5990**	**0.2127**	**0.0000**	**8.9164**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

2111 South Pacific Avenue Existing - Los Angeles-South Coast County, Winter

2111 South Pacific Avenue Existing

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High Turnover (Sit Down Restaurant)	1.49	1000sqft	0.56	1,490.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2019
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Developer information

Construction Phase - Developer information

Off-road Equipment -

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Trips and VMT - Developer information. Assumes 14 CY haul truck capacity

Demolition - Developer information

Grading - Developer information

Vehicle Trips - City of Los Angeles Memo, Traffic Impact Assessment for the Propsoed Residential/Retail Project Located at 2111 South Pacific; October 22, 2010

Woodstoves - Developer information

Construction Off-road Equipment Mitigation - Assumes SCAQMD Rule 403 control efficiencies

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	46
tblLandUse	LotAcreage	0.03	0.56
tblTripsAndVMT	HaulingTripNumber	0.00	3,335.00
tblVehicleTrips	ST_TR	158.37	114.10
tblVehicleTrips	SU_TR	131.84	114.10
tblVehicleTrips	WD_TR	127.15	114.10

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0333	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004
Energy	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829
Mobile	0.2752	1.1192	2.5992	6.6600e-003	0.4927	8.1900e-003	0.5009	0.1319	7.6900e-003	0.1396		676.5929	676.5929	0.0466		677.7588
Total	**0.3187**	**1.2115**	**2.6769**	**7.2100e-003**	**0.4927**	**0.0152**	**0.5079**	**0.1319**	**0.0147**	**0.1466**		**787.4176**	**787.4176**	**0.0488**	**2.0300e-003**	**789.2420**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0333	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004
Energy	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829
Mobile	0.2752	1.1192	2.5992	6.6600e-003	0.4927	8.1900e-003	0.5009	0.1319	7.6900e-003	0.1396		676.5929	676.5929	0.0466		677.7588
Total	**0.3187**	**1.2115**	**2.6769**	**7.2100e-003**	**0.4927**	**0.0152**	**0.5079**	**0.1319**	**0.0147**	**0.1466**		**787.4176**	**787.4176**	**0.0488**	**2.0300e-003**	**789.2420**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2752	1.1192	2.5992	6.6600e-003	0.4927	8.1900e-003	0.5009	0.1319	7.6900e-003	0.1396		676.5929	676.5929	0.0466		677.7588
Unmitigated	0.2752	1.1192	2.5992	6.6600e-003	0.4927	8.1900e-003	0.5009	0.1319	7.6900e-003	0.1396		676.5929	676.5929	0.0466		677.7588

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	170.01	170.01	170.01	231,693	231,693
Total	170.01	170.01	170.01	231,693	231,693

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.548007	0.045751	0.200309	0.124119	0.017133	0.006025	0.018861	0.028423	0.002391	0.002469	0.004915	0.000672	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829
NaturalGas Unmitigated	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	942.007	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829
Total		**0.0102**	**0.0924**	**0.0776**	**5.5000e-004**		**7.0200e-003**	**7.0200e-003**		**7.0200e-003**	**7.0200e-003**		**110.8243**	**110.8243**	**2.1200e-003**	**2.0300e-003**	**111.4829**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0.942007	0.0102	0.0924	0.0776	5.5000e-004		7.0200e-003	7.0200e-003		7.0200e-003	7.0200e-003		110.8243	110.8243	2.1200e-003	2.0300e-003	111.4829
Total		**0.0102**	**0.0924**	**0.0776**	**5.5000e-004**		**7.0200e-003**	**7.0200e-003**		**7.0200e-003**	**7.0200e-003**		**110.8243**	**110.8243**	**2.1200e-003**	**2.0300e-003**	**111.4829**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0333	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004
Unmitigated	0.0333	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.7800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	0.0295					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004
Total	**0.0333**	**0.0000**	**1.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**3.3000e-004**	**3.3000e-004**	**0.0000**		**3.5000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.7800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0295					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e-004	3.3000e-004	0.0000		3.5000e-004
Total	**0.0333**	**0.0000**	**1.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**3.3000e-004**	**3.3000e-004**	**0.0000**		**3.5000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2111 South Pacific Avenue Future - Los Angeles-South Coast County, Summer

2111 South Pacific Avenue Future

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	63.00	Space	0.00	25,200.00	0
Apartments Mid Rise	101.00	Dwelling Unit	0.55	66,629.00	289
Strip Mall	1.80	1000sqft	0.01	1,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2021
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Developer information

Construction Phase - Developer information

Off-road Equipment -

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Trips and VMT - Developer information. Assumes 14 CY haul truck capacity

Demolition - Developer information

Grading - Developer information

Vehicle Trips - City of Los Angeles Memo, Traffic Impact Assessment for the Proposed Residential/Retail Project Located at 2111 South Pacific; October 22,

Woodstoves - Developer information

Construction Off-road Equipment Mitigation - Assumes SCAQMD Rule 403 control efficiencies

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	46
tblConstructionPhase	NumDays	5.00	87.00
tblConstructionPhase	NumDays	100.00	361.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	2.00	22.00
tblFireplaces	NumberGas	85.85	0.00
tblFireplaces	NumberNoFireplace	10.10	101.00
tblFireplaces	NumberWood	5.05	0.00
tblGrading	AcresOfGrading	0.00	0.56
tblGrading	MaterialExported	0.00	20,000.00
tblLandUse	LandUseSquareFeet	101,000.00	66,629.00
tblLandUse	LotAcreage	0.57	0.00
tblLandUse	LotAcreage	2.66	0.55
tblLandUse	LotAcreage	0.04	0.01
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	41.00
tblTripsAndVMT	HaulingTripLength	20.00	41.00
tblTripsAndVMT	HaulingTripNumber	2,500.00	2,857.00
tblTripsAndVMT	WorkerTripNumber	25.00	10.00
tblTripsAndVMT	WorkerTripNumber	30.00	10.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00

tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	5.29
tblVehicleTrips	ST_TR	42.04	37.75
tblVehicleTrips	SU_TR	5.86	5.29
tblVehicleTrips	WD_TR	6.65	5.29
tblVehicleTrips	WD_TR	44.32	37.75
tblWoodstoves	NumberCatalytic	5.05	0.00
tblWoodstoves	NumberNoncatalytic	5.05	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1433	82.0114	33.2567	0.2324	5.6462	1.1304	6.7766	1.7368	1.0717	2.8084	0.0000	24,691.3919	24,691.3919	2.1978	0.0000	24,746.3364
2021	7.1735	15.4841	18.4096	0.0383	1.2250	0.7914	2.0164	0.3271	0.7581	1.0852	0.0000	3,724.6877	3,724.6877	0.4724	0.0000	3,736.4965
Maximum	**7.1735**	**82.0114**	**33.2567**	**0.2324**	**5.6462**	**1.1304**	**6.7766**	**1.7368**	**1.0717**	**2.8084**	**0.0000**	**24,691.3919**	**24,691.3919**	**2.1978**	**0.0000**	**24,746.3364**

Mitigated Construction

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

2020	4.1433	82.0114	33.2567	0.2324	3.4268	1.1304	4.5572	1.0563	1.0717	2.1279	0.0000	24,691.3919	24,691.3919	2.1978	0.0000	24,746.3364
2021	7.1735	15.4841	18.4096	0.0383	0.7420	0.7914	1.5335	0.2085	0.7581	0.9666	0.0000	3,724.6877	3,724.6877	0.4724	0.0000	3,736.4965
Maximum	**7.1735**	**82.0114**	**33.2567**	**0.2324**	**3.4268**	**1.1304**	**4.5572**	**1.0563**	**1.0717**	**2.1279**	**0.0000**	**24,691.3919**	**24,691.3919**	**2.1978**	**0.0000**	**24,746.3364**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**39.33**	**0.00**	**30.73**	**38.72**	**0.00**	**20.52**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7382	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0180	15.0180	0.0146	0.0000	15.3824
Energy	0.0276	0.2358	0.1007	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.0034	301.0034	5.7700e-003	5.5200e-003	302.7921
Mobile	1.1414	5.3332	15.3416	0.0527	4.1549	0.0434	4.1983	1.1120	0.0406	1.1525		5,355.1888	5,355.1888	0.2794		5,362.1730
Total	**2.9071**	**5.6655**	**23.7996**	**0.0546**	**4.1549**	**0.1086**	**4.2634**	**1.1120**	**0.1057**	**1.2176**	**0.0000**	**5,671.2101**	**5,671.2101**	**0.2997**	**5.5200e-003**	**5,680.3475**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7382	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0180	15.0180	0.0146	0.0000	15.3824

