

January 28, 2020

Rodrigo Pelayo
City of Pasadena
Planning and Community Development Department
175 North Garfield Avenue
Pasadena, California 91101-1704

VIA EMAIL
rpelayo@cityofpasadena.net

Subject: Air Quality Analysis for the Proposed Single-Room Occupancy Development at 231 North Hill Avenue and 226 North Holliston Avenue in the City of Pasadena, California

Dear Mr. Pelayo:

This Letter Report presents the results of the air quality analysis for the proposed single-room occupancy (SRO) development on 231 North Hill Avenue and 226 North Holliston Avenue in the City of Pasadena, California (hereinafter referred to as the “Project”). This analysis addresses the potential air quality impacts associated with the Project in accordance with the California Environmental Quality Act (CEQA) (*California Public Resources Code* §21000 et seq.) and the State CEQA Guidelines (*California Code of Regulations*, Title 14, §15000 et seq.).

PROJECT SETTING AND DESCRIPTION

The applicant, Hill & Holliston, LLC, proposes to develop a 19,138-square-foot, 58-unit, four-story SRO building with a single level of subterranean parking with 47 parking spaces. The Project site occupies two separate parcels on 0.55 acres at 231 North Hill Avenue and 226 North Holliston Avenue in the City of Pasadena (Exhibit 1, Regional Location and Local Vicinity). The Project site is currently vacant and undeveloped and is predominantly surrounded by commercial and residential uses (Exhibit 2, Aerial Photograph).

225 South Lake Avenue
Suite 1000
Pasadena, CA 91101


Tel 626.351.2000
Fax 626.351.2030
www.Psomas.com

McDonald Park

ANGELES NATIONAL FOREST

Project Location



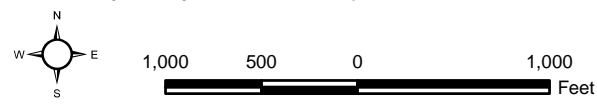
 Project Boundary

D:\Projects\3PAS\010904\MXD\Air_Quality\ex_LV_RL_20200108.mxd

Regional Location and Local Vicinity

Exhibit 1

Air Quality Analysis for the Proposed Residential Development at 231 North Hill Avenue, Pasadena



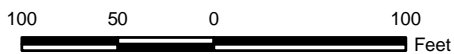
D:\Projects\3PAS\010904\MXD\Air_Quality\ex_Aerial_20200106.mxd



Aerial Photograph

Exhibit 2

Air Quality Analysis for the Proposed Residential Development at 231 North Hill Avenue, Pasadena



Rodrigo Pelayo
January 28, 2020
Page 4

AIR QUALITY ANALYSIS

Relevant elements of the proposed Project related to the analysis of potential air quality impacts include (1) site preparation activities, (2) on-site grading activities, which are expected to export 1,700 cubic yards (cy) of soil; (3) the use of off-road equipment during the construction of 58 single-occupancy units and subterranean parking with 47 parking spaces; and (4) the vehicle trips generated by the proposed Project.

The Project site is located in the Los Angeles County portion of the South Coast Air Basin (SoCAB) and is under the jurisdiction of the South Coast Air Quality Management District (South Coast AQMD) for air quality regulation and permitting. The SoCAB is a 6,600-square-mile area bound 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. The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area of Riverside County. The SoCAB's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive semi-arid climate, which is characterized by moderate temperatures, oceanic influence, and precipitation that is limited to a few storms during the winter (November through April).

Existing Air Quality Conditions

Air quality data for the Project site is represented by the monitoring station located at 752 South Wilson Avenue, Pasadena, 91101. The monitoring station is located approximately 1.17 miles southwest of the Project site. Pollutants measured at the Pasadena South Wilson Avenue Monitoring Station include ozone (O₃), fine particulate matter with a diameter of 2.5 microns or less (PM_{2.5}), and nitrogen dioxide (NO₂). The monitoring data presented in Table 1, Air Quality Levels Measured at the Pasadena South Wilson Avenue Monitoring Station, were obtained from CARB (CARB 2020). Federal and State air quality standards are presented with the number of times those standards were exceeded.

**TABLE 1
 AIR QUALITY LEVELS MEASURED AT THE PASADENA
 SOUTH WILSON AVENUE MONITORING STATION**

Pollutant	California Standard	National Standard	Year	Max. Level ^a	Days State Standard Exceeded	Days National Standard Exceeded
O ₃ (1 hour)	0.09 ppm	None	2016	0.126	12	1
			2017	0.139	18	2
			2018	0.112	8	0
O ₃ (8 hour)	0.070 ppm	0.070 ppm	2016	0.091	19	18
			2017	0.100	38	36
			2018	0.091	20	19
PM10 (24 hour)	50 µg/m ³	150 µg/m ³	2016	–	–	–
			2017	–	–	–
			2018	–	–	–
PM10 (AAM)	20 µg/m ³	None	2016	–	–	–
			2017	–	–	–
			2018	–	–	–
NO ₂ (1 Hour)	0.18 ppm	0.100 ppm	2016	0.071	0	0
			2017	0.072	0	0
			2018	0.068	0	0
PM2.5 (24 Hour)	None	35 µg/m ³	2016	29.2	N/A	0
			2017	22.8	N/A	0
			2018	32.5	N/A	0

–: Data Not Reported or insufficient data available to determine the value; O₃: ozone; ppm: parts per million; PM10: respirable particulate matter with a diameter of 10 microns or less; µg/m³: micrograms per cubic meter; AAM: Annual Arithmetic Mean; NO₂: nitrogen dioxide; CO: carbon monoxide; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SO₂: sulfur dioxide. N/A indicates that there is no applicable standard.

^a California maximum levels were used.

Source: CARB 2020.

The Pasadena monitoring data shows that O₃ is the air pollutant of primary concern in the Project area. At the monitoring station, the State 1-hour O₃ standard was exceeded 12 days in 2016, 18 days in 2017, and 8 days in 2018. The State 8-hour O₃ standard was exceeded 19 days in 2016, 38 days in 2017, and 20 days in 2018. The federal 8-hour O₃ standard was exceeded 18 days in 2016, 36 days in 2017, and 19 days in 2018. O₃ is a secondary pollutant and is not directly emitted from a source; it occurs as the result of photochemical reactions from ozone precursors, which include volatile organic compounds (VOCs) and NO₂ and sunlight.

Regulatory Background

Pollutants and Standards

The U.S. Environmental Protection Agency (USEPA) defines seven “criteria” air pollutants: O₃, carbon monoxide (CO), NO₂, sulfur dioxide (SO₂), respirable particulate matter with a diameter of 10 microns or less (PM10), PM2.5, and lead. These pollutants are called criteria pollutants because the USEPA has established National Ambient Air Quality Standards (NAAQS) for the concentrations of these pollutants.

The California Air Resources Board (CARB) has also established standards for the criteria pollutants, known as California Ambient Air Quality Standards (CAAQS), and the State standards are generally more restrictive than the NAAQS. When a region has air quality that fails to meet the standards, the USEPA and the CARB designate the region as “nonattainment” and the regional air quality agency must develop plans to attain the standards.

Based on monitored air pollutant concentrations, the USEPA and the CARB designate an area’s status in attaining the NAAQS and the CAAQS, respectively, for selected criteria pollutants. These attainment designations are shown in Table 2. As identified in Table 2, Los Angeles County is a nonattainment area for O₃, PM10, PM2.5, and lead.

**TABLE 2
 ATTAINMENT STATUS OF CRITERIA POLLUTANTS
 IN THE SOUTH COAST AIR BASIN**

Pollutant	State	Federal
O ₃ (1 hour)	Nonattainment	No standards
O ₃ (8 hour)	Nonattainment	Nonattainment
PM10	Nonattainment	Attainment/Maintenance
PM2.5	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO ₂	Attainment	Attainment/Maintenance
SO ₂	Attainment	Attainment
Lead	Attainment	Attainment/Nonattainment*
All others	Attainment/Unclassified	No standards

O₃: ozone; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO₂: nitrogen dioxide; SO₂: sulfur dioxide; SoCAB: South Coast Air Basin.

* Los Angeles County is classified nonattainment for lead; the remainder of the SoCAB is in attainment of the State and federal standards.