Energy	0.0276	0.2358	0.1007	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.0034	301.0034	5.7700e-003	5.5200e-003	302.7921
Mobile	1.1414	5.3332	15.3416	0.0527	4.1549	0.0434	4.1983	1.1120	0.0406	1.1525		5,355.1888	5,355.1888	0.2794		5,362.1730
Total	**2.9071**	**5.6655**	**23.7996**	**0.0546**	**4.1549**	**0.1086**	**4.2634**	**1.1120**	**0.1057**	**1.2176**	**0.0000**	**5,671.2101**	**5,671.2101**	**0.2997**	**5.5200e-003**	**5,680.3475**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2020	6/1/2020	5	22	
2	Grading	Grading	6/15/2020	7/14/2020	5	22	
3	Building Construction	Building Construction	7/15/2020	12/1/2021	5	361	
4	Architectural Coating	Architectural Coating	4/1/2021	8/1/2021	5	87	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.56

Acres of Paving: 0

Residential Indoor: 134,924; Residential Outdoor: 44,975; Non-Residential Indoor: 2,700; Non-Residential Outdoor: 900; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Dumpers/Tenders	5	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50

Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Dumpers/Tenders	5	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cement and Mortar Mixers	2	8.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	10	10.00	0.00	156.00	14.70	6.90	41.00	LD_Mix	HDT_Mix	HHDT
Grading	12	10.00	0.00	2,857.00	14.70	6.90	41.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	84.00	15.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					1.5378	0.0000	1.5378	0.2328	0.0000	0.2328			0.0000			0.0000
Off-Road	1.4796	12.6103	12.1445	0.0209		0.6725	0.6725		0.6417	0.6417		1,952.0552	1,952.0552	0.4114		1,962.3392
Total	**1.4796**	**12.6103**	**12.1445**	**0.0209**	**1.5378**	**0.6725**	**2.2103**	**0.2328**	**0.6417**	**0.8745**		**1,952.0552**	**1,952.0552**	**0.4114**		**1,962.3392**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1144	3.4636	0.8368	0.0107	0.2540	0.0130	0.2670	0.0696	0.0125	0.0821		1,158.2222	1,158.2222	0.0724		1,160.0333
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0460	0.0327	0.4378	1.1800e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		117.6113	117.6113	3.7100e-003		117.7040
Total	**0.1604**	**3.4964**	**1.2747**	**0.0119**	**0.3658**	**0.0140**	**0.3797**	**0.0993**	**0.0133**	**0.1126**		**1,275.8335**	**1,275.8335**	**0.0762**		**1,277.7372**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5698	0.0000	0.5698	0.0863	0.0000	0.0863			0.0000			0.0000
Off-Road	1.4796	12.6103	12.1445	0.0209		0.6725	0.6725		0.6417	0.6417	0.0000	1,952.0552	1,952.0552	0.4114		1,962.3392

Total	**1.4796**	**12.6103**	**12.1445**	**0.0209**	**0.5698**	**0.6725**	**1.2423**	**0.0863**	**0.6417**	**0.7279**	**0.0000**	**1,952.0552**	**1,952.0552**	**0.4114**		**1,962.3392**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1144	3.4636	0.8368	0.0107	0.1656	0.0130	0.1786	0.0479	0.0125	0.0604		1,158.2222	1,158.2222	0.0724		1,160.0333
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0460	0.0327	0.4378	1.1800e-003	0.0671	9.3000e-004	0.0680	0.0187	8.6000e-004	0.0195		117.6113	117.6113	3.7100e-003		117.7040
Total	**0.1604**	**3.4964**	**1.2747**	**0.0119**	**0.2327**	**0.0140**	**0.2466**	**0.0666**	**0.0133**	**0.0799**		**1,275.8335**	**1,275.8335**	**0.0762**		**1,277.7372**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8826	0.0000	0.8826	0.4323	0.0000	0.4323			0.0000			0.0000
Off-Road	2.0021	18.5452	17.4930	0.0355		0.8909	0.8909		0.8425	0.8425		3,361.9805	3,361.9805	0.8674		3,383.6644
Total	**2.0021**	**18.5452**	**17.4930**	**0.0355**	**0.8826**	**0.8909**	**1.7734**	**0.4323**	**0.8425**	**1.2748**		**3,361.9805**	**3,361.9805**	**0.8674**		**3,383.6644**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0952	63.4334	15.3258	0.1957	4.6519	0.2386	4.8904	1.2749	0.2283	1.5031		21,211.8000	21,211.8000	1.3267		21,244.9680
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0460	0.0327	0.4378	1.1800e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		117.6113	117.6113	3.7100e-003		117.7040
Total	**2.1412**	**63.4662**	**15.7636**	**0.1969**	**4.7636**	**0.2395**	**5.0031**	**1.3045**	**0.2291**	**1.5336**		**21,329.4113**	**21,329.4113**	**1.3304**		**21,362.6720**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3270	0.0000	0.3270	0.1602	0.0000	0.1602			0.0000			0.0000
Off-Road	2.0021	18.5452	17.4930	0.0355		0.8909	0.8909		0.8425	0.8425	0.0000	3,361.9805	3,361.9805	0.8674		3,383.6644
Total	**2.0021**	**18.5452**	**17.4930**	**0.0355**	**0.3270**	**0.8909**	**1.2179**	**0.1602**	**0.8425**	**1.0027**	**0.0000**	**3,361.9805**	**3,361.9805**	**0.8674**		**3,383.6644**

Mitigated Construction Off-Site

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

Hauling	2.0952	63.4334	15.3258	0.1957	3.0328	0.2386	3.2713	0.8775	0.2283	1.1057		21,211.8000	21,211.8000	1.3267		21,244.9680
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0460	0.0327	0.4378	1.1800e-003	0.0671	9.3000e-004	0.0680	0.0187	8.6000e-004	0.0195		117.6113	117.6113	3.7100e-003		117.7040
Total	**2.1412**	**63.4662**	**15.7636**	**0.1969**	**3.0999**	**0.2395**	**3.3394**	**0.8961**	**0.2291**	**1.1253**		**21,329.4113**	**21,329.4113**	**1.3304**		**21,362.6720**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5530	13.4302	12.2980	0.0200		0.7985	0.7985		0.7606	0.7606		1,880.5234	1,880.5234	0.4014		1,890.5581
Total	**1.5530**	**13.4302**	**12.2980**	**0.0200**		**0.7985**	**0.7985**		**0.7606**	**0.7606**		**1,880.5234**	**1,880.5234**	**0.4014**		**1,890.5581**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0534	1.5956	0.4181	3.8900e-003	0.0960	7.5100e-003	0.1035	0.0277	7.1800e-003	0.0348		415.5370	415.5370	0.0254		416.1710
Worker	0.3866	0.2750	3.6779	9.9200e-003	0.9389	7.8500e-003	0.9468	0.2490	7.2300e-003	0.2562		987.9348	987.9348	0.0312		988.7135
Total	**0.4399**	**1.8706**	**4.0960**	**0.0138**	**1.0350**	**0.0154**	**1.0503**	**0.2767**	**0.0144**	**0.2911**		**1,403.4719**	**1,403.4719**	**0.0565**		**1,404.8845**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5530	13.4302	12.2980	0.0200		0.7985	0.7985		0.7606	0.7606	0.0000	1,880.5234	1,880.5234	0.4014		1,890.5581
Total	**1.5530**	**13.4302**	**12.2980**	**0.0200**		**0.7985**	**0.7985**		**0.7606**	**0.7606**	**0.0000**	**1,880.5234**	**1,880.5234**	**0.4014**		**1,890.5581**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0534	1.5956	0.4181	3.8900e-003	0.0646	7.5100e-003	0.0721	0.0199	7.1800e-003	0.0271		415.5370	415.5370	0.0254		416.1710
Worker	0.3866	0.2750	3.6779	9.9200e-003	0.5634	7.8500e-003	0.5713	0.1568	7.2300e-003	0.1641		987.9348	987.9348	0.0312		988.7135
Total	**0.4399**	**1.8706**	**4.0960**	**0.0138**	**0.6280**	**0.0154**	**0.6434**	**0.1768**	**0.0144**	**0.1912**		**1,403.4719**	**1,403.4719**	**0.0565**		**1,404.8845**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4116	12.2034	12.1433	0.0200		0.6852	0.6852		0.6528	0.6528		1,880.7611	1,880.7611	0.3949		1,890.6326
Total	**1.4116**	**12.2034**	**12.1433**	**0.0200**		**0.6852**	**0.6852**		**0.6528**	**0.6528**		**1,880.7611**	**1,880.7611**	**0.3949**		**1,890.6326**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0456	1.4563	0.3807	3.8600e-003	0.0960	2.9800e-003	0.0990	0.0277	2.8500e-003	0.0305		412.3210	412.3210	0.0243		412.9282
Worker	0.3601	0.2475	3.3833	9.6000e-003	0.9389	7.5900e-003	0.9465	0.2490	6.9900e-003	0.2560		956.5667	956.5667	0.0282		957.2713
Total	**0.4057**	**1.7038**	**3.7640**	**0.0135**	**1.0350**	**0.0106**	**1.0455**	**0.2767**	**9.8400e-003**	**0.2865**		**1,368.8876**	**1,368.8876**	**0.0525**		**1,370.1995**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4116	12.2034	12.1433	0.0200		0.6852	0.6852		0.6528	0.6528	0.0000	1,880.7611	1,880.7611	0.3949		1,890.6326

Total	**1.4116**	**12.2034**	**12.1433**	**0.0200**		**0.6852**	**0.6852**		**0.6528**	**0.6528**	**0.0000**	**1,880.7611**	**1,880.7611**	**0.3949**		**1,890.6326**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0456	1.4563	0.3807	3.8600e-003	0.0646	2.9800e-003	0.0675	0.0199	2.8500e-003	0.0228		412.3210	412.3210	0.0243		412.9282
Worker	0.3601	0.2475	3.3833	9.6000e-003	0.5634	7.5900e-003	0.5710	0.1568	6.9900e-003	0.1638		956.5667	956.5667	0.0282		957.2713
Total	**0.4057**	**1.7038**	**3.7640**	**0.0135**	**0.6280**	**0.0106**	**0.6386**	**0.1768**	**9.8400e-003**	**0.1866**		**1,368.8876**	**1,368.8876**	**0.0525**		**1,370.1995**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0645					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**5.2834**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0729	0.0501	0.6847	1.9400e-003	0.1900	1.5400e-003	0.1916	0.0504	1.4100e-003	0.0518		193.5909	193.5909	5.7000e-003		193.7335
Total	**0.0729**	**0.0501**	**0.6847**	**1.9400e-003**	**0.1900**	**1.5400e-003**	**0.1916**	**0.0504**	**1.4100e-003**	**0.0518**		**193.5909**	**193.5909**	**5.7000e-003**		**193.7335**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0645					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**5.2834**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0729	0.0501	0.6847	1.9400e-003	0.1140	1.5400e-003	0.1156	0.0317	1.4100e-003	0.0332		193.5909	193.5909	5.7000e-003		193.7335
Total	**0.0729**	**0.0501**	**0.6847**	**1.9400e-003**	**0.1140**	**1.5400e-003**	**0.1156**	**0.0317**	**1.4100e-003**	**0.0332**		**193.5909**	**193.5909**	**5.7000e-003**		**193.7335**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1414	5.3332	15.3416	0.0527	4.1549	0.0434	4.1983	1.1120	0.0406	1.1525		5,355.1888	5,355.1888	0.2794		5,362.1730
Unmitigated	1.1414	5.3332	15.3416	0.0527	4.1549	0.0434	4.1983	1.1120	0.0406	1.1525		5,355.1888	5,355.1888	0.2794		5,362.1730

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	534.29	534.29	534.29	1,824,645	1,824,645
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	67.95	67.95	36.77	120,808	120,808
Total	602.24	602.24	571.06	1,945,453	1,945,453

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.54719	0.04517	0.20274	0.12151	0.01614	0.00614	0.01974	0.02994	0.00247	0.00227	0.00507	0.00068	0.00089
Enclosed Parking with Elevator	0.54719	0.04517	0.20274	0.12151	0.01614	0.00614	0.01974	0.02994	0.00247	0.00227	0.00507	0.00068	0.00089
Strip Mall	0.54719	0.04517	0.20274	0.12151	0.01614	0.00614	0.01974	0.02994	0.00247	0.00227	0.00507	0.00068	0.00089

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0276	0.2358	0.1007	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.0034	301.0034	5.7700e-003	5.5200e-003	302.7921
NaturalGas Unmitigated	0.0276	0.2358	0.1007	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.0034	301.0034	5.7700e-003	5.5200e-003	302.7921

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2550.44	0.0275	0.2350	0.1000	1.5000e-003		0.0190	0.0190		0.0190	0.0190		300.0519	300.0519	5.7500e-003	5.5000e-003	301.8349
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.08767	9.0000e-005	7.9000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.9515	0.9515	2.0000e-005	2.0000e-005	0.9571
Total		**0.0276**	**0.2358**	**0.1007**	**1.5000e-003**		**0.0191**	**0.0191**		**0.0191**	**0.0191**		**301.0034**	**301.0034**	**5.7700e-003**	**5.5200e-003**	**302.7921**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2.55044	0.0275	0.2350	0.1000	1.5000e-003		0.0190	0.0190		0.0190	0.0190		300.0519	300.0519	5.7500e-003	5.5000e-003	301.8349
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.00808767	9.0000e-005	7.9000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.9515	0.9515	2.0000e-005	2.0000e-005	0.9571
Total		**0.0276**	**0.2358**	**0.1007**	**1.5000e-003**		**0.0191**	**0.0191**		**0.0191**	**0.0191**		**301.0034**	**301.0034**	**5.7700e-003**	**5.5200e-003**	**302.7921**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7382	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0180	15.0180	0.0146	0.0000	15.3824
Unmitigated	1.7382	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0180	15.0180	0.0146	0.0000	15.3824

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1207					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2536	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461		15.0180	15.0180	0.0146		15.3824
Total	**1.7382**	**0.0965**	**8.3574**	**4.4000e-004**		**0.0461**	**0.0461**		**0.0461**	**0.0461**	**0.0000**	**15.0180**	**15.0180**	**0.0146**	**0.0000**	**15.3824**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1207					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	1.3638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2536	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461		15.0180	15.0180	0.0146		15.3824
Total	**1.7382**	**0.0965**	**8.3574**	**4.4000e-004**		**0.0461**	**0.0461**		**0.0461**	**0.0461**	**0.0000**	**15.0180**	**15.0180**	**0.0146**	**0.0000**	**15.3824**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2111 South Pacific Avenue Future - Los Angeles-South Coast County, Annual

2111 South Pacific Avenue Future

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	63.00	Space	0.00	25,200.00	0
Apartments Mid Rise	101.00	Dwelling Unit	0.55	66,629.00	289
Strip Mall	1.80	1000sqft	0.01	1,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2021
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Developer information

Construction Phase - Developer information

Off-road Equipment -

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Trips and VMT - Developer information. Assumes 14 CY haul truck capacity

Demolition - Developer information

Grading - Developer information

Vehicle Trips - City of Los Angeles Memo, Traffic Impact Assessment for the Proposed Residential/Retail Project Located at 2111 South Pacific; October 22, 2018

Woodstoves - Developer information

Construction Off-road Equipment Mitigation - Assumes SCAQMD Rule 403 control efficiencies

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	46
tblConstructionPhase	NumDays	5.00	87.00
tblConstructionPhase	NumDays	100.00	361.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	2.00	22.00
tblFireplaces	NumberGas	85.85	0.00
tblFireplaces	NumberNoFireplace	10.10	101.00
tblFireplaces	NumberWood	5.05	0.00
tblGrading	AcresOfGrading	0.00	0.56
tblGrading	MaterialExported	0.00	20,000.00
tblLandUse	LandUseSquareFeet	101,000.00	66,629.00
tblLandUse	LotAcreage	0.57	0.00
tblLandUse	LotAcreage	2.66	0.55
tblLandUse	LotAcreage	0.04	0.01
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	41.00
tblTripsAndVMT	HaulingTripLength	20.00	41.00
tblTripsAndVMT	HaulingTripNumber	2,500.00	2,857.00
tblTripsAndVMT	WorkerTripNumber	25.00	10.00
tblTripsAndVMT	WorkerTripNumber	30.00	10.00
tblVehicleTrips	HO_TTP	40.60	41.00

tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	5.29
tblVehicleTrips	ST_TR	42.04	37.75
tblVehicleTrips	SU_TR	5.86	5.29
tblVehicleTrips	WD_TR	6.65	5.29
tblVehicleTrips	WD_TR	44.32	37.75
tblWoodstoves	NumberCatalytic	5.05	0.00
tblWoodstoves	NumberNoncatalytic	5.05	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1855	2.0484	1.5030	4.9400e-003	0.1440	0.0696	0.2136	0.0391	0.0663	0.1054	0.0000	456.7910	456.7910	0.0522	0.0000	458.0966
2021	0.4505	1.7377	1.9857	4.1500e-003	0.1294	0.0873	0.2167	0.0346	0.0833	0.1180	0.0000	365.7623	365.7623	0.0494	0.0000	366.9977
Maximum	**0.4505**	**2.0484**	**1.9857**	**4.9400e-003**	**0.1440**	**0.0873**	**0.2167**	**0.0391**	**0.0833**	**0.1180**	**0.0000**	**456.7910**	**456.7910**	**0.0522**	**0.0000**	**458.0966**