Source: South Coast AQMD 2016a.

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for coordinating and administering both the federal and State air pollution control programs in California. In this capacity, CARB conducts research, sets the CAAQS (as shown in Table 3), compiles emission inventories, develops suggested control measures, oversees local programs, and prepares the State Implementation Plan (SIP). For regions that do not attain the CAAQS, CARB requires the air districts to prepare plans for attaining the standards. These plans are then integrated into the State SIP. CARB establishes emissions standards for (1) motor vehicles sold in California, (2) consumer products (e.g., hair spray, aerosol paints, barbecue lighter fluid), and (3) various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

O₃ is a secondary pollutant and is created when nitrogen oxides (NO_x) and VOCs react in the presence of sunlight. The predominant source of air emissions generated by Project development would be from vehicle emissions. Motor vehicles primarily emit CO, NO_x, and VOCs. The NAAQS and CAAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. The NAAQS and CAAQS for O₃, CO, NO₂, SO₂, PM10, PM2.5, and lead are shown in Table 3.

Rodrigo Pelayo
January 28, 2020
Page 7

The South Coast AQMD was established in 1977 by merging the individual air pollution control districts of the four counties within the SoCAB: Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The South Coast AQMD and the Southern California Association of Governments (SCAG), in coordination with local governments and the private sector, develop the Air Quality Management Plan (AQMP) for the SoCAB to satisfy these requirements. The AQMP is the most important air management document for the SoCAB because it provides the blueprint for meeting State and federal ambient air quality standards.

On November 28, 2007, CARB submitted a State Implementation Plan (SIP) revision to the USEPA for O₃, PM_{2.5}, CO, and NO₂ in the SoCAB. This revision is identified as the “2007 South Coast SIP”. The 2007 South Coast SIP demonstrates attainment of the federal PM_{2.5} standard in the SoCAB by 2014 and attainment of the federal 8-hour O₃ standard by 2023. This SIP also includes a request to reclassify the O₃ attainment designation from “severe” to “extreme”. The USEPA approved the redesignation, effective June 4, 2010. The “extreme” designation requires the attainment of the 8-hour O₃ standard in the SoCAB by June 2024. CARB approved PM_{2.5} SIP revisions in April 2011 and the O₃ SIP revisions in July 2011. The USEPA approved the PM_{2.5} SIP on September 25, 2013 and has approved 47 of the 62 1997 8-hour O₃ SIP requirements. On November 30, 2014, the USEPA proposed a finding that the SoCAB has attained the 1997 PM_{2.5} standards (USEPA 2014). The comment period closed on January 22, 2015; no subsequent action has been taken.

On September 30, 2015, the USEPA proposed to approve elements of the South Coast 2012 PM_{2.5} Plan and 2015 Supplement, which addresses Clean Air Act requirements for the 2006 PM_{2.5} NAAQS, and proposed to reclassify the area as a ‘serious’ nonattainment area for the 2006 PM_{2.5} standard. The reclassification is based on the determination that the area cannot practicably attain the 2006 PM_{2.5} NAAQS by the moderate area attainment date (December 31, 2015). On December 22, 2015, the EPA reclassified the South Coast area as a “Serious” nonattainment area for the 2006 PM_{2.5} standard. The final reclassification requires the State to submit a “serious area” plan that provides for attainment of the 2006 PM_{2.5} NAAQS as expeditiously as practicable as and no later than December 31, 2019 (USEPA 2016). The SCAQMD is preparing a PM_{2.5} Contingency Plan to demonstrate future PM_{2.5} attainment.

On March 3, 2017, the South Coast AQMD adopted the 2016 AQMP, which is a regional and multi-agency effort (South Coast AQMD, CARB, Southern California Association of Governments [SCAG], and USEPA). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); updated emission inventory methodologies for various source categories; and SCAG’s latest growth forecasts. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be consistent with the AQMP, the pollutants emitted from the project should not (1) exceed the South Coast AQMD CEQA air quality significance thresholds or (2) conflict with or exceed the assumptions in the AQMP.

**TABLE 3
 CALIFORNIA AND FEDERAL AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary ^a	Secondary ^b
O ₃	1 Hour	0.09 ppm (180 µg/m ³)	–	–
	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	Same as Primary
PM ₁₀	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary
	AAM	20 µg/m ³	–	Same as Primary
PM _{2.5}	24 Hour	–	35 µg/m ³	Same as Primary
	AAM	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³
CO	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	–
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	–	–
NO ₂	AAM	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary
	1 Hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	–
SO ₂	24 Hour	0.04 ppm (105 µg/m ³)	–	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m ³)
	1 Hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	–
Lead	30-day Avg.	1.5 µg/m ³	–	–
	Calendar Quarter	–	1.5 µg/m ³	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m ³	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	
Sulfates	24 Hour	25 µg/m ³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)		
<p>O₃: ozone; ppm: parts per million; µg/m³: micrograms per cubic meter; PM₁₀: respirable particulate matter 10 microns or less in diameter; AAM: Annual Arithmetic Mean; –: No Standard; PM_{2.5}: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; mg/m³: milligrams per cubic meter; NO₂: nitrogen dioxide; SO₂: sulfur dioxide; km: kilometer.</p> <p>^a <i>National Primary Standards</i>: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.</p> <p>^b <i>National Secondary Standards</i>: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.</p> <p>Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).</p> <p>Source: CARB 2016</p>				

Sensitive Air Quality Receptors

Sensitive receptors include, but are not limited to, children, the elderly, persons with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. The nearest sensitive land use include residences adjacent to the Project’s northern boundary, and residences west of the Project site, located along Holliston Avenue.

Air Quality Impact Analysis

Thresholds of Significance

The South Coast AQMD’s *Air Quality Analysis Handbook* South Coast AQMD provides significance thresholds for both construction and operation of projects within the South Coast AQMD’s jurisdictional boundaries (South Coast AQMD 1993). The South Coast AQMD recommends that projects be evaluated in terms of the quantitative thresholds established to assess both the regional and localized impacts of project-related air pollutant emissions. The City of Pasadena uses the current South Coast AQMD thresholds to determine whether a proposed project would have a significant impact. These thresholds are identified in Table 4.

**TABLE 4
 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AIR QUALITY
 SIGNIFICANCE THRESHOLDS**

Mass Daily Thresholds^a		
Pollutant	Construction	Operation
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
TACs, Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to South Coast AQMD Rule 402	
GHG	10,000 MT/yr CO ₂ e for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants^{b, c}		
NO ₂	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:	
1-hour average annual arithmetic mean	0.18 ppm (State) 0.03 ppm (State) and 0.0534 ppm (federal)	
PM10		
24-hour average annual average	10.4 µg/m ³ (construction) ^c & 2.5 µg/m ³ (operation) 1.0 µg/m ³	
PM2.5		
24-hour average	10.4 µg/m ³ (construction) ^c & 2.5 µg/m ³ (operation)	

**TABLE 4
 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AIR QUALITY
 SIGNIFICANCE THRESHOLDS**

Ambient Air Quality Standards for Criteria Pollutants (cont.)	
SO ₂ 1-hour average 24-hour average	0.25 ppm (State) & 0.075 ppm (federal – 99 th percentile) 0.04 ppm (State)
Sulfate 24-hour average	25 µg/m ³ (State)
CO 1-hour average 8-hour average	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20.0 ppm (State) and 35 ppm (federal) 9.0 ppm (State/federal)
Lead 30-day average Rolling 3-month average	1.5 µg/m ³ (State) 0.15 µg/m ³ (federal)
NOx: nitrogen oxides, lbs/day: pounds per day, VOC: volatile organic compound, PM10: respirable particulate matter with a diameter of 10 microns or less, PM2.5: fine particulate matter with a diameter of 2.5 microns or less, SOx: sulfur oxides, CO: carbon monoxide, TACs: toxic air contaminants, GHG: greenhouse gases, MT/yr CO ₂ e: metric tons per year of carbon dioxide equivalents, NO ₂ : nitrogen dioxide, ppm: parts per million, µg/m ³ : micrograms per cubic meter; South Coast AQMD: South Coast Air Quality Management District a Source: South Coast AQMD CEQA Handbook (South Coast AQMD 1993) b Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated c Ambient air quality threshold is based on South Coast AQMD Rule 403 Source: South Coast AQMD 2019	

The following questions correspond to the questions in the Air Quality section of the Initial Study Checklist in Appendix G of the State CEQA Guidelines, as updated on December 28, 2018.