Mitigated Construction

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

Year	tons/yr										MT/yr					
2020	0.1855	2.0484	1.5030	4.9400e-003	0.0837	0.0696	0.1533	0.0238	0.0663	0.0901	0.0000	456.7909	456.7909	0.0522	0.0000	458.0964
2021	0.4505	1.7377	1.9857	4.1500e-003	0.0786	0.0873	0.1659	0.0222	0.0833	0.1055	0.0000	365.7621	365.7621	0.0494	0.0000	366.9975
Maximum	**0.4505**	**2.0484**	**1.9857**	**4.9400e-003**	**0.0837**	**0.0873**	**0.1659**	**0.0238**	**0.0833**	**0.1055**	**0.0000**	**456.7909**	**456.7909**	**0.0522**	**0.0000**	**458.0964**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**40.64**	**0.00**	**25.82**	**37.66**	**0.00**	**12.43**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-1-2020**	**7-31-2020**	1.2309	1.2309
2	**8-1-2020**	**10-31-2020**	0.5690	0.5690
3	**11-1-2020**	**1-31-2021**	0.5532	0.5532
4	**2-1-2021**	**4-30-2021**	0.5755	0.5755
5	**5-1-2021**	**7-31-2021**	0.7445	0.7445
6	**8-1-2021**	**9-30-2021**	0.3450	0.3450
		Highest	1.2309	1.2309

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3026	0.0121	1.0447	6.0000e-005		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	1.7030	1.7030	1.6500e-003	0.0000	1.7443
Energy	5.0400e-003	0.0430	0.0184	2.7000e-004		3.4800e-003	3.4800e-003		3.4800e-003	3.4800e-003	0.0000	368.3831	368.3831	8.4800e-003	2.4700e-003	369.3312
Mobile	0.1960	1.0083	2.6789	9.2000e-003	0.7384	7.8800e-003	0.7463	0.1979	7.3600e-003	0.2053	0.0000	849.3266	849.3266	0.0456	0.0000	850.4658

Waste						0.0000	0.0000		0.0000	0.0000	9.8146	0.0000	9.8146	0.5800	0.0000	24.3153
Water						0.0000	0.0000		0.0000	0.0000	2.1300	74.8671	76.9971	0.2205	5.5300e-003	84.1590
Total	**0.5036**	**1.0634**	**3.7420**	**9.5300e-003**	**0.7384**	**0.0171**	**0.7555**	**0.1979**	**0.0166**	**0.2145**	**11.9446**	**1,294.2797**	**1,306.2244**	**0.8563**	**8.0000e-003**	**1,330.0156**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3026	0.0121	1.0447	6.0000e-005		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	1.7030	1.7030	1.6500e-003	0.0000	1.7443
Energy	5.0400e-003	0.0430	0.0184	2.7000e-004		3.4800e-003	3.4800e-003		3.4800e-003	3.4800e-003	0.0000	368.3831	368.3831	8.4800e-003	2.4700e-003	369.3312
Mobile	0.1960	1.0083	2.6789	9.2000e-003	0.7384	7.8800e-003	0.7463	0.1979	7.3600e-003	0.2053	0.0000	849.3266	849.3266	0.0456	0.0000	850.4658
Waste						0.0000	0.0000		0.0000	0.0000	9.8146	0.0000	9.8146	0.5800	0.0000	24.3153
Water						0.0000	0.0000		0.0000	0.0000	2.1300	74.8671	76.9971	0.2205	5.5300e-003	84.1590
Total	**0.5036**	**1.0634**	**3.7420**	**9.5300e-003**	**0.7384**	**0.0171**	**0.7555**	**0.1979**	**0.0166**	**0.2145**	**11.9446**	**1,294.2797**	**1,306.2244**	**0.8563**	**8.0000e-003**	**1,330.0156**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2020	6/1/2020	5	22	
2	Grading	Grading	6/15/2020	7/14/2020	5	22	

3	Building Construction	Building Construction	7/15/2020	12/1/2021	5	361	
4	Architectural Coating	Architectural Coating	4/1/2021	8/1/2021	5	87	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.56

Acres of Paving: 0

Residential Indoor: 134,924; Residential Outdoor: 44,975; Non-Residential Indoor: 2,700; Non-Residential Outdoor: 900; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Dumpers/Tenders	5	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Dumpers/Tenders	5	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cement and Mortar Mixers	2	8.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	10	10.00	0.00	156.00	14.70	6.90	41.00	LD_Mix	HDT_Mix	HHDT
Grading	12	10.00	0.00	2,857.00	14.70	6.90	41.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	84.00	15.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0169	0.0000	0.0169	2.5600e-003	0.0000	2.5600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0163	0.1387	0.1336	2.3000e-004		7.4000e-003	7.4000e-003		7.0600e-003	7.0600e-003	0.0000	19.4796	19.4796	4.1000e-003	0.0000	19.5823
Total	**0.0163**	**0.1387**	**0.1336**	**2.3000e-004**	**0.0169**	**7.4000e-003**	**0.0243**	**2.5600e-003**	**7.0600e-003**	**9.6200e-003**	**0.0000**	**19.4796**	**19.4796**	**4.1000e-003**	**0.0000**	**19.5823**

Unmitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	1.2700e-003	0.0397	9.3200e-003	1.2000e-004	2.7500e-003	1.4000e-004	2.8900e-003	7.5000e-004	1.4000e-004	8.9000e-004	0.0000	11.5141	11.5141	7.3000e-004	0.0000	11.5324
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	4.1000e-004	4.5300e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1235	1.1235	4.0000e-005	0.0000	1.1244
Total	**1.7800e-003**	**0.0401**	**0.0139**	**1.3000e-004**	**3.9600e-003**	**1.5000e-004**	**4.1100e-003**	**1.0700e-003**	**1.5000e-004**	**1.2200e-003**	**0.0000**	**12.6376**	**12.6376**	**7.7000e-004**	**0.0000**	**12.6567**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	9.5000e-004	0.0000	9.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0163	0.1387	0.1336	2.3000e-004		7.4000e-003	7.4000e-003		7.0600e-003	7.0600e-003	0.0000	19.4796	19.4796	4.1000e-003	0.0000	19.5822
Total	**0.0163**	**0.1387**	**0.1336**	**2.3000e-004**	**6.2700e-003**	**7.4000e-003**	**0.0137**	**9.5000e-004**	**7.0600e-003**	**8.0100e-003**	**0.0000**	**19.4796**	**19.4796**	**4.1000e-003**	**0.0000**	**19.5822**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2700e-003	0.0397	9.3200e-003	1.2000e-004	1.8000e-003	1.4000e-004	1.9400e-003	5.2000e-004	1.4000e-004	6.6000e-004	0.0000	11.5141	11.5141	7.3000e-004	0.0000	11.5324
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	5.1000e-004	4.1000e-004	4.5300e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	1.1235	1.1235	4.0000e-005	0.0000	1.1244
Total	**1.7800e-003**	**0.0401**	**0.0139**	**1.3000e-004**	**2.5200e-003**	**1.5000e-004**	**2.6800e-003**	**7.2000e-004**	**1.5000e-004**	**8.7000e-004**	**0.0000**	**12.6376**	**12.6376**	**7.7000e-004**	**0.0000**	**12.6567**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.7100e-003	0.0000	9.7100e-003	4.7500e-003	0.0000	4.7500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0220	0.2040	0.1924	3.9000e-004		9.8000e-003	9.8000e-003		9.2700e-003	9.2700e-003	0.0000	33.5493	33.5493	8.6600e-003	0.0000	33.7657
Total	**0.0220**	**0.2040**	**0.1924**	**3.9000e-004**	**9.7100e-003**	**9.8000e-003**	**0.0195**	**4.7500e-003**	**9.2700e-003**	**0.0140**	**0.0000**	**33.5493**	**33.5493**	**8.6600e-003**	**0.0000**	**33.7657**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0232	0.7277	0.1706	2.1400e-003	0.0503	2.6300e-003	0.0529	0.0138	2.5200e-003	0.0163	0.0000	210.8711	210.8711	0.0134	0.0000	211.2050
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	4.1000e-004	4.5300e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1235	1.1235	4.0000e-005	0.0000	1.1244
Total	**0.0237**	**0.7281**	**0.1752**	**2.1500e-003**	**0.0515**	**2.6400e-003**	**0.0542**	**0.0141**	**2.5300e-003**	**0.0167**	**0.0000**	**211.9946**	**211.9946**	**0.0134**	**0.0000**	**212.3294**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.6000e-003	0.0000	3.6000e-003	1.7600e-003	0.0000	1.7600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0220	0.2040	0.1924	3.9000e-004		9.8000e-003	9.8000e-003		9.2700e-003	9.2700e-003	0.0000	33.5493	33.5493	8.6600e-003	0.0000	33.7657
Total	**0.0220**	**0.2040**	**0.1924**	**3.9000e-004**	**3.6000e-003**	**9.8000e-003**	**0.0134**	**1.7600e-003**	**9.2700e-003**	**0.0110**	**0.0000**	**33.5493**	**33.5493**	**8.6600e-003**	**0.0000**	**33.7657**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0232	0.7277	0.1706	2.1400e-003	0.0329	2.6300e-003	0.0355	9.5400e-003	2.5200e-003	0.0121	0.0000	210.8711	210.8711	0.0134	0.0000	211.2050
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	4.1000e-004	4.5300e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	1.1235	1.1235	4.0000e-005	0.0000	1.1244
Total	**0.0237**	**0.7281**	**0.1752**	**2.1500e-003**	**0.0336**	**2.6400e-003**	**0.0363**	**9.7400e-003**	**2.5300e-003**	**0.0123**	**0.0000**	**211.9946**	**211.9946**	**0.0134**	**0.0000**	**212.3294**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