Question AQ-1 Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The South Coast AQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary. It is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources and has prepared an AQMP that establishes a program of rules and regulations directed at attaining the NAAQS and CAAQS.

As stated above, the South Coast AQMD adopted the 2016 AQMP on March 3, 2017 (South Coast AQMD 2017). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2016-2040 RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG’s latest growth forecasts (SCAG 2016).

The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be consistent with the AQMP, the pollutants emitted from the project should not (1) exceed the South Coast AQMD CEQA air quality significance thresholds or (2) conflict with or exceed the assumptions in the AQMP.

Rodrigo Pelayo
January 28, 2020
Page 11

In order to be consistent with the AQMP, the following analysis compares the Project's construction and operational emissions with the South Coast AQMD CEQA air quality significance thresholds. A project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation. The South Coast AQMD has developed construction and operations thresholds to determine whether projects would potentially result in contributing toward a violation of ambient air quality standards.

A project with daily emission rates below the South Coast AQMD's established air quality significance thresholds (shown in Table 4) would have a less than significant effect on regional air quality. Project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 computer program (CAPCOA 2017). CalEEMod is designed to model construction and operational emissions for land development projects and allows for the input of project- and county-specific information. For air quality modeling purposes, construction of the Project was based on the Project's construction assumptions and default assumptions derived from CalEEMod. The input for operational emissions was based on the vehicle trip generation rates provided in the traffic impact analysis and the proposed building area. Additional details are included in Attachment A.

Construction Emissions

Air pollutant emissions would occur from construction equipment exhaust, fugitive dust from site grading; exhaust and particulate emissions from trucks hauling soil and building materials to and from the Project site; from automobiles and light-duty trucks driven to and from the Project site by construction workers; and VOCs from painting and asphalt paving operations. The proposed Project would comply with applicable South Coast AQMD rules and regulations, including Rule 403 for fugitive dust control and Rule 1113 for architectural coatings. Rule 403 measures include regular watering of active grading areas and unpaved roads, limiting vehicle speeds on unpaved surfaces, stabilizing stockpiled earth, and curtailing grading operations during high wind conditions (South Coast AQMD 1976). Watering of active grading areas is included in the CalEEMod emissions analysis and results in reduced PM10 and PM2.5 emissions. It should be noted that some project requirements and features (such as watering grading areas), although required project elements, are shown in the CalEEMod format as mitigation measures. South Coast AQMD Rule 1113 limits the VOC content of architectural coatings (South Coast AQMD 2016b). The emission reductions associated with compliance with this rule have been included in the emissions calculations.

Regional Emissions Thresholds – Maximum Daily Regional Emissions

Table 5, Estimated Maximum Daily Regional Construction Emissions, presents the estimated maximum daily emissions during construction of the proposed Project and compares the estimated emissions with the South Coast AQMD's daily regional emission thresholds. As shown in Table 5, Project construction mass daily emissions would be less than the South Coast AQMD's thresholds for all criteria air pollutants.

**TABLE 5
 ESTIMATED MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS**

Year	Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM10	PM2.5
2020	1	16	6	<1	3	2
2021	1	5	5	<1	1	<1
2022	5	6	8	<1	1	<1
Maximum	5	16	8	<1	3	2
South Coast AQMD Thresholds (Table 4)	75	100	550	150	150	55
Exceeds South Coast AQMD Thresholds?	No	No	No	No	No	No
lbs/day: pounds per day; VOC: volatile organic compound; NO _x : nitrogen oxides; CO: carbon monoxide; SO _x : sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; South Coast AQMD: South Coast Air Quality Management District. Note: Source: South Coast AQMD 2019 (thresholds); see Attachment A for CalEEMod outputs.						

Construction-Phase Localized Significance Thresholds

In addition to the mass daily emissions thresholds established by the South Coast AQMD, short-term local impacts to nearby sensitive receptors from on-site emissions of NO₂, CO, PM10, and PM2.5 are examined based on South Coast AQMD’s localized significance threshold (LST) methodology. To assess local air quality impacts for development projects without complex dispersion modeling, the South Coast AQMD developed screening (lookup) tables to assist lead agencies in evaluating impacts.

The LST method is recommended to be limited to projects that are five acres or less. For the purposes of an LST analysis, the South Coast AQMD considers receptors where it is possible that an individual could remain for 1 hour for NO₂ and CO exposure and 24 hours for PM10 and PM2.5 exposure. The emissions limits in the lookup tables are based on the South Coast AQMD’s Ambient Air Quality Standards (South Coast AQMD 2009). The closest receptors to the Project site are single family residential uses adjacent to the Project’s northern boundary, as shown in Exhibit 2. The emissions thresholds are for receptors within 25 meters (82 feet)¹ of the Project site; the thresholds for receptors farther away would be higher, and the Project emissions would be a smaller fraction of the thresholds.

Table 6, Construction-Phase Localized Significance Threshold Emissions, shows the maximum daily on-site emissions for construction activities compared with the South Coast AQMD LSTs with receptors within 25 meters. The Project site is approximately 0.55 acres in area. The thresholds shown are from the lookup tables for a site that is 1 acre, which is based upon the most intensive phase of construction that involves soil disturbance. The Project’s maximum daily on-site emissions would occur during the paving phase (for CO) and during the site preparation phase (for NO_x, PM10, and PM2.5). As shown in Table 6, localized emissions for all criteria pollutants would be less than their respective thresholds. Therefore, localized air quality impacts at receptors proximate to construction activities would be exposed to less than significant air quality impacts.

¹ The South Coast AQMD recommends that, when sensitive receptors are located nearer than 25 meters (82 feet) from the Project site, the minimum 25 meter (82 foot) distance threshold should be used.

**TABLE 6
 CONSTRUCTION-PHASE
 LOCALIZED SIGNIFICANCE THRESHOLD EMISSIONS**

Emissions and Thresholds	Emissions (lbs/day)			
	NOx	CO	PM10	PM2.5
Project maximum daily on-site emissions	16	7	3	2
LST Screening Threshold	69	535	4	3
Exceed threshold?	No	No	No	No
lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter. Note: Data is for South Coast AQMD Source Receptor Area 8, West San Gabriel Valley Source: South Coast AQMD 2009 (thresholds); see Attachment A for CalEEMod model outputs.				

Operational Emissions

The ongoing operation of the Project would result in a long-term increase in air quality emissions. This increase would be due to emissions from Project-generated vehicle trips and through operational emissions from the ongoing use of the Project. The Project site is currently vacant; there are no operational emissions associated with the existing Project site. The following section provides an analysis of potential long-term air quality impacts to regional and local air quality with the long-term operation of the proposed Project. The potential operations-related air emissions have been analyzed below for the regional and local criteria pollutant emissions and cumulative impacts.

Operations-Related Criteria Pollutant Analysis

Operational emissions are comprised of area, energy, and mobile source emissions. The principal source of VOC emissions associated with the Project would result from the use of consumer products; the primary source of CO emissions would be landscaping equipment. Area and energy source emissions are based on CalEEMod assumptions for the specific land uses and size. Mobile source emissions are based on estimated Project-related trip generation forecasts, as contained in the Transportation Impact Analysis prepared by the City. The Project would generate 237 net daily trips, which includes a 25% reduction for transit trips (City of Pasadena DOT 2019). Estimated peak daily operational emissions are shown in Table 7.

**TABLE 7
 PEAK DAILY OPERATIONAL EMISSIONS**

Source	Emissions (lb/day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
Area sources	1	<1	5	<1	<1	<1
Energy sources	<1	<1	<1	<1	<1	<1
Mobile sources	<1	2	6	<1	2	<1
Total Operational Emissions*	1	2	11	<1	2	1
South Coast AQMD Significance Thresholds (Table 4)	55	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No

lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; South Coast AQMD: South Coast Air Quality Management District.

* Some totals do not add due to rounding.

Note: CalEEMod model data sheets are included in Attachment A.

As shown in Table 7, the Project’s operational emissions would be less than the South Coast AQMD CEQA significance thresholds for all criteria pollutants. Therefore, the Project’s operational impact on regional emissions would be less than significant, and no mitigation is required.

Most of the Project site is located within the Commercial General (CG) zoning district, and an approximate quarter of the Project site is within the Multi-family Residential, City of Gardens zoning district with a parking overlay (RM-32 PK) (City of Pasadena 2019). Additionally, most of the Project site is within the Low Density land use classification (0.0 to 1.0 Floor to Area Ratio), and an approximate quarter of the Project site is within the Medium-High Density Residential land use classification (0-32 Dwelling units/acre). The RM-32 zoning designation specifies for 0-32 units per acre for Medium-High Density Residential with a land use designation of Medium-High Density Residential of 0-32 dwelling units (DU)/acre, within a Parking Overlay District (City of Pasadena 2020a).

Per Section 17.50.300 of the City’s municipal code, Single Room Occupancy (SRO) facilities are permitted within the General Commercial zone, and a site area per unit standard does not apply to SRO facilities. The Project also has an estimated 25% of project related trips that would use transit as well as 25% of units being affordable units. Affordable units provide opportunities for workers to live closer to their place of employment which would reduce vehicular emissions associated with longer work trip travel. The Project is consistent with the AQMP’s goals of reduced air pollutant emissions associated with increased transit usage and reduced home to work trip lengths. In addition, the amount of emissions generated by the Project is substantially below the significance thresholds. As such, no conflict with the 2016 AQMP would occur with the proposed Project. There would be a less than significant impact.

Question AQ-2 Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. A project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation. The South Coast AQMD has developed construction and operations thresholds to determine whether projects would potentially result

Rodrigo Pelayo
January 28, 2020
Page 15

in contributing toward a violation of ambient air quality standards. A project with daily emission rates below the South Coast AQMD's established air quality significance thresholds (shown in Table 4, previously) would have a less than significant effect on regional air quality.

Construction Activities

Construction activities associated with the proposed Project would result in less than significant construction-related regional and localized air quality impacts, as quantified previously in Tables 5 and 6, respectively. South Coast AQMD's policy with respect to cumulative impacts associated with the above referenced pollutants and their precursors is that impacts that would be directly less than significant would also be cumulatively less than significant (South Coast AQMD 2003). As discussed in response to Question AQ-1, short-term construction emissions would be less than the South Coast AQMD's significance thresholds. Therefore, consistent with South Coast AQMD policy, the cumulative construction impact of criteria pollutants would also be less than significant.

Operational Activities

As shown in Table 7, operational emissions for all analyzed pollutants would be below the South Coast AQMD CEQA significance thresholds. Therefore, the Project would not contribute to a cumulatively considerable net increase of a pollutant for which the SoCAB is in nonattainment. Emissions of nonattainment pollutants or their precursors would not be cumulatively considerable and would be less than significant; no mitigation would be required.

Question AQ-3 Would the Project result expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. A significant impact may occur when a project would generate pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations that are more susceptible to the effects of air pollution than the population at large. Exposure of sensitive receptors is addressed for the following situations: CO hotspots, criteria pollutants and toxic air contaminants (TACs, specifically diesel particulate matter [DPM]) from on-site construction. Operational, long-term TACs may be generated by some industrial land uses; commercial land uses (e.g., gas stations and dry cleaners); and diesel trucks on freeways. Residential land uses do not generate substantial quantities of TACs and are therefore not addressed in this report.

Carbon Monoxide Hotspot

In an urban setting, vehicle exhaust is the primary source of CO. Consequently, the highest CO concentrations generally are found close to congested intersections. Under typical meteorological conditions, CO concentrations tend to decrease as the distance from the emissions source (e.g., congested intersection) increases. Therefore, for purposes of providing a conservative worst-case impact analysis, CO concentrations typically are analyzed at congested intersection locations. If impacts are less than significant close to congested intersections, impacts also would be less than significant at more distant sensitive-receptor and other locations. An initial screening procedure is provided in the *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol) to determine whether a project poses the potential to generate a CO hotspot (UCD ITS 1997). The key criterion is whether the Project would worsen traffic congestion at signalized intersections operating at level of service (LOS) E or F.

The Traffic Impact Analysis (TIA) prepared for this Project indicates that none of the study intersections would operate at LOS E or F with implementation of the proposed Project. The signalized intersections

Rodrigo Pelayo
January 28, 2020
Page 16

included as part of the TIA for the Project would operate at LOS C or D with implementation of the Project. The impact would be less than significant.

Criteria Pollutants from On-Site Construction

Exposure of persons to NO_x, CO, PM₁₀, and PM_{2.5} emissions is discussed in response to Question AQ-1, above. There would be no significant impacts, and no additional mitigation is required.

Toxic Air Contaminant Emissions from On-Site Construction

Construction activities would result in short-term, Project-generated emissions of DPM from the exhaust of off-road, heavy-duty diesel equipment used for site preparation (e.g., demolition, excavation, and grading); paving; building construction; and other miscellaneous activities. CARB identified DPM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment, health risk assessments—which determine the exposure of sensitive receptors to TAC emissions—should be based on a 40-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the Project.

There would be relatively few pieces of off-road, heavy-duty diesel equipment in operation, and the total construction period would be relatively short when compared to a 40-year exposure period. Combined with the highly dispersive properties of DPM and additional reductions in particulate emissions from newer construction equipment, as required by USEPA and CARB regulations, construction emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. The impact would be less than significant, and no mitigation is required.

Question AQ-4 Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No Impact. The Project would not result in other emissions that would adversely affect a substantial number of people. The proposed Project would be an SRO residential use, which is consistent with the residential uses in the vicinity of the Project site. Potential operational emissions (which may lead to odors) could be created by cooking activities associated with residential uses. These odors would be similar to existing residential uses surrounding the Project site and throughout the City, and these odors would be confined to the immediate vicinity of the proposed dwelling units. Furthermore, according to the South Coast AQMD's *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (South Coast AQMD 1993). The Project does not include any uses identified by the South Coast AQMD as being associated with odors and, therefore, would not produce emissions which would lead to odors. Residential uses generally do not result in odors that constitute a public nuisance. The Project uses are also regulated from nuisance odors or other objectionable emissions by South Coast AQMD Rule 402. Rule 402 prohibits any the discharge from any source of air contaminants or other material which would cause injury, detriment, nuisance, or annoyance to people or the public. As such, the Project would have no significant impact with regard to other emissions and no mitigation is required.

Rodrigo Pelayo
January 28, 2020
Page 17

CONCLUSION

The Project was analyzed for potential air quality impacts from both the construction and operational phases. The Project would not conflict with or obstruct implementation of the South Coast AQMD 2016 Air Quality Management Plan. As previously shown in Tables 5 through 7, air quality emissions from construction and operation of the Project would be less than the South Coast AQMD air quality thresholds. Project-related construction emissions would not be cumulatively considerable, and the impact would be less than significant. Sensitive receptors near the Project site would not be exposed to substantial pollutant concentrations, and the impact would be less than significant. The Project would not produce other emissions, such as objectionable odors, which would adversely affect a substantial number of people. In conclusion, the Project would have no impacts or less than significant impacts, respectively, for all Project-related air quality emissions.

Thank you for the opportunity to assist on this Project. If you have any questions or comments, please contact me at (626) 351-2000.

Sincerely,

P S O M A S



Tin Cheung
Director of Air Quality, Climate Change, and Noise Services

Enclosures: Exhibit 1 – Regional Location and Local Vicinity
 Exhibit 2 – Aerial Photograph
 Attachment A – CalEEMod Data

Rodrigo Pelayo
 January 28, 2020
 Page 18

REFERENCES

California Air Pollution Control Officers Association (CAPCOA). 2017. California Emission Estimator Model (CalEEMod)TM Version 2016.3.2, Developed by Trinity Consultants in Collaboration with South Coast AQMD and other California Air Districts. Sacramento, CA: CAPCOA.

California Air Resources Board (CARB). 2020 (January 6, last accessed). iADAM: Air Quality Data Statistics. Sacramento, CA: CARB. <http://www.arb.ca.gov/adam/>.