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

Off-Road	0.0947	0.8192	0.7502	1.2200e-003		0.0487	0.0487		0.0464	0.0464	0.0000	104.0649	104.0649	0.0222	0.0000	104.6202
Total	**0.0947**	**0.8192**	**0.7502**	**1.2200e-003**		**0.0487**	**0.0487**		**0.0464**	**0.0464**	**0.0000**	**104.0649**	**104.0649**	**0.0222**	**0.0000**	**104.6202**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3200e-003	0.0992	0.0268	2.3000e-004	5.7600e-003	4.6000e-004	6.2200e-003	1.6600e-003	4.4000e-004	2.1000e-003	0.0000	22.7310	22.7310	1.4400e-003	0.0000	22.7671
Worker	0.0237	0.0191	0.2109	5.8000e-004	0.0562	4.8000e-004	0.0566	0.0149	4.4000e-004	0.0154	0.0000	52.3340	52.3340	1.6500e-003	0.0000	52.3752
Total	**0.0270**	**0.1182**	**0.2378**	**8.1000e-004**	**0.0619**	**9.4000e-004**	**0.0629**	**0.0166**	**8.8000e-004**	**0.0175**	**0.0000**	**75.0650**	**75.0650**	**3.0900e-003**	**0.0000**	**75.1423**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0947	0.8192	0.7502	1.2200e-003		0.0487	0.0487		0.0464	0.0464	0.0000	104.0648	104.0648	0.0222	0.0000	104.6201
Total	**0.0947**	**0.8192**	**0.7502**	**1.2200e-003**		**0.0487**	**0.0487**		**0.0464**	**0.0464**	**0.0000**	**104.0648**	**104.0648**	**0.0222**	**0.0000**	**104.6201**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3200e-003	0.0992	0.0268	2.3000e-004	3.8900e-003	4.6000e-004	4.3500e-003	1.2000e-003	4.4000e-004	1.6400e-003	0.0000	22.7310	22.7310	1.4400e-003	0.0000	22.7671
Worker	0.0237	0.0191	0.2109	5.8000e-004	0.0338	4.8000e-004	0.0342	9.4200e-003	4.4000e-004	9.8600e-003	0.0000	52.3340	52.3340	1.6500e-003	0.0000	52.3752
Total	**0.0270**	**0.1182**	**0.2378**	**8.1000e-004**	**0.0377**	**9.4000e-004**	**0.0386**	**0.0106**	**8.8000e-004**	**0.0115**	**0.0000**	**75.0650**	**75.0650**	**3.0900e-003**	**0.0000**	**75.1423**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1687	1.4583	1.4511	2.3900e-003		0.0819	0.0819		0.0780	0.0780	0.0000	203.8906	203.8906	0.0428	0.0000	204.9608
Total	**0.1687**	**1.4583**	**1.4511**	**2.3900e-003**		**0.0819**	**0.0819**		**0.0780**	**0.0780**	**0.0000**	**203.8906**	**203.8906**	**0.0428**	**0.0000**	**204.9608**

Unmitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5700e-003	0.1769	0.0480	4.6000e-004	0.0113	3.6000e-004	0.0117	3.2600e-003	3.4000e-004	3.6000e-003	0.0000	44.1845	44.1845	2.7100e-003	0.0000	44.2523
Worker	0.0432	0.0336	0.3796	1.1000e-003	0.1100	9.1000e-004	0.1109	0.0292	8.4000e-004	0.0301	0.0000	99.2675	99.2675	2.9200e-003	0.0000	99.3405
Total	**0.0488**	**0.2105**	**0.4276**	**1.5600e-003**	**0.1213**	**1.2700e-003**	**0.1226**	**0.0325**	**1.1800e-003**	**0.0337**	**0.0000**	**143.4520**	**143.4520**	**5.6300e-003**	**0.0000**	**143.5928**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1687	1.4583	1.4511	2.3900e-003		0.0819	0.0819		0.0780	0.0780	0.0000	203.8904	203.8904	0.0428	0.0000	204.9605
Total	**0.1687**	**1.4583**	**1.4511**	**2.3900e-003**		**0.0819**	**0.0819**		**0.0780**	**0.0780**	**0.0000**	**203.8904**	**203.8904**	**0.0428**	**0.0000**	**204.9605**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5700e-003	0.1769	0.0480	4.6000e-004	7.6200e-003	3.6000e-004	7.9800e-003	2.3600e-003	3.4000e-004	2.7000e-003	0.0000	44.1845	44.1845	2.7100e-003	0.0000	44.2523

Worker	0.0432	0.0336	0.3796	1.1000e-003	0.0661	9.1000e-004	0.0671	0.0185	8.4000e-004	0.0193	0.0000	99.2675	99.2675	2.9200e-003	0.0000	99.3405
Total	**0.0488**	**0.2105**	**0.4276**	**1.5600e-003**	**0.0738**	**1.2700e-003**	**0.0750**	**0.0208**	**1.1800e-003**	**0.0220**	**0.0000**	**143.4520**	**143.4520**	**5.6300e-003**	**0.0000**	**143.5928**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5200e-003	0.0664	0.0791	1.3000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	11.1067	11.1067	7.6000e-004	0.0000	11.1257
Total	**0.2298**	**0.0664**	**0.0791**	**1.3000e-004**		**4.0900e-003**	**4.0900e-003**		**4.0900e-003**	**4.0900e-003**	**0.0000**	**11.1067**	**11.1067**	**7.6000e-004**	**0.0000**	**11.1257**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1800e-003	2.4800e-003	0.0280	8.0000e-005	8.1000e-003	7.0000e-005	8.1700e-003	2.1500e-003	6.0000e-005	2.2100e-003	0.0000	7.3130	7.3130	2.2000e-004	0.0000	7.3184
Total	**3.1800e-003**	**2.4800e-003**	**0.0280**	**8.0000e-005**	**8.1000e-003**	**7.0000e-005**	**8.1700e-003**	**2.1500e-003**	**6.0000e-005**	**2.2100e-003**	**0.0000**	**7.3130**	**7.3130**	**2.2000e-004**	**0.0000**	**7.3184**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5200e-003	0.0664	0.0791	1.3000e-004		4.0900e-003	4.0900e-003		4.0900e-003	4.0900e-003	0.0000	11.1066	11.1066	7.6000e-004	0.0000	11.1257
Total	**0.2298**	**0.0664**	**0.0791**	**1.3000e-004**		**4.0900e-003**	**4.0900e-003**		**4.0900e-003**	**4.0900e-003**	**0.0000**	**11.1066**	**11.1066**	**7.6000e-004**	**0.0000**	**11.1257**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1800e-003	2.4800e-003	0.0280	8.0000e-005	4.8700e-003	7.0000e-005	4.9400e-003	1.3600e-003	6.0000e-005	1.4200e-003	0.0000	7.3130	7.3130	2.2000e-004	0.0000	7.3184
Total	**3.1800e-003**	**2.4800e-003**	**0.0280**	**8.0000e-005**	**4.8700e-003**	**7.0000e-005**	**4.9400e-003**	**1.3600e-003**	**6.0000e-005**	**1.4200e-003**	**0.0000**	**7.3130**	**7.3130**	**2.2000e-004**	**0.0000**	**7.3184**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1960	1.0083	2.6789	9.2000e-003	0.7384	7.8800e-003	0.7463	0.1979	7.3600e-003	0.2053	0.0000	849.3266	849.3266	0.0456	0.0000	850.4658
Unmitigated	0.1960	1.0083	2.6789	9.2000e-003	0.7384	7.8800e-003	0.7463	0.1979	7.3600e-003	0.2053	0.0000	849.3266	849.3266	0.0456	0.0000	850.4658

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	534.29	534.29	534.29	1,824,645	1,824,645
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	67.95	67.95	36.77	120,808	120,808
Total	602.24	602.24	571.06	1,945,453	1,945,453

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.547192	0.045171	0.202743	0.121516	0.016141	0.006143	0.019743	0.029945	0.002479	0.002276	0.005078	0.000682	0.000891
Enclosed Parking with Elevator	0.547192	0.045171	0.202743	0.121516	0.016141	0.006143	0.019743	0.029945	0.002479	0.002276	0.005078	0.000682	0.000891
Strip Mall	0.547192	0.045171	0.202743	0.121516	0.016141	0.006143	0.019743	0.029945	0.002479	0.002276	0.005078	0.000682	0.000891

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	318.5486	318.5486	7.5200e-003	1.5600e-003	319.2006
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	318.5486	318.5486	7.5200e-003	1.5600e-003	319.2006
NaturalGas Mitigated	5.0400e-003	0.0430	0.0184	2.7000e-004		3.4800e-003	3.4800e-003		3.4800e-003	3.4800e-003	0.0000	49.8345	49.8345	9.6000e-004	9.1000e-004	50.1306
NaturalGas Unmitigated	5.0400e-003	0.0430	0.0184	2.7000e-004		3.4800e-003	3.4800e-003		3.4800e-003	3.4800e-003	0.0000	49.8345	49.8345	9.6000e-004	9.1000e-004	50.1306

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	930911	5.0200e-003	0.0429	0.0183	2.7000e-004		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	49.6770	49.6770	9.5000e-004	9.1000e-004	49.9722
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	2952	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1575	0.1575	0.0000	0.0000	0.1585
Total		**5.0400e-003**	**0.0430**	**0.0184**	**2.7000e-004**		**3.4800e-003**	**3.4800e-003**		**3.4800e-003**	**3.4800e-003**	**0.0000**	**49.8345**	**49.8345**	**9.5000e-004**	**9.1000e-004**	**50.1306**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	930911	5.0200e-003	0.0429	0.0183	2.7000e-004		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	49.6770	49.6770	9.5000e-004	9.1000e-004	49.9722
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	2952	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1575	0.1575	0.0000	0.0000	0.1585
Total		**5.0400e-003**	**0.0430**	**0.0184**	**2.7000e-004**		**3.4800e-003**	**3.4800e-003**		**3.4800e-003**	**3.4800e-003**	**0.0000**	**49.8345**	**49.8345**	**9.5000e-004**	**9.1000e-004**	**50.1306**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	399968	222.7668	5.2600e-003	1.0900e-003	223.2228
Enclosed Parking with Elevator	147672	82.2476	1.9400e-003	4.0000e-004	82.4160
Strip Mall	24300	13.5342	3.2000e-004	7.0000e-005	13.5619
Total		**318.5486**	**7.5200e-003**	**1.5600e-003**	**319.2006**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	399968	222.7668	5.2600e-003	1.0900e-003	223.2228
Enclosed Parking with Elevator	147672	82.2476	1.9400e-003	4.0000e-004	82.4160
Strip Mall	24300	13.5342	3.2000e-004	7.0000e-005	13.5619
Total		**318.5486**	**7.5200e-003**	**1.5600e-003**	**319.2006**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3026	0.0121	1.0447	6.0000e-005		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	1.7030	1.7030	1.6500e-003	0.0000	1.7443
Unmitigated	0.3026	0.0121	1.0447	6.0000e-005		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	1.7030	1.7030	1.6500e-003	0.0000	1.7443

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2489					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0317	0.0121	1.0447	6.0000e-005		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	1.7030	1.7030	1.6500e-003	0.0000	1.7443
Total	**0.3026**	**0.0121**	**1.0447**	**6.0000e-005**		**5.7600e-003**	**5.7600e-003**		**5.7600e-003**	**5.7600e-003**	**0.0000**	**1.7030**	**1.7030**	**1.6500e-003**	**0.0000**	**1.7443**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0220					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2489					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0317	0.0121	1.0447	6.0000e-005		5.7600e-003	5.7600e-003		5.7600e-003	5.7600e-003	0.0000	1.7030	1.7030	1.6500e-003	0.0000	1.7443
Total	**0.3026**	**0.0121**	**1.0447**	**6.0000e-005**		**5.7600e-003**	**5.7600e-003**		**5.7600e-003**	**5.7600e-003**	**0.0000**	**1.7030**	**1.7030**	**1.6500e-003**	**0.0000**	**1.7443**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	76.9971	0.2205	5.5300e-003	84.1590
Unmitigated	76.9971	0.2205	5.5300e-003	84.1590

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	6.58056 / 4.14861	75.4822	0.2162	5.4200e-003	82.5019
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.133331 / 0.0817187	1.5149	4.3800e-003	1.1000e-004	1.6571
Total		**76.9971**	**0.2205**	**5.5300e-003**	**84.1590**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
Apartments Mid Rise	6.58056 / 4.14861	75.4822	0.2162	5.4200e-003	82.5019
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.133331 / 0.0817187	1.5149	4.3800e-003	1.1000e-004	1.6571
Total		**76.9971**	**0.2205**	**5.5300e-003**	**84.1590**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9.8146	0.5800	0.0000	24.3153
Unmitigated	9.8146	0.5800	0.0000	24.3153

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Apartments Mid Rise	46.46	9.4310	0.5574	0.0000	23.3648
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	1.89	0.3837	0.0227	0.0000	0.9505
Total		**9.8146**	**0.5800**	**0.0000**	**24.3153**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	46.46	9.4310	0.5574	0.0000	23.3648
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	1.89	0.3837	0.0227	0.0000	0.9505
Total		**9.8146**	**0.5800**	**0.0000**	**24.3153**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

2111 South Pacific Avenue Future - Los Angeles-South Coast County, Winter

2111 South Pacific Avenue Future

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	63.00	Space	0.00	25,200.00	0
Apartments Mid Rise	101.00	Dwelling Unit	0.55	66,629.00	289
Strip Mall	1.80	1000sqft	0.01	1,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2021
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Developer information

Construction Phase - Developer information

Off-road Equipment -

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Off-road Equipment - Developer information

Trips and VMT - Developer information. Assumes 14 CY haul truck capacity

Demolition - Developer information

Grading - Developer information

Vehicle Trips - City of Los Angeles Memo, Traffic Impact Assessment for the Proposed Residential/Retail Project Located at 2111 South Pacific; October 22,

Woodstoves - Developer information

Construction Off-road Equipment Mitigation - Assumes SCAQMD Rule 403 control efficiencies

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	46
tblConstructionPhase	NumDays	5.00	87.00
tblConstructionPhase	NumDays	100.00	361.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	2.00	22.00
tblFireplaces	NumberGas	85.85	0.00
tblFireplaces	NumberNoFireplace	10.10	101.00
tblFireplaces	NumberWood	5.05	0.00
tblGrading	AcresOfGrading	0.00	0.56
tblGrading	MaterialExported	0.00	20,000.00
tblLandUse	LandUseSquareFeet	101,000.00	66,629.00
tblLandUse	LotAcreage	0.57	0.00
tblLandUse	LotAcreage	2.66	0.55
tblLandUse	LotAcreage	0.04	0.01
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	41.00
tblTripsAndVMT	HaulingTripLength	20.00	41.00
tblTripsAndVMT	HaulingTripNumber	2,500.00	2,857.00
tblTripsAndVMT	WorkerTripNumber	25.00	10.00
tblTripsAndVMT	WorkerTripNumber	30.00	10.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00

tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	5.29
tblVehicleTrips	ST_TR	42.04	37.75
tblVehicleTrips	SU_TR	5.86	5.29
tblVehicleTrips	WD_TR	6.65	5.29
tblVehicleTrips	WD_TR	44.32	37.75
tblWoodstoves	NumberCatalytic	5.05	0.00
tblWoodstoves	NumberNoncatalytic	5.05	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1755	83.5177	33.6888	0.2305	5.6462	1.1322	6.7784	1.7368	1.0734	2.8102	0.0000	24,493.1328	24,493.1328	2.2248	0.0000	24,548.7519
2021	7.2244	15.5129	18.1014	0.0376	1.2250	0.7915	2.0165	0.3271	0.7582	1.0853	0.0000	3,646.2011	3,646.2011	0.4719	0.0000	3,657.9993
Maximum	**7.2244**	**83.5177**	**33.6888**	**0.2305**	**5.6462**	**1.1322**	**6.7784**	**1.7368**	**1.0734**	**2.8102**	**0.0000**	**24,493.1328**	**24,493.1328**	**2.2248**	**0.0000**	**24,548.7519**