———. 2016 (May). Ambient Air Quality Standards. Sacramento, CA: CARB. <https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf>

———. 2005 (April). *Air Quality and Land Use Handbook: A Community Health Perspective*. Sacramento, CA: CARB. <http://www.arb.ca.gov/ch/handbook.pdf>.

Pasadena, City of. 2020a (January 7, date accessed). Current Planning and Zoning. Pasadena, CA: City of Pasadena. <https://ww5.cityofpasadena.net/planning/planning-division/current-planning-and-zoning/>.

———. 2020b (January 7, date accessed). Transportation Data Management System (Interactive Map). Pasadena, CA: City of Pasadena. <https://pasadena.ms2soft.com/tcds/tsearch.asp?loc=Pasadena&mod=>.

———. 2019 (September 28). City of Pasadena Zoning Map. Pasadena, CA: City of Pasadena. https://ww5.cityofpasadena.net/planning/wp-content/uploads/sites/56/2017/09/Zoning_Map_2019-09-28.pdf.

Pasadena, City of. Department of Transportation (Pasadena DOT). 2019 (December 10). Transportation Impact Analysis Outside of CEQA Evaluation—231 North Hill Ave/226 North Holliston Ave. Pasadena, CA: Pasadena DOT.

South Coast Air Quality Management District (South Coast AQMD). 2019 (April, revised). South Coast AQMD Air Quality Significance Thresholds. Diamond Bar, CA: South Coast AQMD. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

———. 2017 (April 6). Air Quality Management Plan (AQMP). Diamond Bar, CA: South Coast AQMD. <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.

———. 2016a (February). National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin. Diamond Bar, CA: South Coast AQMD. <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=14>.

———. 2016b (February 5, Amended). Rule 1113—Architectural Coatings. Diamond Bar, CA: South Coast AQMD. <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf?sfvrsn=24>.

———. 2009 (October). *Mass Rate Localized Significance Thresholds Look-up Tables*. Diamond Bar, CA: SCAQMD. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2>.

Rodrigo Pelayo
 January 28, 2020
 Page 19

———. 2003 (September 5). Attachment to BOARD MEETING DATE: September 5, 2003, AGENDA NO. 29. White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions. <http://www.aqmd.gov/home/governing-board/agendas-minutes>.

———. 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA: South Coast AQMD.

———. 1976. Rule 403 Fugitive Dust. <https://www.aqmd.gov/home/rules-compliance/compliance/rule-403-dust-control-information>

Southern California Association of Governments (SCAG). 2016 (April). *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life*. Los Angeles, CA: SCAG. <http://scagrtpscsc.net/Documents/2016/final/f2016RTPSCS.pdf>.

University of California Davis (UCD), Institute of Traffic Studies (ITS) 1997 (December, as revised). *Transportation Project-Level Carbon Monoxide Protocol* (Prepared for Environmental Program California Department of Transportation by V.J. Garza, P. Graney, and D. Sperling with revisions by D. Niemeier, D. Eisinger, T. Kear, D. Chang, and Y. Meng). Davis, CA: ITS. http://www.dot.ca.gov/hq/env/air/documents/COProtocol_searchable.pdf.

U.S. Environmental Protection Agency (USEPA). 2016 (accessed May 7). Pacific Southwest, Region 9, Air Actions, California, South Coast Air Actions. Washington D.C.: USEPA. <https://www3.epa.gov/region9/air/actions/southcoast/index.html#pm25>.

———. 2014 (December 9). Clean Data Determination for 1997 PM_{2.5} Standards; California—South Coast; Applicability of Clean Air Act Requirements. *Federal Register* 79(236): 72999–73007. Washington, D.C.: USEPA. <http://www.gpo.gov/fdsys/pkg/FR-2014-12-09/pdf/2014-28709.pdf#page=1>.

ATTACHMENT A

CALEEMOD DATA

Attached is the output data from the CalEEMod criteria air pollutant model.

Single Room Occupancy Project- Hill & Holliston - Los Angeles-South Coast County, Winter

**Single Room Occupancy Project- Hill & Holliston
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	47.00	Space	0.00	21,472.00	0
Other Non-Asphalt Surfaces	2.53	1000sqft	0.00	2,528.00	0
Recreational Swimming Pool	0.51	1000sqft	0.00	512.00	0
Apartments Mid Rise	58.00	Dwelling Unit	0.55	19,138.00	118

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2022
Utility Company	Pasadena Water & Power				
CO2 Intensity (lb/MW hr)	1664.14	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Population per traffic memorandum
- Construction Phase - .
- Off-road Equipment - .
- Off-road Equipment - .
- Off-road Equipment - Used maximum amount of hours allowable for construction equipment duration

Grading -

Vehicle Trips - .

Woodstoves - Rule 445 prohibits wood burning device installation, and no fireplaces as part of the Project.

Water And Wastewater - Default

Construction Off-road Equipment Mitigation -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	1.00	27.00
tblConstructionPhase	NumDays	2.00	50.00
tblConstructionPhase	NumDays	100.00	471.00
tblConstructionPhase	NumDays	5.00	52.00
tblConstructionPhase	NumDays	5.00	26.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	49.30	0.00
tblFireplaces	NumberNoFireplace	5.80	0.00
tblFireplaces	NumberWood	2.90	0.00
tblGrading	MaterialExported	0.00	1,700.00
tblLandUse	LandUseSquareFeet	18,800.00	21,472.00
tblLandUse	LandUseSquareFeet	2,530.00	2,528.00
tblLandUse	LandUseSquareFeet	510.00	512.00
tblLandUse	LandUseSquareFeet	58,000.00	19,138.00

tblLandUse	LotAcreage	0.42	0.00
tblLandUse	LotAcreage	0.06	0.00
tblLandUse	LotAcreage	0.01	0.00
tblLandUse	LotAcreage	1.53	0.55
tblLandUse	Population	166.00	118.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblVehicleTrips	ST_TR	6.39	3.93
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	5.86	3.60
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	6.65	4.09
tblVehicleTrips	WD_TR	33.82	0.00
tblWoodstoves	NumberCatalytic	2.90	0.00
tblWoodstoves	NumberNoncatalytic	2.90	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	1.4791	15.7599	5.9676	0.0153	6.0780	0.7018	6.7798	3.3251	0.6457	3.9707	0.0000	1,487.8735	1,487.8735	0.4651	0.0000	1,499.4996
2021	0.5717	5.0303	4.6191	0.0121	0.6453	0.1327	0.7775	0.1726	0.1318	0.3043	0.0000	1,200.1802	1,200.1802	0.2220	0.0000	1,201.6656
2022	5.1118	5.9704	7.6453	0.0131	0.6453	0.2977	0.7606	0.1726	0.2773	0.3306	0.0000	1,222.0471	1,222.0471	0.3069	0.0000	1,229.7184
Maximum	5.1118	15.7599	7.6453	0.0153	6.0780	0.7018	6.7798	3.3251	0.6457	3.9707	0.0000	1,487.8735	1,487.8735	0.4651	0.0000	1,499.4996

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	1.4791	15.7599	5.9676	0.0153	2.4045	0.7018	3.1063	1.3058	0.6457	1.9515	0.0000	1,487.8735	1,487.8735	0.4651	0.0000	1,499.4996
2021	0.5717	5.0303	4.6191	0.0121	0.6453	0.1327	0.7775	0.1726	0.1318	0.3043	0.0000	1,200.1802	1,200.1802	0.2220	0.0000	1,201.6656
2022	5.1118	5.9704	7.6453	0.0131	0.6453	0.2977	0.7606	0.1726	0.2773	0.3306	0.0000	1,222.0471	1,222.0471	0.3069	0.0000	1,229.7184
Maximum	5.1118	15.7599	7.6453	0.0153	2.4045	0.7018	3.1063	1.3058	0.6457	1.9515	0.0000	1,487.8735	1,487.8735	0.4651	0.0000	1,499.4996

	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
Percent Reduction	0.00	0.00	0.00	0.00	49.85	0.00	44.16	55.02	0.00	43.84	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

1	Site Preparation	Site Preparation	12/1/2020	12/31/2020	6	27
2	Grading-Excavation	Grading	1/1/2021	2/27/2021	6	50
3	Building Construction	Building Construction	3/1/2021	8/31/2022	6	471
4	Paving	Paving	9/1/2022	10/31/2022	6	52
5	Architectural Coating	Architectural Coating	11/1/2022	11/30/2022	6	26

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 38,754; Residential Outdoor: 12,918; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading-Excavation	Concrete/Industrial Saws	0	8.00	81	0.73
Grading-Excavation	Rubber Tired Dozers	0	1.00	247	0.40
Grading-Excavation	Rubber Tired Loaders	1	8.00	203	0.36
Grading-Excavation	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	0	4.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading-Excavation	1	3.00	0.00	213.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	1	52.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 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					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.4536	15.7418	5.7670	0.0148		0.7014	0.7014		0.6453	0.6453		1,432.5024	1,432.5024	0.4633		1,444.0849
Total	1.4536	15.7418	5.7670	0.0148	6.0221	0.7014	6.7235	3.3102	0.6453	3.9555		1,432.5024	1,432.5024	0.4633		1,444.0849

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	0.0256	0.0181	0.2005	5.6000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		55.3710	55.3710	1.7500e-003		55.4147
Total	0.0256	0.0181	0.2005	5.6000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		55.3710	55.3710	1.7500e-003		55.4147

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					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000			0.0000
Off-Road	1.4536	15.7418	5.7670	0.0148		0.7014	0.7014		0.6453	0.6453	0.0000	1,432.5024	1,432.5024	0.4633		1,444.0849
Total	1.4536	15.7418	5.7670	0.0148	2.3486	0.7014	3.0500	1.2910	0.6453	1.9362	0.0000	1,432.5024	1,432.5024	0.4633		1,444.0849

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	0.0256	0.0181	0.2005	5.6000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		55.3710	55.3710	1.7500e-003		55.4147

Total	0.0256	0.0181	0.2005	5.6000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		55.3710	55.3710	1.7500e-003		55.4147
--------------	---------------	---------------	---------------	--------------------	---------------	--------------------	---------------	---------------	--------------------	---------------	--	----------------	----------------	--------------------	--	----------------

3.3 Grading-Excavation - 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						
Fugitive Dust					3.8500e-003	0.0000	3.8500e-003	5.8000e-004	0.0000	5.8000e-004			0.0000				0.0000
Off-Road	0.3430	3.8638	1.5987	6.2500e-003		0.1288	0.1288		0.1185	0.1185			605.2262	605.2262	0.1957		610.1198
Total	0.3430	3.8638	1.5987	6.2500e-003	3.8500e-003	0.1288	0.1327	5.8000e-004	0.1185	0.1191			605.2262	605.2262	0.1957		610.1198

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	0.0364	1.1567	0.2841	3.2700e-003	0.0745	3.5600e-003	0.0781	0.0204	3.4100e-003	0.0238			354.3396	354.3396	0.0253		354.9729
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	0.0143	9.7800e-003	0.1105	3.2000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003			32.1675	32.1675	9.5000e-004		32.1912
Total	0.0507	1.1665	0.3946	3.5900e-003	0.1080	3.8300e-003	0.1119	0.0293	3.6600e-003	0.0330			386.5071	386.5071	0.0263		387.1641

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					1.5000e-003	0.0000	1.5000e-003	2.3000e-004	0.0000	2.3000e-004			0.0000			0.0000
Off-Road	0.3430	3.8638	1.5987	6.2500e-003		0.1288	0.1288		0.1185	0.1185	0.0000	605.2262	605.2262	0.1957		610.1198
Total	0.3430	3.8638	1.5987	6.2500e-003	1.5000e-003	0.1288	0.1303	2.3000e-004	0.1185	0.1188	0.0000	605.2262	605.2262	0.1957		610.1198

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	0.0364	1.1567	0.2841	3.2700e-003	0.0745	3.5600e-003	0.0781	0.0204	3.4100e-003	0.0238		354.3396	354.3396	0.0253		354.9729
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	0.0143	9.7800e-003	0.1105	3.2000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		32.1675	32.1675	9.5000e-004		32.1912
Total	0.0507	1.1665	0.3946	3.5900e-003	0.1080	3.8300e-003	0.1119	0.0293	3.6600e-003	0.0330		386.5071	386.5071	0.0263		387.1641

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	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079
Total	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079

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	0.0319	0.9689	0.2808	2.5000e-003	0.0640	2.0500e-003	0.0661	0.0184	1.9600e-003	0.0204		267.3455	267.3455	0.0173		267.7770
Worker	0.2480	0.1696	1.9149	5.6000e-003	0.5812	4.7000e-003	0.5859	0.1542	4.3300e-003	0.1585		557.5706	557.5706	0.0164		557.9808
Total	0.2799	1.1385	2.1957	8.1000e-003	0.6453	6.7500e-003	0.6520	0.1726	6.2900e-003	0.1789		824.9161	824.9161	0.0337		825.7578

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079
Total	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079

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	0.0319	0.9689	0.2808	2.5000e-003	0.0640	2.0500e-003	0.0661	0.0184	1.9600e-003	0.0204		267.3455	267.3455	0.0173		267.7770
Worker	0.2480	0.1696	1.9149	5.6000e-003	0.5812	4.7000e-003	0.5859	0.1542	4.3300e-003	0.1585		557.5706	557.5706	0.0164		557.9808
Total	0.2799	1.1385	2.1957	8.1000e-003	0.6453	6.7500e-003	0.6520	0.1726	6.2900e-003	0.1789		824.9161	824.9161	0.0337		825.7578

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090		375.2641	375.2641	0.0244		375.8749
Total	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090		375.2641	375.2641	0.0244		375.8749

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	0.0300	0.9208	0.2658	2.4800e-003	0.0640	1.7900e-003	0.0658	0.0184	1.7100e-003	0.0202		264.9703	264.9703	0.0167		265.3866
Worker	0.2329	0.1532	1.7637	5.4000e-003	0.5812	4.5500e-003	0.5858	0.1542	4.1900e-003	0.1583		537.9761	537.9761	0.0148		538.3464
Total	0.2628	1.0740	2.0295	7.8800e-003	0.6453	6.3400e-003	0.6516	0.1726	5.9000e-003	0.1785		802.9464	802.9464	0.0315		803.7330

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090	0.0000	375.2641	375.2641	0.0244		375.8749
Total	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090	0.0000	375.2641	375.2641	0.0244		375.8749

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	0.0300	0.9208	0.2658	2.4800e-003	0.0640	1.7900e-003	0.0658	0.0184	1.7100e-003	0.0202		264.9703	264.9703	0.0167		265.3866
Worker	0.2329	0.1532	1.7637	5.4000e-003	0.5812	4.5500e-003	0.5858	0.1542	4.1900e-003	0.1583		537.9761	537.9761	0.0148		538.3464

Total	0.2628	1.0740	2.0295	7.8800e-003	0.6453	6.3400e-003	0.6516	0.1726	5.9000e-003	0.1785		802.9464	802.9464	0.0315		803.7330
--------------	---------------	---------------	---------------	--------------------	---------------	--------------------	---------------	---------------	--------------------	---------------	--	-----------------	-----------------	---------------	--	-----------------

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758		1,035.8246	1,035.8246	0.3017		1,043.3677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758		1,035.8246	1,035.8246	0.3017		1,043.3677

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	0.0806	0.0530	0.6105	1.8700e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		186.2225	186.2225	5.1300e-003		186.3507
Total	0.0806	0.0530	0.6105	1.8700e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		186.2225	186.2225	5.1300e-003		186.3507

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758	0.0000	1,035.8246	1,035.8246	0.3017		1,043.3677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758	0.0000	1,035.8246	1,035.8246	0.3017		1,043.3677

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	0.0806	0.0530	0.6105	1.8700e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		186.2225	186.2225	5.1300e-003		186.3507
Total	0.0806	0.0530	0.6105	1.8700e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		186.2225	186.2225	5.1300e-003		186.3507

3.6 Architectural Coating - 2022

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	4.8625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	5.0670	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

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	0.0448	0.0295	0.3392	1.0400e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		103.4570	103.4570	2.8500e-003		103.5282
Total	0.0448	0.0295	0.3392	1.0400e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		103.4570	103.4570	2.8500e-003		103.5282