Mitigated Construction

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

2020	4.1755	83.5177	33.6888	0.2305	3.4268	1.1322	4.5591	1.0563	1.0734	2.1297	0.0000	24,493.1328	24,493.1328	2.2248	0.0000	24,548.7519
2021	7.2244	15.5129	18.1014	0.0376	0.7420	0.7915	1.5335	0.2085	0.7582	0.9667	0.0000	3,646.2011	3,646.2011	0.4719	0.0000	3,657.9993
Maximum	**7.2244**	**83.5177**	**33.6888**	**0.2305**	**3.4268**	**1.1322**	**4.5591**	**1.0563**	**1.0734**	**2.1297**	**0.0000**	**24,493.1328**	**24,493.1328**	**2.2248**	**0.0000**	**24,548.7519**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**39.33**	**0.00**	**30.73**	**38.72**	**0.00**	**20.51**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7382	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0180	15.0180	0.0146	0.0000	15.3824
Energy	0.0276	0.2358	0.1007	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.0034	301.0034	5.7700e-003	5.5200e-003	302.7921
Mobile	1.1090	5.4684	14.5868	0.0501	4.1549	0.0437	4.1986	1.1120	0.0408	1.1527		5,095.3890	5,095.3890	0.2784		5,102.3490
Total	**2.8747**	**5.8007**	**23.0449**	**0.0520**	**4.1549**	**0.1088**	**4.2637**	**1.1120**	**0.1059**	**1.2179**	**0.0000**	**5,411.4103**	**5,411.4103**	**0.2988**	**5.5200e-003**	**5,420.5235**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7382	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0180	15.0180	0.0146	0.0000	15.3824

Energy	0.0276	0.2358	0.1007	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.0034	301.0034	5.7700e-003	5.5200e-003	302.7921
Mobile	1.1090	5.4684	14.5868	0.0501	4.1549	0.0437	4.1986	1.1120	0.0408	1.1527		5,095.3890	5,095.3890	0.2784		5,102.3490
Total	**2.8747**	**5.8007**	**23.0449**	**0.0520**	**4.1549**	**0.1088**	**4.2637**	**1.1120**	**0.1059**	**1.2179**	**0.0000**	**5,411.4103**	**5,411.4103**	**0.2988**	**5.5200e-003**	**5,420.5235**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2020	6/1/2020	5	22	
2	Grading	Grading	6/15/2020	7/14/2020	5	22	
3	Building Construction	Building Construction	7/15/2020	12/1/2021	5	361	
4	Architectural Coating	Architectural Coating	4/1/2021	8/1/2021	5	87	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.56

Acres of Paving: 0

Residential Indoor: 134,924; Residential Outdoor: 44,975; Non-Residential Indoor: 2,700; Non-Residential Outdoor: 900; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Dumpers/Tenders	5	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Bore/Drill Rigs	1	8.00	221	0.50

Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Dumpers/Tenders	5	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cement and Mortar Mixers	2	8.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	10	10.00	0.00	156.00	14.70	6.90	41.00	LD_Mix	HDT_Mix	HHDT
Grading	12	10.00	0.00	2,857.00	14.70	6.90	41.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	84.00	15.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

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

Category	lb/day										lb/day					
Fugitive Dust					1.5378	0.0000	1.5378	0.2328	0.0000	0.2328			0.0000			0.0000
Off-Road	1.4796	12.6103	12.1445	0.0209		0.6725	0.6725		0.6417	0.6417		1,952.0552	1,952.0552	0.4114		1,962.3392
Total	**1.4796**	**12.6103**	**12.1445**	**0.0209**	**1.5378**	**0.6725**	**2.2103**	**0.2328**	**0.6417**	**0.8745**		**1,952.0552**	**1,952.0552**	**0.4114**		**1,962.3392**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1159	3.5457	0.8624	0.0106	0.2540	0.0131	0.2671	0.0696	0.0126	0.0822		1,147.7718	1,147.7718	0.0739		1,149.6200
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0363	0.4010	1.1100e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		110.7420	110.7420	3.4900e-003		110.8293
Total	**0.1670**	**3.5820**	**1.2635**	**0.0117**	**0.3658**	**0.0141**	**0.3798**	**0.0993**	**0.0134**	**0.1127**		**1,258.5138**	**1,258.5138**	**0.0774**		**1,260.4493**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5698	0.0000	0.5698	0.0863	0.0000	0.0863			0.0000			0.0000
Off-Road	1.4796	12.6103	12.1445	0.0209		0.6725	0.6725		0.6417	0.6417	0.0000	1,952.0552	1,952.0552	0.4114		1,962.3392

Total	**1.4796**	**12.6103**	**12.1445**	**0.0209**	**0.5698**	**0.6725**	**1.2423**	**0.0863**	**0.6417**	**0.7279**	**0.0000**	**1,952.0552**	**1,952.0552**	**0.4114**		**1,962.3392**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1159	3.5457	0.8624	0.0106	0.1656	0.0131	0.1787	0.0479	0.0126	0.0605		1,147.7718	1,147.7718	0.0739		1,149.6200
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0363	0.4010	1.1100e-003	0.0671	9.3000e-004	0.0680	0.0187	8.6000e-004	0.0195		110.7420	110.7420	3.4900e-003		110.8293
Total	**0.1670**	**3.5820**	**1.2635**	**0.0117**	**0.2327**	**0.0141**	**0.2467**	**0.0666**	**0.0134**	**0.0800**		**1,258.5138**	**1,258.5138**	**0.0774**		**1,260.4493**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.8826	0.0000	0.8826	0.4323	0.0000	0.4323			0.0000			0.0000
Off-Road	2.0021	18.5452	17.4930	0.0355		0.8909	0.8909		0.8425	0.8425		3,361.9805	3,361.9805	0.8674		3,383.6644
Total	**2.0021**	**18.5452**	**17.4930**	**0.0355**	**0.8826**	**0.8909**	**1.7734**	**0.4323**	**0.8425**	**1.2748**		**3,361.9805**	**3,361.9805**	**0.8674**		**3,383.6644**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1223	64.9363	15.7948	0.1939	4.6519	0.2404	4.8923	1.2749	0.2300	1.5049		21,020.4103	21,020.4103	1.3539		21,054.2582
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0363	0.4010	1.1100e-003	0.1118	9.3000e-004	0.1127	0.0296	8.6000e-004	0.0305		110.7420	110.7420	3.4900e-003		110.8293
Total	**2.1734**	**64.9725**	**16.1958**	**0.1951**	**4.7636**	**0.2413**	**5.0050**	**1.3045**	**0.2309**	**1.5354**		**21,131.1523**	**21,131.1523**	**1.3574**		**21,165.0875**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3270	0.0000	0.3270	0.1602	0.0000	0.1602			0.0000			0.0000
Off-Road	2.0021	18.5452	17.4930	0.0355		0.8909	0.8909		0.8425	0.8425	0.0000	3,361.9805	3,361.9805	0.8674		3,383.6644
Total	**2.0021**	**18.5452**	**17.4930**	**0.0355**	**0.3270**	**0.8909**	**1.2179**	**0.1602**	**0.8425**	**1.0027**	**0.0000**	**3,361.9805**	**3,361.9805**	**0.8674**		**3,383.6644**