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	4.8625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	5.0670	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

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	0.0448	0.0295	0.3392	1.0400e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		103.4570	103.4570	2.8500e-003		103.5282
Total	0.0448	0.0295	0.3392	1.0400e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		103.4570	103.4570	2.8500e-003		103.5282

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	0.4152	2.0983	5.5196	0.0202	1.7237	0.0172	1.7409	0.4613	0.0160	0.4773		2,053.3187	2,053.3187	0.1075		2,056.0054
Unmitigated	0.4152	2.0983	5.5196	0.0202	1.7237	0.0172	1.7409	0.4613	0.0160	0.4773		2,053.3187	2,053.3187	0.1075		2,056.0054

4.2 Trip Summary Information

Category	lb/day										lb/day					
NaturalGas Mitigated	0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243
NaturalGas Unmitigated	0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243

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	2128.71	0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243
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
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243

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	2.12871	0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243
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

Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243

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	0.5672	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265	0.0000	8.6270	8.6270	8.3400e-003	0.0000	8.8355
Unmitigated	0.5672	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265	0.0000	8.6270	8.6270	8.3400e-003	0.0000	8.8355

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	0.0346					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3874					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	0.1452	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265		8.6270	8.6270	8.3400e-003		8.8355
Total	0.5672	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265	0.0000	8.6270	8.6270	8.3400e-003	0.0000	8.8355

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	0.0346					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3874					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	0.1452	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265		8.6270	8.6270	8.3400e-003		8.8355
Total	0.5672	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265	0.0000	8.6270	8.6270	8.3400e-003	0.0000	8.8355

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

Single Room Occupancy Project- Hill & Holliston - Los Angeles-South Coast County, Summer

**Single Room Occupancy Project- Hill & Holliston
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	47.00	Space	0.00	21,472.00	0
Other Non-Asphalt Surfaces	2.53	1000sqft	0.00	2,528.00	0
Recreational Swimming Pool	0.51	1000sqft	0.00	512.00	0
Apartments Mid Rise	58.00	Dwelling Unit	0.55	19,138.00	118

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2022
Utility Company	Pasadena Water & Power				
CO2 Intensity (lb/MW hr)	1664.14	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Population per traffic memorandum
- Construction Phase - .
- Off-road Equipment - .
- Off-road Equipment - .
- Off-road Equipment - Used maximum amount of hours allowable for construction equipment duration

Grading -

Vehicle Trips - .

Woodstoves - Rule 445 prohibits wood burning device installation, and no fireplaces as part of the Project.

Water And Wastewater - Default

Construction Off-road Equipment Mitigation -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	1.00	27.00
tblConstructionPhase	NumDays	2.00	50.00
tblConstructionPhase	NumDays	100.00	471.00
tblConstructionPhase	NumDays	5.00	52.00
tblConstructionPhase	NumDays	5.00	26.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	49.30	0.00
tblFireplaces	NumberNoFireplace	5.80	0.00
tblFireplaces	NumberWood	2.90	0.00
tblGrading	MaterialExported	0.00	1,700.00
tblLandUse	LandUseSquareFeet	18,800.00	21,472.00
tblLandUse	LandUseSquareFeet	2,530.00	2,528.00
tblLandUse	LandUseSquareFeet	510.00	512.00
tblLandUse	LandUseSquareFeet	58,000.00	19,138.00

tblLandUse	LotAcreage	0.42	0.00
tblLandUse	LotAcreage	0.06	0.00
tblLandUse	LotAcreage	0.01	0.00
tblLandUse	LotAcreage	1.53	0.55
tblLandUse	Population	166.00	118.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblVehicleTrips	ST_TR	6.39	3.93
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	5.86	3.60
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	6.65	4.09
tblVehicleTrips	WD_TR	33.82	0.00
tblWoodstoves	NumberCatalytic	2.90	0.00
tblWoodstoves	NumberNoncatalytic	2.90	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	1.4766	15.7582	5.9860	0.0154	6.0780	0.7018	6.7798	3.3251	0.6457	3.9707	0.0000	1,491.3081	1,491.3081	0.4652	0.0000	1,502.9369
2021	0.5452	5.0153	4.7717	0.0125	0.6453	0.1326	0.7774	0.1726	0.1317	0.3043	0.0000	1,242.3050	1,242.3050	0.2212	0.0000	1,243.7899
2022	5.1072	5.9653	7.7037	0.0133	0.6453	0.2977	0.7605	0.1726	0.2773	0.3306	0.0000	1,233.5928	1,233.5928	0.3072	0.0000	1,241.2724
Maximum	5.1072	15.7582	7.7037	0.0154	6.0780	0.7018	6.7798	3.3251	0.6457	3.9707	0.0000	1,491.3081	1,491.3081	0.4652	0.0000	1,502.9369

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	1.4766	15.7582	5.9860	0.0154	2.4045	0.7018	3.1063	1.3058	0.6457	1.9515	0.0000	1,491.3081	1,491.3081	0.4652	0.0000	1,502.9369
2021	0.5452	5.0153	4.7717	0.0125	0.6453	0.1326	0.7774	0.1726	0.1317	0.3043	0.0000	1,242.3050	1,242.3050	0.2212	0.0000	1,243.7899
2022	5.1072	5.9653	7.7037	0.0133	0.6453	0.2977	0.7605	0.1726	0.2773	0.3306	0.0000	1,233.5928	1,233.5928	0.3072	0.0000	1,241.2724
Maximum	5.1072	15.7582	7.7037	0.0154	2.4045	0.7018	3.1063	1.3058	0.6457	1.9515	0.0000	1,491.3081	1,491.3081	0.4652	0.0000	1,502.9369

	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
Percent Reduction	0.00	0.00	0.00	0.00	49.85	0.00	44.16	55.02	0.00	43.84	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

1	Site Preparation	Site Preparation	12/1/2020	12/31/2020	6	27
2	Grading-Excavation	Grading	1/1/2021	2/27/2021	6	50
3	Building Construction	Building Construction	3/1/2021	8/31/2022	6	471
4	Paving	Paving	9/1/2022	10/31/2022	6	52
5	Architectural Coating	Architectural Coating	11/1/2022	11/30/2022	6	26

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 38,754; Residential Outdoor: 12,918; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading-Excavation	Concrete/Industrial Saws	0	8.00	81	0.73
Grading-Excavation	Rubber Tired Dozers	0	1.00	247	0.40
Grading-Excavation	Rubber Tired Loaders	1	8.00	203	0.36
Grading-Excavation	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	0	4.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	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
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading-Excavation	1	3.00	0.00	213.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	1	52.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 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					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.4536	15.7418	5.7670	0.0148		0.7014	0.7014		0.6453	0.6453		1,432.5024	1,432.5024	0.4633		1,444.0849
Total	1.4536	15.7418	5.7670	0.0148	6.0221	0.7014	6.7235	3.3102	0.6453	3.9555		1,432.5024	1,432.5024	0.4633		1,444.0849

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	0.0230	0.0164	0.2189	5.9000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.8056	58.8056	1.8500e-003		58.8520
Total	0.0230	0.0164	0.2189	5.9000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.8056	58.8056	1.8500e-003		58.8520

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					2.3486	0.0000	2.3486	1.2910	0.0000	1.2910			0.0000			0.0000
Off-Road	1.4536	15.7418	5.7670	0.0148		0.7014	0.7014		0.6453	0.6453	0.0000	1,432.5024	1,432.5024	0.4633		1,444.0849
Total	1.4536	15.7418	5.7670	0.0148	2.3486	0.7014	3.0500	1.2910	0.6453	1.9362	0.0000	1,432.5024	1,432.5024	0.4633		1,444.0849

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	0.0230	0.0164	0.2189	5.9000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.8056	58.8056	1.8500e-003		58.8520

Total	0.0230	0.0164	0.2189	5.9000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.8056	58.8056	1.8500e-003		58.8520
--------------	---------------	---------------	---------------	--------------------	---------------	--------------------	---------------	---------------	--------------------	---------------	--	----------------	----------------	--------------------	--	----------------

3.3 Grading-Excavation - 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					
Fugitive Dust					3.8500e-003	0.0000	3.8500e-003	5.8000e-004	0.0000	5.8000e-004			0.0000			0.0000
Off-Road	0.3430	3.8638	1.5987	6.2500e-003		0.1288	0.1288		0.1185	0.1185		605.2262	605.2262	0.1957		610.1198
Total	0.3430	3.8638	1.5987	6.2500e-003	3.8500e-003	0.1288	0.1327	5.8000e-004	0.1185	0.1191		605.2262	605.2262	0.1957		610.1198

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	0.0355	1.1427	0.2679	3.3200e-003	0.0745	3.5100e-003	0.0780	0.0204	3.3600e-003	0.0238		360.5861	360.5861	0.0245		361.1979
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	0.0129	8.8400e-003	0.1208	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		34.1631	34.1631	1.0100e-003		34.1883
Total	0.0484	1.1516	0.3888	3.6600e-003	0.1080	3.7800e-003	0.1118	0.0293	3.6100e-003	0.0329		394.7492	394.7492	0.0255		395.3861

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					1.5000e-003	0.0000	1.5000e-003	2.3000e-004	0.0000	2.3000e-004			0.0000			0.0000
Off-Road	0.3430	3.8638	1.5987	6.2500e-003		0.1288	0.1288		0.1185	0.1185	0.0000	605.2262	605.2262	0.1957		610.1198
Total	0.3430	3.8638	1.5987	6.2500e-003	1.5000e-003	0.1288	0.1303	2.3000e-004	0.1185	0.1188	0.0000	605.2262	605.2262	0.1957		610.1198

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	0.0355	1.1427	0.2679	3.3200e-003	0.0745	3.5100e-003	0.0780	0.0204	3.3600e-003	0.0238		360.5861	360.5861	0.0245		361.1979
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	0.0129	8.8400e-003	0.1208	3.4000e-004	0.0335	2.7000e-004	0.0338	8.8900e-003	2.5000e-004	9.1400e-003		34.1631	34.1631	1.0100e-003		34.1883
Total	0.0484	1.1516	0.3888	3.6600e-003	0.1080	3.7800e-003	0.1118	0.0293	3.6100e-003	0.0329		394.7492	394.7492	0.0255		395.3861

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	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079
Total	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079

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	0.0304	0.9709	0.2538	2.5700e-003	0.0640	1.9900e-003	0.0660	0.0184	1.9000e-003	0.0203		274.8806	274.8806	0.0162		275.2855
Worker	0.2229	0.1532	2.0944	5.9400e-003	0.5812	4.7000e-003	0.5859	0.1542	4.3300e-003	0.1585		592.1603	592.1603	0.0175		592.5965
Total	0.2533	1.1241	2.3482	8.5100e-003	0.6453	6.6900e-003	0.6519	0.1726	6.2300e-003	0.1788		867.0410	867.0410	0.0336		867.8820

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079
Total	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079

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	0.0304	0.9709	0.2538	2.5700e-003	0.0640	1.9900e-003	0.0660	0.0184	1.9000e-003	0.0203		274.8806	274.8806	0.0162		275.2855
Worker	0.2229	0.1532	2.0944	5.9400e-003	0.5812	4.7000e-003	0.5859	0.1542	4.3300e-003	0.1585		592.1603	592.1603	0.0175		592.5965
Total	0.2533	1.1241	2.3482	8.5100e-003	0.6453	6.6900e-003	0.6519	0.1726	6.2300e-003	0.1788		867.0410	867.0410	0.0336		867.8820

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090		375.2641	375.2641	0.0244		375.8749
Total	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090		375.2641	375.2641	0.0244		375.8749

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	0.0285	0.9233	0.2402	2.5500e-003	0.0640	1.7400e-003	0.0658	0.0184	1.6600e-003	0.0201		272.4859	272.4859	0.0156		272.8768
Worker	0.2088	0.1384	1.9323	5.7300e-003	0.5812	4.5500e-003	0.5858	0.1542	4.1900e-003	0.1583		571.3304	571.3304	0.0158		571.7246
Total	0.2373	1.0617	2.1725	8.2800e-003	0.6453	6.2900e-003	0.6516	0.1726	5.8500e-003	0.1784		843.8163	843.8163	0.0314		844.6014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090	0.0000	375.2641	375.2641	0.0244		375.8749
Total	0.2727	1.8780	2.4181	3.9600e-003		0.1090	0.1090		0.1090	0.1090	0.0000	375.2641	375.2641	0.0244		375.8749

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	0.0285	0.9233	0.2402	2.5500e-003	0.0640	1.7400e-003	0.0658	0.0184	1.6600e-003	0.0201		272.4859	272.4859	0.0156		272.8768
Worker	0.2088	0.1384	1.9323	5.7300e-003	0.5812	4.5500e-003	0.5858	0.1542	4.1900e-003	0.1583		571.3304	571.3304	0.0158		571.7246

Total	0.2373	1.0617	2.1725	8.2800e-003	0.6453	6.2900e-003	0.6516	0.1726	5.8500e-003	0.1784		843.8163	843.8163	0.0314		844.6014
--------------	---------------	---------------	---------------	--------------------	---------------	--------------------	---------------	---------------	--------------------	---------------	--	-----------------	-----------------	---------------	--	-----------------

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758		1,035.8246	1,035.8246	0.3017		1,043.3677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758		1,035.8246	1,035.8246	0.3017		1,043.3677

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	0.0723	0.0479	0.6689	1.9800e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		197.7682	197.7682	5.4600e-003		197.9047
Total	0.0723	0.0479	0.6689	1.9800e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		197.7682	197.7682	5.4600e-003		197.9047

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758	0.0000	1,035.8246	1,035.8246	0.3017		1,043.3677
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6469	5.9174	7.0348	0.0113		0.2961	0.2961		0.2758	0.2758	0.0000	1,035.8246	1,035.8246	0.3017		1,043.3677

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	0.0723	0.0479	0.6689	1.9800e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		197.7682	197.7682	5.4600e-003		197.9047
Total	0.0723	0.0479	0.6689	1.9800e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		197.7682	197.7682	5.4600e-003		197.9047

3.6 Architectural Coating - 2022

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	4.8625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	5.0670	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

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	0.0402	0.0266	0.3716	1.1000e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		109.8712	109.8712	3.0300e-003		109.9470
Total	0.0402	0.0266	0.3716	1.1000e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		109.8712	109.8712	3.0300e-003		109.9470

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	4.8625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	5.0670	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

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	0.0402	0.0266	0.3716	1.1000e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		109.8712	109.8712	3.0300e-003		109.9470
Total	0.0402	0.0266	0.3716	1.1000e-003	0.1118	8.7000e-004	0.1127	0.0296	8.1000e-004	0.0305		109.8712	109.8712	3.0300e-003		109.9470

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	0.4278	2.0480	5.8258	0.0212	1.7237	0.0171	1.7408	0.4613	0.0159	0.4772		2,157.0838	2,157.0838	0.1078		2,159.7798
Unmitigated	0.4278	2.0480	5.8258	0.0212	1.7237	0.0171	1.7408	0.4613	0.0159	0.4772		2,157.0838	2,157.0838	0.1078		2,159.7798

4.2 Trip Summary Information

Category	lb/day										lb/day					
NaturalGas Mitigated	0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243
NaturalGas Unmitigated	0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243

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	2128.71	0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243
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
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243

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	2.12871	0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243
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

Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0230	0.1962	0.0835	1.2500e-003		0.0159	0.0159		0.0159	0.0159		250.4361	250.4361	4.8000e-003	4.5900e-003	251.9243

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	0.5672	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265	0.0000	8.6270	8.6270	8.3400e-003	0.0000	8.8355
Unmitigated	0.5672	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265	0.0000	8.6270	8.6270	8.3400e-003	0.0000	8.8355

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	0.0346					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3874					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	0.1452	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265		8.6270	8.6270	8.3400e-003		8.8355
Total	0.5672	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265	0.0000	8.6270	8.6270	8.3400e-003	0.0000	8.8355

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	0.0346					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3874					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	0.1452	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265		8.6270	8.6270	8.3400e-003		8.8355
Total	0.5672	0.0553	4.7953	2.5000e-004		0.0265	0.0265		0.0265	0.0265	0.0000	8.6270	8.6270	8.3400e-003	0.0000	8.8355

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