Mitigated Construction Off-Site

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

Hauling	2.1223	64.9363	15.7948	0.1939	3.0328	0.2404	3.2732	0.8775	0.2300	1.1075		21,020.4103	21,020.4103	1.3539		21,054.2582
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0363	0.4010	1.1100e-003	0.0671	9.3000e-004	0.0680	0.0187	8.6000e-004	0.0195		110.7420	110.7420	3.4900e-003		110.8293
Total	**2.1734**	**64.9725**	**16.1958**	**0.1951**	**3.0999**	**0.2413**	**3.3412**	**0.8961**	**0.2309**	**1.1270**		**21,131.1523**	**21,131.1523**	**1.3574**		**21,165.0875**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5530	13.4302	12.2980	0.0200		0.7985	0.7985		0.7606	0.7606		1,880.5234	1,880.5234	0.4014		1,890.5581
Total	**1.5530**	**13.4302**	**12.2980**	**0.0200**		**0.7985**	**0.7985**		**0.7606**	**0.7606**		**1,880.5234**	**1,880.5234**	**0.4014**		**1,890.5581**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0558	1.5953	0.4611	3.7900e-003	0.0960	7.6300e-003	0.1037	0.0277	7.3000e-003	0.0350		404.1736	404.1736	0.0270		404.8493
Worker	0.4293	0.3045	3.3685	9.3400e-003	0.9389	7.8500e-003	0.9468	0.2490	7.2300e-003	0.2562		930.2331	930.2331	0.0293		930.9661
Total	**0.4850**	**1.8997**	**3.8296**	**0.0131**	**1.0350**	**0.0155**	**1.0504**	**0.2767**	**0.0145**	**0.2912**		**1,334.4067**	**1,334.4067**	**0.0564**		**1,335.8154**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5530	13.4302	12.2980	0.0200		0.7985	0.7985		0.7606	0.7606	0.0000	1,880.5234	1,880.5234	0.4014		1,890.5581
Total	**1.5530**	**13.4302**	**12.2980**	**0.0200**		**0.7985**	**0.7985**		**0.7606**	**0.7606**	**0.0000**	**1,880.5234**	**1,880.5234**	**0.4014**		**1,890.5581**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0558	1.5953	0.4611	3.7900e-003	0.0646	7.6300e-003	0.0722	0.0199	7.3000e-003	0.0272		404.1736	404.1736	0.0270		404.8493
Worker	0.4293	0.3045	3.3685	9.3400e-003	0.5634	7.8500e-003	0.5713	0.1568	7.2300e-003	0.1641		930.2331	930.2331	0.0293		930.9661
Total	**0.4850**	**1.8997**	**3.8296**	**0.0131**	**0.6280**	**0.0155**	**0.6435**	**0.1768**	**0.0145**	**0.1913**		**1,334.4067**	**1,334.4067**	**0.0564**		**1,335.8154**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4116	12.2034	12.1433	0.0200		0.6852	0.6852		0.6528	0.6528		1,880.7611	1,880.7611	0.3949		1,890.6326
Total	**1.4116**	**12.2034**	**12.1433**	**0.0200**		**0.6852**	**0.6852**		**0.6528**	**0.6528**		**1,880.7611**	**1,880.7611**	**0.3949**		**1,890.6326**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0479	1.4533	0.4212	3.7500e-003	0.0960	3.0700e-003	0.0991	0.0277	2.9400e-003	0.0306		401.0183	401.0183	0.0259		401.6655
Worker	0.4005	0.2740	3.0934	9.0400e-003	0.9389	7.5900e-003	0.9465	0.2490	6.9900e-003	0.2560		900.6909	900.6909	0.0265		901.3535
Total	**0.4484**	**1.7273**	**3.5145**	**0.0128**	**1.0350**	**0.0107**	**1.0456**	**0.2767**	**9.9300e-003**	**0.2866**		**1,301.7092**	**1,301.7092**	**0.0524**		**1,303.0190**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4116	12.2034	12.1433	0.0200		0.6852	0.6852		0.6528	0.6528	0.0000	1,880.7611	1,880.7611	0.3949		1,890.6326

Total	**1.4116**	**12.2034**	**12.1433**	**0.0200**		**0.6852**	**0.6852**		**0.6528**	**0.6528**	**0.0000**	**1,880.7611**	**1,880.7611**	**0.3949**		**1,890.6326**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0479	1.4533	0.4212	3.7500e-003	0.0646	3.0700e-003	0.0676	0.0199	2.9400e-003	0.0229		401.0183	401.0183	0.0259		401.6655
Worker	0.4005	0.2740	3.0934	9.0400e-003	0.5634	7.5900e-003	0.5710	0.1568	6.9900e-003	0.1638		900.6909	900.6909	0.0265		901.3535
Total	**0.4484**	**1.7273**	**3.5145**	**0.0128**	**0.6280**	**0.0107**	**0.6387**	**0.1768**	**9.9300e-003**	**0.1867**		**1,301.7092**	**1,301.7092**	**0.0524**		**1,303.0190**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0645					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**5.2834**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0811	0.0555	0.6260	1.8300e-003	0.1900	1.5400e-003	0.1916	0.0504	1.4100e-003	0.0518		182.2827	182.2827	5.3600e-003		182.4168
Total	**0.0811**	**0.0555**	**0.6260**	**1.8300e-003**	**0.1900**	**1.5400e-003**	**0.1916**	**0.0504**	**1.4100e-003**	**0.0518**		**182.2827**	**182.2827**	**5.3600e-003**		**182.4168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.0645					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**5.2834**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

Mitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0811	0.0555	0.6260	1.8300e-003	0.1140	1.5400e-003	0.1156	0.0317	1.4100e-003	0.0332		182.2827	182.2827	5.3600e-003		182.4168
Total	**0.0811**	**0.0555**	**0.6260**	**1.8300e-003**	**0.1140**	**1.5400e-003**	**0.1156**	**0.0317**	**1.4100e-003**	**0.0332**		**182.2827**	**182.2827**	**5.3600e-003**		**182.4168**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1090	5.4684	14.5868	0.0501	4.1549	0.0437	4.1986	1.1120	0.0408	1.1527		5,095.3890	5,095.3890	0.2784		5,102.3490
Unmitigated	1.1090	5.4684	14.5868	0.0501	4.1549	0.0437	4.1986	1.1120	0.0408	1.1527		5,095.3890	5,095.3890	0.2784		5,102.3490

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	534.29	534.29	534.29	1,824,645	1,824,645
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	67.95	67.95	36.77	120,808	120,808
Total	602.24	602.24	571.06	1,945,453	1,945,453

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.54719	0.04517	0.20274	0.12151	0.01614	0.00614	0.01974	0.02994	0.00247	0.00227	0.00507	0.00068	0.00089
Enclosed Parking with Elevator	0.54719	0.04517	0.20274	0.12151	0.01614	0.00614	0.01974	0.02994	0.00247	0.00227	0.00507	0.00068	0.00089
Strip Mall	0.54719	0.04517	0.20274	0.12151	0.01614	0.00614	0.01974	0.02994	0.00247	0.00227	0.00507	0.00068	0.00089

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0276	0.2358	0.1007	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.0034	301.0034	5.7700e-003	5.5200e-003	302.7921
NaturalGas Unmitigated	0.0276	0.2358	0.1007	1.5100e-003		0.0191	0.0191		0.0191	0.0191		301.0034	301.0034	5.7700e-003	5.5200e-003	302.7921

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2550.44	0.0275	0.2350	0.1000	1.5000e-003		0.0190	0.0190		0.0190	0.0190		300.0519	300.0519	5.7500e-003	5.5000e-003	301.8349
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	8.08767	9.0000e-005	7.9000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.9515	0.9515	2.0000e-005	2.0000e-005	0.9571
Total		**0.0276**	**0.2358**	**0.1007**	**1.5000e-003**		**0.0191**	**0.0191**		**0.0191**	**0.0191**		**301.0034**	**301.0034**	**5.7700e-003**	**5.5200e-003**	**302.7921**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2.55044	0.0275	0.2350	0.1000	1.5000e-003		0.0190	0.0190		0.0190	0.0190		300.0519	300.0519	5.7500e-003	5.5000e-003	301.8349
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.00808767	9.0000e-005	7.9000e-004	6.7000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.9515	0.9515	2.0000e-005	2.0000e-005	0.9571
Total		**0.0276**	**0.2358**	**0.1007**	**1.5000e-003**		**0.0191**	**0.0191**		**0.0191**	**0.0191**		**301.0034**	**301.0034**	**5.7700e-003**	**5.5200e-003**	**302.7921**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7382	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0180	15.0180	0.0146	0.0000	15.3824
Unmitigated	1.7382	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461	0.0000	15.0180	15.0180	0.0146	0.0000	15.3824

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1207					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2536	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461		15.0180	15.0180	0.0146		15.3824
Total	**1.7382**	**0.0965**	**8.3574**	**4.4000e-004**		**0.0461**	**0.0461**		**0.0461**	**0.0461**	**0.0000**	**15.0180**	**15.0180**	**0.0146**	**0.0000**	**15.3824**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1207					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	1.3638					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2536	0.0965	8.3574	4.4000e-004		0.0461	0.0461		0.0461	0.0461		15.0180	15.0180	0.0146		15.3824
Total	**1.7382**	**0.0965**	**8.3574**	**4.4000e-004**		**0.0461**	**0.0461**		**0.0461**	**0.0461**	**0.0000**	**15.0180**	**15.0180**	**0.0146**	**0.0000**	**15.3824**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation