Air Quality Assessment for the Mt. San Antonio College Facilities Master Plan Update and Physical Education Projects

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1.0 EXISTING AIR QUALITY

1.1 Project Description

Mt. San Antonio College is located in the City of Walnut on over 420 acres. It has an estimated 2014-2015 fall enrollment of 35,986 students (headcount). The college has proposed a 2015 Facilities Master Plan Update (FMPU), and the corresponding Land Use Plan is shown as in Exhibit 1. The major change from the 2012 FMP is the re-design of the athletic facilities south of Temple Avenue and east of Bonita Avenue as shown in Exhibit 2. The existing stadium will be demolished and a new stadium built onsite. Other changes for the 2015 FMPU include the relocation of the Public Transportation Center to Lot D3, and expanded Wildlife Sanctuary and Open Space area, and a pedestrian bridge across Temple Avenue connecting the Physical Education Complex to Lot F. The net increase in square footage at 2015 FMPU buildout is approximately 500,000 gross square feet. Special annual events will continue to be held on campus that include the Mt. SAC/Brooks Relays and the Mt. SAC Cross-Country Invitational (XC Invite). The District is also filing an application to host the 8-day 2020 Olympic Track & Field Trials in late July or August 2020.

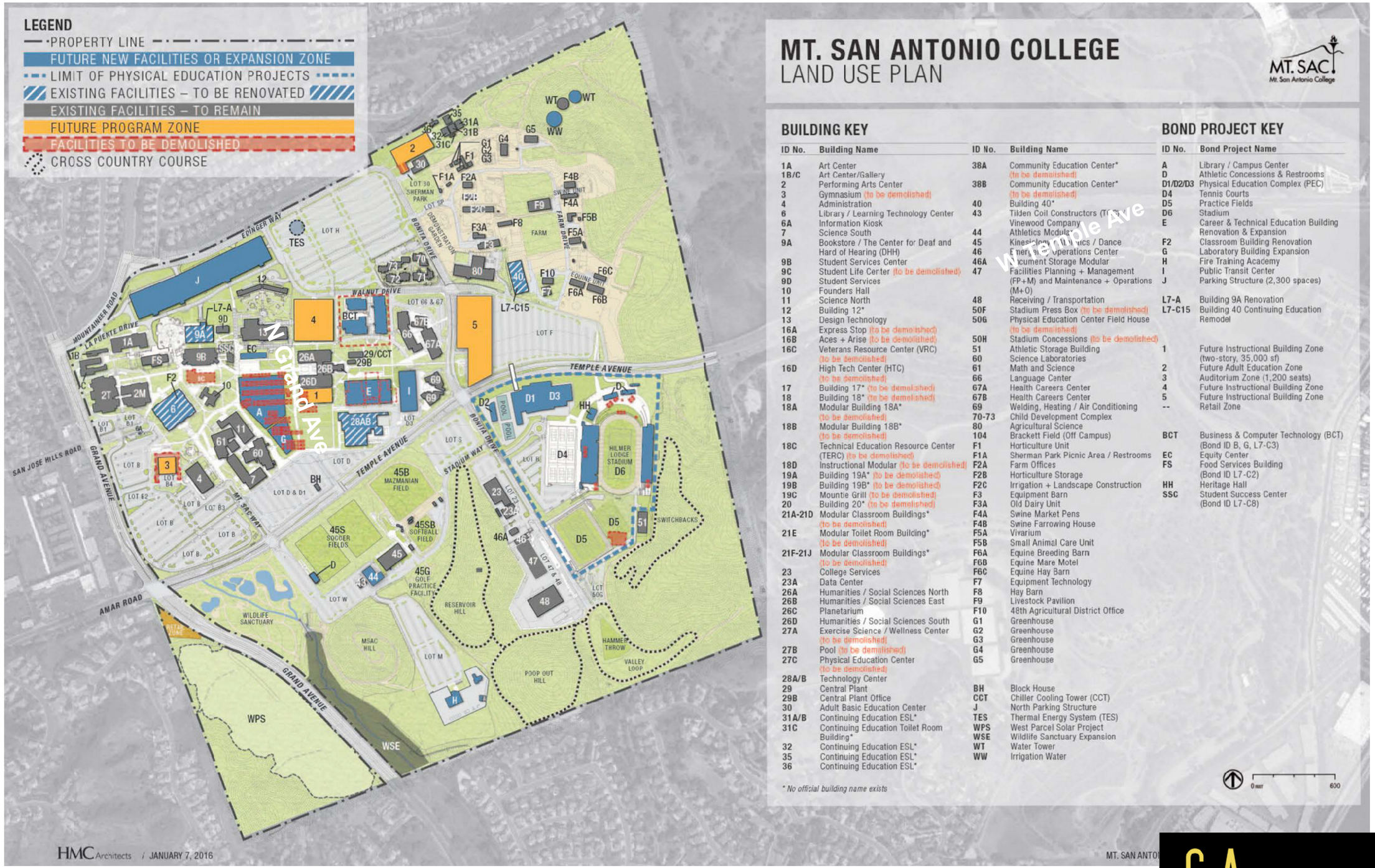
This report analyzes the potential air quality impacts associated with this project. Regional air quality impacts from construction and operation of the proposed project are analyzed, as are potential local air quality impacts.

1.2 Local, State, and Federal Air Quality Agencies

The proposed project is located in the South Coast Air Basin (SCAB). The SCAB is comprised of parts of Los Angeles, Riverside and San Bernardino counties and all of Orange County. The basin is bounded on the west by the Pacific Ocean and surrounded on the other sides by mountains. To the north lie the San Gabriel Mountains, to the north and east the San Bernardino Mountains, to the southeast the San Jacinto Mountains and to the south the Santa Ana Mountains. The basin forms a low plain and the mountains channel and confine airflow, which trap air pollutants.

The primary agencies responsible for regulations to improve air quality in the SCAB are the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The Southern California Association of Governments (SCAG) is an important partner to the SCAQMD, as it is the designated metropolitan planning authority for the area and produces estimates of anticipated future growth and vehicular travel in the basin that are used for air quality planning. The SCAQMD sets and enforces regulations for non-vehicular sources of air pollution in the basin.

Exhibit 1 - Land Use Plan for the 2015 FMPU



MT. SAN ANTONIO COLLEGE
LAND USE PLAN

MT. SAC
Mt. San Antonio College

BUILDING KEY

ID No.	Building Name	ID No.	Building Name
1A	Art Center	38A	Community Education Center* (to be demolished)
1B/C	Art Center/Gallery	38B	Community Education Center* (to be demolished)
2	Performing Arts Center	40	Building 40*
3	Gymnasium (to be demolished)	43	Tilden Coil Constructors (TCC) / Vinewood Company
4	Administration	44	Athletics Modular
6	Library / Learning Technology Center	45	Kinesiology / Athletics / Dance
6A	Information Kiosk	46	Energy Operations Center
7	Science South	46A	Document Storage Modular
9A	Bookstore / The Center for Deaf and Hard of Hearing (DHH)	47	Facilities Planning + Management (FP+M) and Maintenance + Operations (M+O)
9B	Student Services Center	48	Receiving / Transportation
9C	Student Life Center (to be demolished)	50F	Stadium Press Box (to be demolished)
9D	Student Services	50G	Physical Education Center Field House (to be demolished)
10	Founders Hall	50H	Stadium Concessions (to be demolished)
11	Science North	51	Athletic Storage Building
12	Building 12*	60	Science Laboratories
13	Design Technology	61	Math and Science
16A	Express Stop (to be demolished)	66	Language Center
16B	Aces + Arise (to be demolished)	67A	Health Careers Center
16C	Veterans Resource Center (VRC) (to be demolished)	67B	Health Careers Center
16D	High Tech Center (HTC) (to be demolished)	69	Welding, Heating / Air Conditioning
17	Building 17* (to be demolished)	70-73	Child Development Complex
18	Building 18* (to be demolished)	80	Agricultural Science
18A	Modular Building 18A* (to be demolished)	104	Brackett Field (Off Campus)
18B	Modular Building 18B* (to be demolished)	F1	Horticulture Unit
18C	Technical Education Resource Center (TERC) (to be demolished)	F1A	Sherman Park Picnic Area / Restrooms
18D	Instructional Modular (to be demolished)	F2A	Farm Offices
19A	Building 19A* (to be demolished)	F2B	Horticulture Storage
19B	Building 19B* (to be demolished)	F2C	Irrigation + Landscape Construction
19C	Mountie Grill (to be demolished)	F3	Equipment Barn
20	Building 20* (to be demolished)	F3A	Old Dairy Unit
21A-21D	Modular Classroom Buildings* (to be demolished)	F4A	Swine Market Pens
21E	Modular Toilet Room Building* (to be demolished)	F4B	Swine Farrowing House
21F-21J	Modular Classroom Buildings* (to be demolished)	F5A	Vivarium
23	College Services	F5B	Small Animal Care Unit
23A	Data Center	F6A	Equine Breeding Barn
26A	Humanities / Social Sciences North	F6B	Equine Mare Motel
26B	Humanities / Social Sciences East	F6C	Equine Hay Barn
26C	Planetarium	F7	Equipment Technology
26D	Humanities / Social Sciences South	F8	Hay Barn
27A	Exercise Science / Wellness Center (to be demolished)	F9	Livestock Pavilion
27B	Pool (to be demolished)	F10	48th Agricultural District Office
27C	Physical Education Center (to be demolished)	G1	Greenhouse
28A/B	Technology Center	G2	Greenhouse
29	Central Plant	G3	Greenhouse
29B	Central Plant Office	G4	Greenhouse
30	Adult Basic Education Center	G5	Greenhouse
31A/B	Continuing Education ESL*	BH	Block House
31C	Continuing Education Toilet Room Building*	CCT	Chiller Cooling Tower (CCT)
32	Continuing Education ESL*	J	North Parking Structure
35	Continuing Education ESL*	TES	Thermal Energy System (TES)
36	Continuing Education ESL*	WPS	West Parcel Solar Project
		WSE	Wildlife Sanctuary Expansion
		WT	Water Tower
		WW	Irrigation Water

* No official building name exists

BOND PROJECT KEY

ID No.	Bond Project Name
A	Library / Campus Center
D	Athletic Concessions & Restrooms
D1/D2/D3	Physical Education Complex (PEC)
D4	Tennis Courts
D5	Practice Fields
D6	Stadium
E	Career & Technical Education Building Renovation & Expansion
F2	Classroom Building Renovation
G	Laboratory Building Expansion
H	Fire Training Academy
I	Public Transit Center
J	Parking Structure (2,300 spaces)
L7-A	Building 9A Renovation
L7-C15	Building 40 Continuing Education Remodel
1	Future Instructional Building Zone (two-story, 35,000 sf)
2	Future Adult Education Zone
3	Auditorium Zone (1,200 seats)
4	Future Instructional Building Zone
5	Future Instructional Building Zone
--	Retail Zone
BCT	Business & Computer Technology (BCT) (Bond ID B, G, L7-C3)
EC	Equity Center
FS	Food Services Building (Bond ID L7-C2)
HH	Heritage Hall
SSC	Student Success Center (Bond ID L7-C8)

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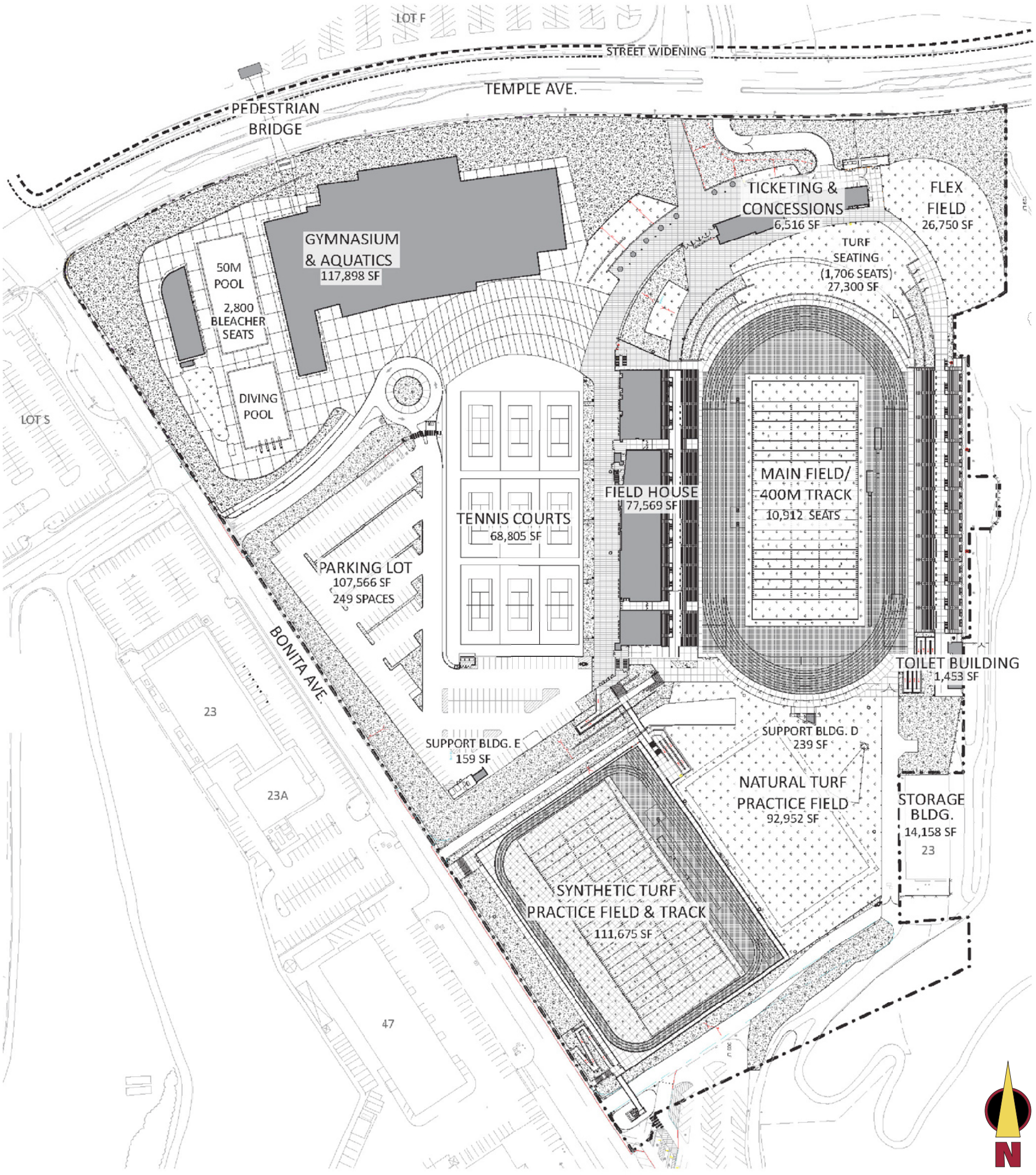
Exhibit 2 - Physical Education Projects



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The U.S. Environmental Protection Agency (U.S. EPA) is the primary federal agency for regulating air quality. The EPA implements the provisions of the Federal Clean Air Act (FCAA). This Act establishes national ambient air quality standards (NAAQS) that are applicable nationwide. The EPA designates areas with pollutant concentrations that do not meet the NAAQS as non-attainment areas for each criteria pollutant. States are required by the FCAA to prepare State Implementation Plans (SIP) for designated non-attainment areas. The SIP is required to demonstrate how the areas will attain the NAAQS by the prescribed deadlines and what measures will be required to attain the standards. The EPA also oversees implementation of the prescribed measures. Areas that achieve the NAAQS after a non-attainment designation are redesignated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the NAAQS.

The California Clean Air Act (CCAA) required all air pollution control districts in the state to prepare a plan to reduce pollutant concentrations exceeding the CAAQS and ultimately achieves the CAAQS. The districts are required to review and revise these plans every three years. The SCAQMD satisfies this requirement through the publication of an Air Quality Management Plan (AQMP). The AQMP is developed by SCAQMD and SCAG in coordination with local governments and the private sector. The AQMP is incorporated into the SIP by CARB to satisfy the FCAA requirements discussed above. The AQMP is discussed further in Section 1.5.

1.3 Criteria Pollutants, Health Effects, and Standards

Under the Federal Clean Air Act (FCAA), the U.S. EPA has established National Ambient Air Quality Standards (NAAQS) for six major pollutants; ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead. These six air pollutants are often referred to as the criteria pollutants. The NAAQS are two tiered: primary, to protect public health, and secondary, to prevent degradation to the environment (i.e., impairment of visibility, damage to vegetation and property).

Under the California Clean Air Act (CCAA), the California Air Resources Board has established California Ambient Air Quality Standards (CAAQS) to protect the health and welfare of Californians. State standards have been established for the six criteria pollutants as well as four additional pollutants; visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Exhibit 3 presents the state and national ambient air quality standards.

Exhibit 3 - Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[10]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: California Air Resources Board website 10/1/15

1.4 Attainment Designations

Based on monitored air pollutant concentrations, the U.S. EPA and CARB designate areas relative to their status in attaining the NAAQS and CAAQS respectively. Table 1 lists the current attainment designations for the SCAB. For the Federal standards, the required attainment date is also shown. The "Unclassified" designation indicates that the air quality data for the area does not support a designation of attainment or nonattainment.

Table 1 Designations of Criteria Pollutants for the SCAB

Pollutant	Federal	State
Ozone (O_3)	Extreme Nonattainment (2023)	Nonattainment
Respirable Particulate Matter (PM_{10})	Attainment/Maintenance (2013)	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Moderate Nonattainment (2015)	Nonattainment
Carbon Monoxide (CO)	Attainment/Maintenance (2000)	Attainment
Nitrogen Dioxide (NO_2)	Attainment/Maintenance (1995)	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead	Attainment	Attainment
Visibility Reducing Particles	n/a	Unclassified
Sulfates	n/a	Unclassified
Hydrogen Sulfide	n/a	Attainment
Vinyl Chloride	n/a	Attainment

Table 1 shows that the U.S. EPA has designated SCAB as Extreme Non-attainment for ozone, Attainment/Maintenance for PM_{10}, Moderate Non-attainment for $PM_{2.5}$, and attainment/maintenance for CO and NO_2. The basin has been designated by the state as non-attainment for ozone, PM_{10}, and $PM_{2.5}$. For the federal designations, the qualifiers, Extreme and Moderate, affect the required attainment dates as the federal regulations have different requirements for areas that exceed the standards by greater amounts at the time of attainment/non-attainment designation. The SCAB is designated as in attainment of the Federal SO_2 and lead NAAQS as well as the state CO, NO_2, SO_2, lead, hydrogen sulfide, and vinyl chloride CAAQS.

Table 1 shows that SCAB is designated as in attainment of the SO_2 and lead NAAQS as well as the state CO, NO_2, SO_2, lead, hydrogen sulfide, and vinyl chloride CAAQS. Generally, these pollutants are not considered a concern in the SCAB.

1.5 Air Quality Management Plan (AQMP)

As discussed above, the CAA requires plans to demonstrate attainment of the NAAQS for which an area is designated as nonattainment. Further, the CCAA requires SCAQMD to revise its plan to reduce pollutant concentrations exceeding the CAAQS every three years. In the SCAB, SCAQMD and SCAG, in coordination with local governments and the private sector, develop the Air Quality Management Plan (AQMP) for the air basin to satisfy these

requirements. The AQMP is the most important air management document for the basin because it provides the blueprint for meeting state and federal ambient air quality standards.

On December 7, 2012, the 2012 AQMP was adopted by the SCAQMD Governing Board. The primary task of the 2012 AQMP is to bring the basin into attainment with federal health-based standards for unhealthful fine particulate matter (PM2.5) by 2014. The document states that to have any reasonable expectation of meeting the 2023 ozone deadline, the scope and pace of continued air quality improvement must greatly intensify.

The SCAQMD is in the process of developing the 2016 AQMP, which will be a comprehensive and integrated plan primarily focused on addressing the ozone and PM2.5 standards. The upcoming 2016 AQMP will develop integrated strategies and measures to meet the following NAAQS:

- 8-hour Ozone by 2032
- Annual PM2.5 by 2021-2025
- 1-hour Ozone by 2023
- 24-hour PM2.5 by 2019

The draft 2016 AQMP is expected to be released in early 2016. The current schedule shows the SCAQMD Governing Board adopting the 2016 AQMP in April 2016.

1.6 Climate

The climate in and around the project area, as with all of Southern California, is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. It maintains moderate temperatures and comfortable humidity, and limits precipitation to a few storms during the winter "wet" season. Temperatures are normally mild, excepting the summer months, which commonly bring substantially higher temperatures. In all portions of the basin, temperatures well above 100 degrees F. have been recorded in recent years. The annual average temperature in the basin is approximately 62 degrees Fahrenheit.

Winds in the project area are usually driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime onshore sea breezes. At night, the wind generally slows and reverses direction traveling towards the sea. Wind direction will be altered by local canyons, with wind tending to flow parallel to the canyons. During the transition period from one wind pattern to the other, the dominant wind direction rotates into the south and causes a minor wind direction maximum from the south. The frequency of calm winds (less than 2 miles per hour) is less than 10 percent. Therefore, there is little stagnation in the project vicinity, especially during busy daytime traffic hours.

Southern California frequently has temperature inversions, which inhibit the dispersion of pollutants. Inversions may be either ground based or elevated. Grounds based inversions, sometimes referred to as radiation inversions, are most severe during clear, cold, early winter

mornings. Under conditions of a ground-based inversion, very little mixing or turbulence occurs, and high concentrations of primary pollutants may occur local to major roadways. Elevated inversions can be generated by a variety of meteorological phenomena. Elevated inversions act as a lid or upper boundary and restrict vertical mixing. Below the elevated inversion, dispersion is not restricted. Mixing heights for elevated inversions are lower in the summer and more persistent. This low summer inversion puts a lid over the South Coast Air Basin (SCAB) and is responsible for the high levels of ozone observed during summer months in the air basin.

1.7 Monitored Air Quality

Air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin. Estimates for the SCAB have been made for existing emissions ("Final 2012 Air Quality Management Plan", February 2013). The data indicate that on-road (e.g.; automobiles, busses and trucks) and off-road (e.g.; trains, ships, and construction equipment) mobile sources are the major source of current emissions in the SCAB. Mobile sources account for approximately 59% of VOC emissions, 88% of NOx emissions, 50% of direct PM2.5 emissions, 75% of SOx emissions and 95% of CO emissions. Area sources (e.g., architectural coatings, residential water heaters, and consumer products) account for approximately 36% of VOC emissions and 39% of direct $PM_{2.5}$ emissions. Point sources (e.g., chemical manufacturing, petroleum production, and electric utilities) account for approximately 23% of SOx emissions. Entrained road dust account for approximately 10% of direct PM2.5 emissions.

The SCAQMD has divided the SCAB into 38 air-monitoring areas with a designated ambient air monitoring station in most areas. The project is in the Pomona/Walnut Valley Source-Receptor Area (SRA) 10. The Pomona monitoring station is the representative facility for SRA 10. The data collected at this station is considered representative of the air quality experienced in the vicinity of the project. The air pollutants measured at the Pomona station include ozone and carbon monoxide (CO). The nearest station that monitors particulates is the Glendora station. The air quality data monitored from 2012 to 2014 are presented in Table 2 (2015 data has not been released yet). The air quality data monitored were obtained from the CARB air quality data website (www.arb.ca.gov/adam/).

Table 2 Air Quality Levels Measured at the Pomona/Glendora Stations

Pollutant	California Standard	National Standard	Year	Max. Level	Days State Standard Exceeded	Days National Standard Exceeded
Ozone	0.09 ppm	None	2014	0.123	22	0
1 Hour			2013	0.125	12	0
Average			2012	0.117	21	0
Ozone	0.070 ppm	0.08 ppm[4]	2014	0.099	56	33
8 Hour			2013	0.099	22	15
Average			2012	0.092	30	15
CO	9.0 ppm	9 ppm	2014	n/a	n/a	n/a
8 Hour			2013	n/a	n/a	n/a
Average			2012	1.47	0	0
Fine	None	35 µg/m^3	2014	53.5	*	*
Particulates			2013	78.7	*	*
$PM_{2.5}$			2012	38.0	*	*
(24 Hour)						
Fine	12 µg/m^3	12 µg/m^3	2014	9.4	0	0
Particulates			2013	9.7	0	0
$PM_{2.5}$			2012	*	*	*
(Annual)						
Respirable	50 µg/m^3	150 µg/m^3	2014	78.0	*	0
Particulates			2013	100.7	*	0
PM_{10}			2012	75.8	*	0
24 Hour Average						
Respirable	20 µg/m^3	35 µg/m^3	2014	33.6	No	No
Particulates			2013	30.6	No	No
PM_{10}			2012	29.4	No	No
AAM						

n/a – data not available

* Insufficient data available to determine the value

Source: CARB Air Quality Data Statistics web site www.arb.ca.gov/adam/ accessed 1/27/2016

The Pomona and Glendora monitoring data presented in Table 2 show that ozone is the air pollutant of primary concern in the project area. The Federal 8-hour ozone standard was exceeded between 15 and 33 days per year for the period between 2012 and 2014. Insufficient data is available to determine the seriousness of particulate levels in the area. The Federal standards for PM10 do not appear to be violated in the area.

1.8 Existing Campus Emissions

Existing campus emissions were calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a computer program developed by the SCAQMD in conjunction with the California Air Resources Board (CARB). The model calculates emissions for construction and operation of various projects. For campus emissions, the model uses the "headcount" or student enrollment data. For the existing baseline case, the headcount is 35,986.

CalEEMod calculates maximum daily emissions for the summertime and wintertime periods. The results presented below are from the summer or winter emissions, whichever are the higher emissions. Output files from the CalEEMod program are presented in the appendix. Table 3 presents the results of the CalEEMod model showing the maximum daily air pollutant emissions projected for the existing academic year. The specific data utilized in calculating the emissions are provided in the appendix.

Table 3 Existing Campus Emissions (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Area	41.5	0.0	3.8	0.0	0.0	0.0
Energy	1.3	12.0	10.1	0.1	0.9	0.9
Mobile	178.6	495.2	1917.7	3.9	283.5	80.3
Total	**221.4**	**507.2**	**1931.6**	**4.0**	**284.4**	**81.2**

Mobile emissions are the most significant category of emissions. These emissions represent vehicular emissions from students and teachers traveling to the campus. Mobile emissions represent almost 98% of the total campus emissions. Area source emissions represent emissions from painting, consumer products (e.g., using aerosol sprays), and landscaping activities.

2.0 POTENTIAL AIR QUALITY IMPACTS

Air quality impacts are usually divided into short term and long term. Short-term impacts are usually the result of construction or grading operations. Long-term impacts are associated with the operation of the proposed project. The analysis of potential air impacts is further divided into those associated with the 2015 FMPU projects and the PEP.

2.1 Thresholds of Significance

2.1.1 Regional Air Quality

In their "1993 CEQA Air Quality Handbook", the SCAQMD has established significance thresholds to assess the impact of project related air pollutant emissions. Table 4 presents these significance thresholds. There are separate thresholds for short-term construction and long-term operational emissions. A project with daily emission rates below these thresholds are considered to have a less than significant effect on air quality. It should be noted the thresholds recommended by the SCAQMD are very low and subject to controversy. It is up to the individual lead agencies to determine if the SCAQMD thresholds are appropriate for their projects.

Table 4 SCAQMD Regional Pollutant Emission Thresholds of Significance

	Pollutant Emissions (lbs./day)					
	CO	**ROG**	**NOx**	**PM10**	**PM2.5**	**SOx**
Construction	*550*	*75*	*100*	*150*	*55*	*150*
Operation	*550*	*55*	*55*	*150*	*55*	*150*

2.1.2 Localized Significance Thresholds

As part of the SCAQMD's environmental justice program, attention was focused on localized effects of air quality. In accordance with Governing Board direction, SCAQMD staff developed localized significance threshold (LST) methodology and mass rate look-up tables by Source Receptor Area (SRA) that can be used to determine whether or not a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area. The LST methodology is described in "Final Localized Significance Threshold Methodology" updated in 2009 by the SCAQMD and is available at the SCAQMD website (http://aqmd.gov/ceqa/handbook/LST/LST.html).

The LST mass rate look-up tables provided by the SCAQMD allow one to determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts. If the calculated on-site emissions for the proposed construction

or operational activities are below the LST emission levels found on the LST mass rate look-up tables and no potentially significant impacts are found to be associated with other environmental issues, then the proposed construction or operation activity is not significant for local air quality.

The LST mass rate look-up tables are applicable to the following pollutants only: oxides of nitrogen (NO_x), carbon monoxide (CO), particulate matter less than 10 microns in aerodynamic diameter (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$). LSTs are derived based on the location of the activity (i.e., the source/receptor area); the emission rates of NO_x, CO, $PM_{2.5}$ and PM_{10}; and the distance to the nearest exposed individual.

The LST methodology presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds. If receptors are within 25 meters of the site, the methodology document says that the threshold for the 25-meter distance should be used. The threshold levels varying depending on the size of the project and the distance to the receptor. Therefore, threshold levels need to be calculated on a project-by-project basis.

2.2 The 2015 Facility Master Plan Update (FMPU)

Construction emissions, operational emission changes, and compliance with the Air Quality Management Planning are considered in Section 2.2.

2.2.1 Construction Emissions

Construction emissions for the 2015 FMPU are first considered. Since construction schedules have not been developed for most of the projects in the FMPU, the emissions potentially generated by the FMPU are considered for various scenarios. More detailed information has been developed for the two of the larger projects covered in the FMPU; specifically, Buildings A and G. Construction emissions for PEP are addressed in more detail in Sections 2.3.1 and 2.3.2.

2.2.1.1 *Overall Construction Emissions*

The long-term buildout of the 2015 FMPU will result in new construction of 454,485 square feet (including PEP). To make room for some of the new construction, demolition of some existing buildings is necessary. The FMPU indicates that approximately 122,976 square feet will be demolished.

Emissions during the phases of construction were calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a computer program developed by the SCAQMD in conjunction with the California Air Resources Board (CARB). CalEEMod considers the following phases in its calculation of construction emissions; demolition, site preparation, grading, building construction, paving, and painting. Demolition quantities, construction quantities, the appropriate number of acres, and other key elements of the project were input

into the CalEEMod to generate the estimate of emissions. CalEEMod default values for the construction phases were used since construction phasing has not been established. Some parts of the FMPU may be completed by 2017 while other parts would not be completed until 2020 or 2025. Therefore, the entire FMPU (excluding PEP) was modeled using early years (e.g., 2018) since the emissions factors for heavy equipment decrease slightly for later years. It was also assumed that the overlap between construction phases would be minimal. Only mitigation required by the Mitigation Monitoring Program is assumed for this analysis. Specifically, only paints with a volatile organic content (VOC) of 75 grams per liter (g/l) will be used, and watering twice per day will be employed during grading to reduce particulate emissions. CalEEMod printouts are included in the Appendix.

Table 5 presents the results of the total emission calculations for the construction activities discussed above. The first lines of the table present the total emissions generated by the buildout and associated demolition of the FMPU (excluding PEP), then the emissions for PEP Phases 1 and 2, and finally the total emissions for everything combined. The following two lines in Table 5 average the total emissions over a 5 year and 10 year period assuming a 5-day workweek. The 5-year and 10 averaging periods loosely represent a best case and worst-case approach for construction on campus. A ten-year averaging period would extend past 2025, which is probably a realistic construction period for the FMPU. The 5-year average represents a much quicker rate of construction, and it is very unlikely that the FMPU would be built out within this time period. Finally, it needs to be emphasized that the construction emissions will vary for different phases of construction, and from project to project. For this reason specific projects are also assessed in the report; specifically Building G (see Section 2.2.1.2), Building A (see Section 2.2.1.3), PEP Phase 1 (see Section 2.3.1), and PEP Phase 2 (see Section 2.3.2).

Table 5 Construction Emissions for the 2015 FMPU

	ROG	NOx	CO	SOx	PM10	PM2.5
			Pollutant Emissions (lbs.)			
FMPU (Excluding PEP)	2,922	9,526	8,672	14	1,093	695
PEP Phase 1	12,130	23,763	32,064	63	4,438	1,942
PEP Phase 2	2,219	6,537	6,858	12	701	442
Total Construction	17,271	39,826	47,594	90	6,232	3,079
			Pollutant Emissions (lbs. per day)			
Average Over 5 Years	13.2	30.6	36.5	0.1	4.8	2.4
Average Over 10 Years	6.6	15.3	18.3	0.0	2.4	1.2
SCQAMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Exceed Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

The projected construction emissions shown in Table 5 are all well below the significance thresholds established by the SCAQMD. This indicates that the construction emissions will generally not impact the regional air quality and that additional global mitigation measures will not be needed outside of those already required by the Mitigation Monitoring Program. It should also be pointed out that the construction emissions generated during PEP Phase 1 are substantially higher than generated by the rest of the FMPU.

2.2.1.2 *Construction Emissions for Building G*

Construction of Building G, the Laboratory Building Expansion, will include construction of an approximately 50,000 gross square foot (gsf) building by 2020. The construction of Building G, and later the adjacent Building A, will require the demolition of Buildings 16, 17, 18, 19 and 21. It was assumed that all of these buildings would be demolished as part of the Building G construction.

Emissions during construction were calculated using the California Emissions Estimator Model (CalEEMod). The appropriate number of acres, square footage of demolition, square footage of Building G, and other key elements of the project were input into the CalEEMod to generate the estimate of emissions. It was also assumed that the overlap between construction phases would be minimal. Only mitigation required by the Mitigation Monitoring Program is assumed for this analysis. Specifically, only paints with a volatile organic content (VOC) of 75 grams per liter (g/l) will be used, and watering twice per day will be employed during grading. CalEEMod printouts are included in the Appendix.

Table 6 presents the results of the emissions calculations for the construction activities discussed above. The highest daily construction emissions are presented below and represent a worst-case scenario. The projected emissions are compared to the Significance Thresholds described in Section 2.1.2.

Table 6 Peak Construction Emissions for Building G

	Pollutant Emissions (Pounds Per Day)					
Activity	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Demolition	3.6	37.0	34.2	0.1	3.4	1.9
Site Preparation	4.1	42.6	35.6	0.0	10.5	6.5
Grading	2.8	28.4	24.1	0.0	4.7	3.0
Building Const.	2.5	21.6	18.9	0.0	1.6	1.3
Paving	1.4	13.8	15.0	0.0	0.9	0.7
Architectural Coating	19.6	1.7	2.0	0.0	0.2	0.1
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Exceed Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

The projected construction emissions are all well below the significance thresholds established by the SCAQMD for all phases of construction and all pollutants. The regional

impacts of the construction of Building G will be less than significant, and additional mitigation measures will not be required.

The localized impact of the project was also assessed using the SCAQMD's methodology. This analysis determines if there will be impact on adjacent residential area due to the construction of the project. The nearest off-site residential area is about 978 feet north of the construction and demolition area. The on-site emissions were calculated utilizing CalEEMod. The emissions presented in Table 7 are those that would be emitted from activity within the project site. The total on-site construction emissions are compared to the Localized Significance Thresholds (LSTs) described in Section 2.1.2. Specific thresholds were calculated for the distance associated with this site and size of site. Worksheets showing the emission calculations are presented in the appendix.

Table 7 On-Site Construction Emissions for Building G

	Daily Emissions (lbs./day)			
Activity	NOx	CO	PM10	PM2.5
Demolition	33.9	30.8	2.9	1.7
Site Preparation	42.5	34.8	10.3	6.4
Grading	28.4	23.4	4.5	2.9
Building Construction	21.0	17.1	1.3	1.2
Paving	13.8	14.4	0.7	0.7
Architectural Coating	1.7	1.8	0.1	0.1
LST Thresholds	*509*	*12,386*	*112*	*49*
Exceed Threshold?	*No*	*No*	*No*	*No*

None of the emissions will exceed the LST significance thresholds. Only watering twice per day during earth moving operations and use of low VOC paints has been assumed, and this is required by the Mitigation Monitoring Program. Therefore, the impact of demolition and construction for Building G on nearby off-site sensitive receptor areas will be less than significant.

2.2.1.3 *Construction Emissions for Building A*

Construction of Building A, the Library/Campus Center, will include construction of an approximately 167,200 gross square foot (gsf) building by 2025. Demolition will be required to clear the site for Building A, but this was assumed to occur during the construction of Building G.

Emissions during the phases of construction were calculated using the California Emissions Estimator Model (CalEEMod). The appropriate number of acres, square footage of Building A, and other key elements of the project were input into the CalEEMod to generate the estimate of emissions. It was also assumed that the overlap between construction phases

would be minimal. Only mitigation required by the Mitigation Monitoring Program is assumed for this analysis. Specifically, only paints with a volatile organic content (VOC) of 75 grams per liter (g/l) will be used, and watering twice per day will be employed during grading. CalEEMod printouts are included in the Appendix.

Table 8 presents the results of the emissions calculations for the construction activities discussed above. The highest daily construction emissions are presented below and represent a worst-case scenario. The projected emissions are compared to the Significance Thresholds described in Section 2.1.2.

Table 8 Peak Construction Emissions for Building A

	Pollutant Emissions (Pounds Per Day)					
Activity	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Demolition	1.4	12.4	16.1	0.0	0.7	0.5
Site Preparation	1.1	10.2	11.4	0.0	3.2	1.8
Grading	0.9	8.4	9.4	0.0	2.7	1.5
Building Const.	1.4	10.7	13.8	0.0	0.7	0.5
Paving	0.6	5.3	9.1	0.0	0.4	0.3
Architectural Coating	34.9	1.2	1.9	0.0	0.1	0.1
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Exceed Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

The projected construction emissions are all well below the significance thresholds established by the SCAQMD for all phases of construction and all pollutants. The regional impacts of the construction of Building A will be less than significant, and additional mitigation measures will not be required.

The localized impact of the project was also assessed using the SCAQMD's methodology. This analysis determines if there will be impact on adjacent residential area due to the construction of the project. The nearest off-site residential area is about 978 feet north of the construction/demolition area. The on-site emissions were calculated utilizing CalEEMod. The emissions presented in Table 9 are those that would be emitted from activity within the project site. The total on-site construction emissions are compared to the Localized Significance Thresholds (LSTs) described in Section 2.1.2. Worksheets showing the emission calculations are presented in the appendix.

Table 9 On-Site Construction Emissions for Building A

Activity	Daily Emissions (lbs./day) NOx	CO	PM10	PM2.5
Demolition	12.3	15.7	0.5	0.5
Site Preparation	10.1	11.2	3.1	1.8
Grading	8.3	9.2	2.6	1.5
Building Construction	10.4	12.4	0.4	0.4
Paving	5.3	8.7	0.2	0.2
Architectural Coating	1.1	1.8	0.1	0.1
LST Thresholds	*509*	*12,386*	*112*	*49*
Exceed Threshold?	*No*	*No*	*No*	*No*

None of the emissions will exceed the LST significance thresholds. Only watering twice per day during earth moving operations and use of low VOC paints has been assumed, and this is required by the Mitigation Monitoring Program. Therefore, the impact of the construction of Building A on nearby off-site sensitive receptor areas will be less than significant.

2.2.2 Operational Emissions

The realization of the 2015 FMPU will result in increases in student enrollment (headcount) as additional and newer facilities are brought online. By the academic year 2020-2021 the headcount is anticipated to increase 3,745 over baseline up to a total headcount of 39,731. By the academic year 2025-2026, the headcount is anticipated to increase to 43,139, which is an increase of 7,153 over baseline.

The CalEEMod was used to project the emissions for the 2020 and 2025 academic years. The results presented below are from the summer or winter emissions, whichever are the higher emissions. Output files from the CalEEMod program are presented in the appendix. Table 10 presents the results of the CalEEMod model showing the maximum daily air pollutant emissions projected for the existing, 2020, and 2025 academic years. The change between the existing (baseline) case and the future academic years are also shown. A negative number indicates a decrease in emissions, while a positive number indicates an increase over existing levels. The change in emissions is also compared to the SCAQMD thresholds in the table. The specific data utilized in calculating the emissions are provided in the appendix.

Table 10 Campus Emissions for Future Years (pounds per day)

	ROG	NOx	CO	SOx	PM10	PM2.5
Existing	221.4	507.2	1,932	4.0	284.4	81.2
Year 2020	186.2	384.6	1,485	4.4	312.6	88.3
Change	-35.2	-122.6	-447	0.4	28.2	7.0
Year 2025	176.8	299.3	1,315	4.9	339.7	95.9
Change	-44.6	-207.9	-617	0.9	55.2	14.7
SCAQMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Thresholds for 2020	*No*	*No*	*No*	*No*	*No*	*No*
Exceed Thresholds for 2025	*No*	*No*	*No*	*No*	*No*	*No*

The analysis indicates that the emissions of ROG, NOx, and CO will decrease in future years even though the headcount will increase. The vehicular emission rates will continue to decrease in future for these emissions, and will more than offset the increase in headcount. Emissions of SOx, PM10, and PM2.5 will increase slightly in future years. Again the emission rates for these pollutants will go down in future years, offsetting a portion of the increase in emissions caused by increasing headcount. Most importantly, all emission changes are less than the SCAQMD thresholds, and no impact on regional air quality is projected.

2.2.3 Local Air Quality at Intersections

To assess local air quality impacts, the peak hour traffic are related to the Ambient Air Quality Standards, which are the significance threshold for this type of impact. Because the area is in attainment of the CO state standards, exceedances of these standards, 20 ppm for 1-hour carbon monoxide (CO) concentration levels and 9 ppm for 8-hour CO concentration levels, would result in a significant local air quality impact. The air basin has reached attainment of the CO air quality standards and CO analysis is generally no longer required by the SCAQMD.

CO modeling was originally performed at four intersections considered to be the worst-case intersections in the South Coast Air Basin as part of the 2003 AQMP to demonstrate attainment of the federal CO standards. This CO modeling is included in the EPA approved 2005 SCAB CO Redesignation Request. The four intersections included, Wilshire at Veteran, Sunset at Highland, La Cienega at Century, and Long Beach at Imperial. The highest peak a.m. traffic volume was 8,062 (occurred at Wilshire and Veteran), while the highest peak p.m. volume was 8,674 (occurred at La Cienega and Century). Table 4-10 of Appendix V, Section

4 of the 2005 SCAB CO Redesignation Request shows that the modeled 1-hour average concentrations at these four intersections for 2002 conditions are below the 8-hour standard of 9 ppm. The highest modeled 1-hour average concentration of 4.6 ppm took place at the Wilshire and Veteran intersection, and is well below the State standard of 20 ppm and the Federal standard of 35 ppm.

Traffic data prepared for the project (Iteris, January 2016) provides intersection volumes for the existing case, 2020 plus project, and 2025 plus project. The total intersection volumes are provided in Table 11. The data indicate that all of the intersections will be well below the intersection volumes used for the Redesignation Request. The highest intersection volume will be 7,102 vehicles per hour, which is below the highest peak p.m. volume of 8,674. Therefore, the impact on air pollution at intersections will be less than significant.

Table 11 Intersection Volumes (Vehicles Per Hour)

	Existing		2020 + Project		2025 + Project	
Intersection	**A.M.**	**P.M.**	**A.M.**	**P.M.**	**A.M.**	**P.M.**
Nogales St/Amar Rd	3,487	3,498	3,509	3,520	3,529	3,541
Lemon Ave/Amar Rd	2,684	2,667	2,731	2,714	2,774	2,757
Grand Ave/I-10 WB Ramp	2,940	3,167	2,989	3,215	3,032	3,258
Grand Ave/I-10 EB Ramp	2,946	2,781	3,031	2,866	3,109	2,945
Grand Ave/Cameron Ave	3,617	3,072	3,722	3,176	3,817	3,272
Grand Ave/Mountaineer Rd	4,036	3,353	4,204	3,522	4,357	3,675
Grand Ave/San Jose Hills Rd	4,289	3,542	4,368	3,622	4,441	3,694
Grand Ave/Temple Ave	5,759	5,701	5,929	5,871	6,085	6,027
Grand Ave/La Puente Rd	4,443	4,167	4,550	4,274	4,648	4,373
Grand Ave/Valley Blvd	6,052	6,974	6,119	7,041	6,182	7,102
Grand Ave/Baker Pkwy	3,553	3,180	3,584	3,211	3,613	3,240
Grand Ave/SR-60 EB Ramps	3,982	3,772	4,013	3,803	4,042	3,832
Grand Ave/SR-60 WB Ramps	3,618	3,571	3,646	3,596	3,672	3,620
Mt. SAC Wy/Temple Ave	2,747	2,963	2,912	3,129	3,065	3,281
Bonita Ave/Temple Ave	2,958	2,766	3,167	2,975	3,360	3,164
Lot F/Temple Ave	2,580	2,325	2,742	2,487	2,888	2,634
Valley Blvd/Temple Ave	3,671	4,160	3,824	4,313	3,962	4,452
SR-57 SB Ramps/Temple Ave	3,180	4,133	3,289	4,241	3,386	4,339
SR-57 NB Ramps/Temple Ave	3,340	4,099	3,403	4,162	3,461	4,219

2.2.4 Local Air Quality During Olympic Trials

The same approach was used to assess the local air quality next to intersections during the proposed Olympic Field Trials as was used above in Section 2.2.3 for campus buildout. The Olympic Trials represent the highest level of traffic that is projected to occur with the buildout of the campus.

The highest peak p.m. volume of 8,674 should not be exceeded to insure that CO concentrations around intersections are well below the State standard of 20 ppm and the Federal standard of 35 ppm. The Olympic Trials will have a minimal effect on a.m. peak hour traffic, and therefore, only the p.m. peak is examined.

Traffic data prepared for the Olympic Trials (Iteris, April 2016) provides intersection volumes for 2020 Plan A and Plan B. Plan A and Plan B differ by how much guests are accommodated on-campus (refer to Traffic Assessment for more information). The total intersection volumes are provided in Table 12. The data indicate that all of the intersections will be below the critical intersection volume of 8,674 used for the Redesignation Request. The highest intersection volume will be 8,626 vehicles per hour, which is below the critical p.m. volume of 8,674. Therefore, the impact on air pollution at intersections will be less than significant. Intersection volumes will be slightly higher for Plan A than for Plan B, and air pollutant levels would parallel the traffic volumes.

Table 12 Intersection Volumes for Olympic Field Trials (Vehicles Per Hour)

Intersection	Plan A P.M. Peak	Plan B P.M. Peak
Nogales St/Amar Rd	3,498	3,498
Lemon Ave/Amar Rd	2,667	2,667
Grand Ave/I-10 WB Ramp	4,664	4,025
Grand Ave/I-10 EB Ramp	4,283	3,644
Grand Ave/Cameron Ave	4,574	3,935
Grand Ave/Mountaineer Rd	5,083	4,488
Grand Ave/San Jose Hills Rd	4,724	4,210
Grand Ave/Temple Ave	8,157	7,244
Grand Ave/La Puente Rd	5,669	5,536
Grand Ave/Valley Blvd	8,626	8,344
Grand Ave/Baker Pkwy	4,824	4,542
Grand Ave/SR-60 EB Ramps	5,419	5,137
Grand Ave/SR-60 WB Ramps	4,074	3,971
Mt. SAC Wy/Temple Ave	5,441	4,234
Bonita Ave/Temple Ave	6,057	4,920
Lot F/Temple Ave	4,858	3,851
Valley Blvd/Temple Ave	7,470	6,033
SR-57 SB Ramps/Temple Ave	7,793	6,006
SR-57 NB Ramps/Temple Ave	6,352	5,035

2.2.5 Compliance with Air Quality Planning

The following section deals with the major air planning requirements for this project. Specifically, consistency of the project with the AQMP is addressed. As discussed below, consistency with the AQMP is a requirement of the California Environmental Quality Act (CEQA).

An air quality assessment must discuss any inconsistencies between the proposed project and applicable General Plans and regional plans (California Environmental Quality Act (CEQA) guidelines (Section 15125)). Regional plans that apply to the proposed project include the South Coast Air Quality Management Plan (AQMP). In this regard, this section will discuss any inconsistencies between the proposed project and the AQMP.

The purpose of the consistency discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-maker determines that the project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD's CEQA Handbook states "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the plan if it furthers one or more policies and does not obstruct other policies. The Handbook identifies two key indicators of consistency:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP (except as provided for CO in Section 9.4 for relocating CO hot spots).

(2) Whether the project will exceed the assumptions in the AQMP in 2010 or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criterion 1 - Increase in the Frequency or Severity of Violations?

Based on the air quality modeling analysis contained in this report, with mitigation there will not be significant short-term construction impacts based on the SCAQMD localized significance thresholds. Therefore, short-term construction activities will not increase the frequency or severity of existing air quality violations. Additionally, mitigation measures are proposed for construction that will bring the level of emissions under the significance thresholds.

The proposed project will increase regional emissions, but will increase (and decrease) regional emissions by an amount less than the SCAQMD regional thresholds (Refer to Section 2.2.2). Because the project is not projected to impact the local air quality or the regional air quality, the project is found to be consistent with the AQMP for the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the project with the assumptions in the AQMP. Thus, the emphasis of this criterion is to insure that the analyses conducted for the project are based on the same forecasts as the AQMP. The Regional Comprehensive Plan and Guide (RCP&G) consist of three sections: Core Chapters, Ancillary Chapters, and Bridge Chapters. The Growth Management, Regional Mobility, Air Quality, Water Quality, and Hazardous Waste Management chapters constitute the Core Chapters of the document. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA.

Since the SCAG forecasts are not detailed, the test for consistency of this project is not specific. The AQMP assumptions are based upon projections from local general plans. Projects that are consistent with the local general plan are consistent with the AQMP assumptions. The emission projections for the project (Section 2.2.2) show that the project will increase emissions significantly, and therefore, do not represent a significant increase in activities levels for the campus. Therefore, the second criterion is met for consistency with the AQMP.

2.3 Physical Education Projects (PEP)

Temporary impacts can result from project construction activities. Air pollutants are emitted by construction equipment and fugitive dust is generated during grading and construction. Construction of PEP will occur in two phases. The first phase roughly start in October 2016 and end in August 2018. The second phase of construction would occur from roughly February 2018 and be complete by August 2020. Both phases are assessed below.

2.3.1 Phase 1 Construction Emissions

Phase 1 will include demolition of the existing stadium, construction of a new stadium, a new Field House, installation of several practice fields and other improvements. The plan for the PEP area at the end of Phase 1 is shown in Exhibit 4. Emissions during the phases of construction were calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a computer program developed by the SCAQMD in conjunction with the California Air Resources Board (CARB). The model calculates emissions for construction and operation of various projects. For on-road vehicular emissions, the CalEEMod model utilizes the EMFAC2007 emission rates that have also been developed by CARB.

Exhibit 4 - PEP Phase 1

G&A

CalEEMod considers the following phases in its calculation of construction emissions; demolition, site preparation, grading, building construction, paving, and painting. Demolition quantities and approximate scheduling were provided by Tilden-Coil in conjunction with the College. The appropriate number of acres, duration of each construction phase, and other key elements of the project were input into the CalEEMod to generate the estimate of emissions. It was also assumed that the overlap between construction phases would be minimal. Only mitigation required by the Mitigation Monitoring Program is assumed for this analysis. Specifically, only paints with a volatile organic content (VOC) of 75 grams per liter (g/l) will be used, and watering twice per day will be employed during grading. CalEEMod printouts are included in the Appendix.

Table 13 presents the results of the total emissions calculations for the construction activities discussed above. The highest construction emissions are presented below and represent a worst-case scenario. No mitigation is included in the emissions presented below. The projected emissions are compared to the Significance Thresholds described in Section 2.1.2. The CalEEMod printouts are included in the Appendix.

Table 13 Peak Construction Emissions for PEP Phase 1

	Pollutant Emissions (Pounds Per Day)					
Activity	**ROG**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Demolition	5.0	55.7	43.7	0.1	6.6	3.0
Site Preparation	5.2	54.7	42.2	0.0	11.3	7.2
Grading	11.2	***147.2***	106.9	0.3	32.6	11.9
Building Const.	7.3	49.1	76.9	0.2	10.3	4.2
Paving	1.8	17.2	15.2	0.0	1.1	0.9
Architectural Coating	10.3	2.6	7.6	0.0	1.5	0.5
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Exceed Threshold?	*No*	***Yes***	*No*	*No*	*No*	*No*

The projected construction emissions are all well below the significance thresholds established by the SCAQMD, except for NOx emissions during the grading phase. The exceedance is caused by a combination on off-road heavy equipment (e.g., graders) and haul trucks exporting 81,429 cubic yards of fill. Mitigation measures for PEP Phase 1 construction will be needed to reduce NOx emissions and are presented in Section 3.2.

The localized impact of the project was also assessed using the SCAQMD's methodology. This analysis determines if there will be impact on adjacent residential area due to the construction of the project. The nearest off-site residential area is about 900 feet south of the main area of construction. The on-site emissions were calculated utilizing CalEEMod. The emissions presented in Table 14 are those that would be emitted from activity within the project site. The total on-site construction emissions are compared to the Localized

Significance Thresholds (LSTs) described in Section 2.1.2. Worksheets showing the emission calculations are presented in the appendix.

Table 14 On-Site Emissions By Construction Activity for PEP Phase 1

Activity	Daily Emissions (lbs./day) NOx	CO	PM10	PM2.5
Demolition	45.7	35.0	5.7	2.7
Site Preparation	54.6	41.1	11.1	7.2
Grading	74.8	49.1	7.7	4.9
Building Construction	26.4	18.1	1.8	1.7
Paving	17.2	14.5	0.9	0.9
Architectural Coating	2.0	1.9	0.2	0.2
LST Thresholds	*489*	*11,084*	*105*	*44*
Exceed Threshold?	*No*	*No*	*No*	*No*

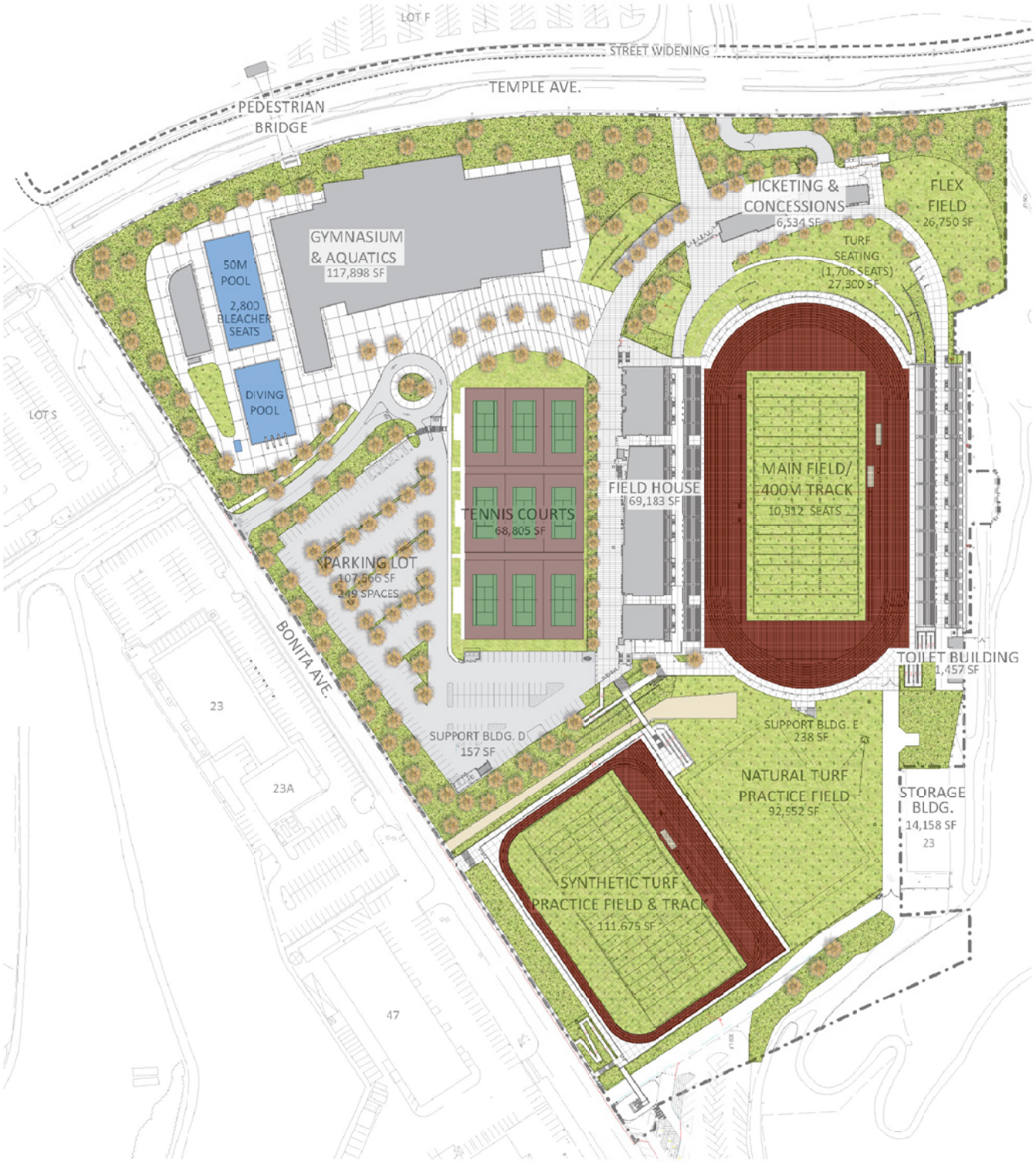
None of the emissions will exceed the LST significance thresholds. Only watering twice per day during earth moving operations has been assumed, and this is required by the Mitigation Monitoring Program. Therefore, the impact of construction of Phase 1 on nearby off-site sensitive receptor areas will be less than significant.

2.3.2 Phase 2 Construction Emissions

Phase 2 will include the construction of a gymnasium and aquatic center, 50-meter pool, diving pool, and nine tennis courts. The plan PEP Phase 2 is shown in Exhibit 5. Emissions during the phases of construction were calculated using the California Emissions Estimator Model (CalEEMod) similar to the approach used to model Phase 1. Key elements of the project were input into the CalEEMod to generate the estimate of emissions. It was also assumed that the overlap between construction phases would be minimal. Only mitigation required by the Mitigation Monitoring Program is assumed for this analysis. Specifically, only paints with a volatile organic content (VOC) of 75 grams per liter (g/l) will be used, and watering twice per day will be employed during grading. CalEEMod printouts are included in the Appendix.

Table 15 presents the results of the total emissions calculations for the construction activities discussed above. The highest daily construction emissions are presented below and represent a worst-case scenario. No mitigation is included in the emissions presented below. The projected emissions are compared to the Significance Thresholds described in Section 2.1.2. The CalEEMod printouts are included in the Appendix.

Exhibit 5 - PEP Phase 2



G&A

Table 15 Peak Construction Emissions for PEP Phase 2

Activity	Pollutant Emissions (Pounds Per Day) ROG	NOx	CO	SOx	PM10	PM2.5
Demolition	7.0	80.9	80.8	0.2	31.1	7.2
Site Preparation	4.4	45.7	37.1	0.0	10.7	6.7
Grading	3.1	31.1	24.7	0.0	4.8	3.1
Building Const.	3.2	26.2	25.5	0.0	2.7	1.8
Paving	1.2	11.7	12.9	0.0	0.9	0.7
Architectural Coating	9.9	1.8	2.6	0.0	0.3	0.2
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Exceed Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

The projected construction emissions are all well below the significance thresholds established by the SCAQMD. Mitigation measures will not be needed for PEP Phase 2 construction.

The localized impact of the project was also assessed using the SCAQMD's methodology. This analysis determines if there will be impact on adjacent residential area due to the construction of the project. The nearest off-site residential area is about 900 feet south of the main area of construction. The on-site emissions were calculated utilizing CalEEMod. The emissions presented in Table 16 are those that would be emitted from activity within the project site. The total on-site construction emissions are compared to the Localized Significance Thresholds (LSTs) described in Section 2.1.2. Worksheets showing the emission calculations are presented in the appendix.

Table 16 On-Site Emissions By Construction Activity for PEP Phase 2

Activity	Daily Emissions (lbs./day) NOx	CO	PM10	PM2.5
Demolition	31.0	29.6	25.6	5.0
Site Preparation	45.6	36.2	10.5	6.6
Grading	31.1	24.0	4.7	3.1
Building Construction	23.3	17.5	1.5	1.4
Paving	11.6	12.1	0.6	0.6
Architectural Coating	1.7	1.8	0.1	0.1
LST Thresholds	*489*	*11,084*	*105*	*44*
Exceed Threshold?	*No*	*No*	*No*	*No*

None of the emissions will exceed the LST significance thresholds. Only watering twice per day during earth moving operations has been assumed, and this is required by the Mitigation Monitoring Program. Therefore, the impact of construction of Phase 2 on nearby off-site sensitive receptor areas will be less than significant.

2.3.3 Diesel Particulate Matter Emissions During Construction

In 1998, the California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines (Diesel Particulate Matter or DPM) as a Toxic Air Contaminant (TAC). It is assumed that the majority of the heavy construction equipment utilized during construction would be diesel fueled and emit DPM.

Impacts from toxic substances are related to cumulative exposure and are assessed over a 70-year period. Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year lifetime (California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Guide to Health Risk Assessment.) Grading for the PEP Phase 1 and Phase 2, when the peak diesel exhaust emissions would occur, is expected to take less than 6 months total with all construction expected to be completed in less than 4 years. Because of the relatively short duration of construction compared to a 70-year lifespan, diesel emissions resulting from the construction of the project, including truck traffic associated with the project, are not expected to result in a significant impact.

2.4 Cumulative Impacts

To assess the cumulative local air quality impacts, the cumulative peak hour traffic is related to the Ambient Air Quality Standards, which are the significance threshold for this type of impact. Because the area is in attainment of the CO state standards, exceedances of these standards, 20 ppm for 1-hour carbon monoxide (CO) concentration levels and 9 ppm for 8-hour CO concentration levels, would result in a significant local air quality impact. The air basin has reached attainment of the CO air quality standards and CO analysis is generally no longer required by the SCAQMD.

CO modeling was originally performed at four intersections considered to be the worst-case intersections in the South Coast Air Basin as part of the 2003 AQMP to demonstrate attainment of the federal CO standards. This CO modeling is included in the EPA approved 2005 SCAB CO Redesignation Request. The four intersections included, Wilshire at Veteran, Sunset at Highland, La Cienega at Century, and Long Beach at Imperial. The highest peak a.m. traffic volume was 8,062 (occurred at Wilshire and Veteran), while the highest peak p.m. volume was 8,674 (occurred at La Cienega and Century). Table 4-10 of Appendix V, Section 4 of the 2005 SCAB CO Redesignation Request shows that the modeled 1-hour average concentrations at these four intersections for 2002 conditions are below the 8-hour standard of 9 ppm. The highest modeled 1-hour average concentration of 4.6 ppm took place at the Wilshire and Veteran intersection, and is well below the State standard of 20 ppm and the Federal standard of 35 ppm.

Traffic data prepared for the project (Iteris, April 2016) provides intersection volumes for 2020 for existing plus cumulative plus project, and 2025 for existing plus cumulative plus project. The total intersection volumes are provided in Table 17. The data indicate that all of the intersections will be well below the intersection volumes used for the Redesignation Request. The highest intersection volume will be 7,805 vehicles per hour, which is below the highest peak p.m. volume of 8,674. Therefore, the cumulative impact on air pollution at intersections will be less than significant.

Table 17 Cumulative Plus Project Intersection Volumes (Vehicles Per Hour)

	2020		2025	
Intersection	**A.M.**	**P.M.**	**A.M.**	**P.M.**
Nogales St/Amar Rd	3,609	3,624	3,827	3,727
Lemon Ave/Amar Rd	2,820	2,810	3,059	2,935
Grand Ave/I-10 WB Ramp	3,047	3,298	3,112	3,440
Grand Ave/I-10 EB Ramp	3,145	2,983	3,334	3,209
Grand Ave/Cameron Ave	3,836	3,294	4,042	3,536
Grand Ave/Mountaineer Rd	4,318	3,640	4,582	3,939
Grand Ave/San Jose Hills Rd	4,482	3,740	4,666	3,958
Grand Ave/Temple Ave	6,137	6,092	6,600	6,476
Grand Ave/La Puente Rd	4,671	4,401	4,881	4,647
Grand Ave/Valley Blvd	6,387	7,323	6,900	7,805
Grand Ave/Baker Pkwy	3,717	3,349	4,849	4,725
Grand Ave/SR-60 EB Ramps	4,145	3,944	5,026	4,977
Grand Ave/SR-60 WB Ramps	3,758	3,687	4,334	4,235
Mt. SAC Wy/Temple Ave	3,004	3,229	3,355	3,462
Bonita Ave/Temple Ave	3,259	3,075	3,650	3,345
Lot F/Temple Ave	2,834	2,587	3,178	2,815
Valley Blvd/Temple Ave	4,237	4,733	5,503	5,475
SR-57 SB Ramps/Temple Ave	3,797	4,572	4,486	4,915
SR-57 NB Ramps/Temple Ave	3,995	4,836	4,348	5,015

3.0 MITIGATION MEASURES

3.1 Mitigation Monitoring Program

Two measures from the Mitigation Monitoring Program have been included in the analysis of potential impacts for the proposed project. Specifically, only paints with a volatile organic content (VOC) of 75 grams per liter (g/l) will be used, and watering twice per day will be employed during grading to reduce particulate emissions. These measures need to be applied to the proposed project.

3.2 Short-Term Impacts

NOx emissions were projected to be above the regional threshold of 100 pounds per day during the grading phase of construction for the PEP Phase 1. No other construction activities were projected to exceed thresholds and therefore, this mitigation only applies to the grading phase of PEP Phase 1. The mitigation measure provided below brings the emissions to below the NOx threshold.

Mitigation Measure AQ-1: Require all off-road diesel-powered construction equipment greater than 50 hp (e.g., excavators, graders, dozers, scrappers, tractors, loaders, etc.) to comply with EPA-Certified Tier IV emission controls where available. This will reduce the projected NOx emissions to 75.7 pounds per day (CalEEMod printout included in the Appendix). It should be noted that this measure is consistent with Measure 3f of the 2013 Mitigation Monitoring Program.

3.3 Long-Term Impacts

No long-term regional impacts are projected and therefore, mitigation measures are not necessary for operational emissions.

4.0 UNAVOIDABLE SIGNIFICANT IMPACTS

4.1 Short-Term Impacts

The analysis demonstrates that the project with mitigation will result in a less than significant air quality impact.

4.2 Long-Term Impacts

The analysis demonstrates that the project will in a less than significant air quality impact.

In summary, there will be no unavoidable adverse air quality impacts.

5.0 APPENDIX

Mt. SAC FMPU - Existing

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	35,986.00	Student	420.00	1,570,869.41	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2015
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Headcount data from Iteris.
Lot acreage from Project Description

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	36.06	420.00
tblProjectCharacteristics	OperationalYear	2014	2015

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Area	41.4529	0.0368	3.8005	2.7000e-004		0.0138	0.0138		0.0138	0.0138		7.8756	7.8756	0.0228		8.3545
Energy	1.3214	12.0125	10.0905	0.0721		0.9130	0.9130		0.9130	0.9130		14,415.0369	14,415.0369	0.2763	0.2643	14,502.7645
Mobile	178.5957	495.1502	1,917.6748	3.9219	276.4876	6.9977	283.4853	73.8641	6.4291	80.2932		354,568.1900	354,568.1900	15.6670		354,897.1961
Total	**221.3700**	**507.1995**	**1,931.5659**	**3.9943**	**276.4876**	**7.9244**	**284.4120**	**73.8641**	**7.3558**	**81.2199**		**368,991.1026**	**368,991.1026**	**15.9660**	**0.2643**	**369,408.3150**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Area	41.4529	0.0368	3.8005	2.7000e-004		0.0138	0.0138		0.0138	0.0138		7.8756	7.8756	0.0228		8.3545
Energy	1.3214	12.0125	10.0905	0.0721		0.9130	0.9130		0.9130	0.9130		14,415.0369	14,415.0369	0.2763	0.2643	14,502.7645
Mobile	178.5957	495.1502	1,917.6748	3.9219	276.4876	6.9977	283.4853	73.8641	6.4291	80.2932		354,568.1900	354,568.1900	15.6670		354,897.1961
Total	**221.3700**	**507.1995**	**1,931.5659**	**3.9943**	**276.4876**	**7.9244**	**284.4120**	**73.8641**	**7.3558**	**81.2199**		**368,991.1026**	**368,991.1026**	**15.9660**	**0.2643**	**369,408.3150**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	178.5957	495.1502	1,917.6748	3.9219	276.4876	6.9977	283.4853	73.8641	6.4291	80.2932		354,568.1900	354,568.1900	15.6670		354,897.1961
Unmitigated	178.5957	495.1502	1,917.6748	3.9219	276.4876	6.9977	283.4853	73.8641	6.4291	80.2932		354,568.1900	354,568.1900	15.6670		354,897.1961

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	43,183.20	15,114.12	1439.44	100,305,908	100,305,908
Total	43,183.20	15,114.12	1,439.44	100,305,908	100,305,908

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.514499	0.060499	0.179997	0.139763	0.042095	0.006675	0.015446	0.029572	0.001914	0.002508	0.004341	0.000594	0.002098

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.3214	12.0125	10.0905	0.0721		0.9130	0.9130		0.9130	0.9130		14,415.0369	14,415.0369	0.2763	0.2643	14,502.7645
NaturalGas Unmitigated	1.3214	12.0125	10.0905	0.0721		0.9130	0.9130		0.9130	0.9130		14,415.0369	14,415.0369	0.2763	0.2643	14,502.7645

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					
Junior College (2Yr)	122528	1.3214	12.0125	10.0905	0.0721		0.9130	0.9130		0.9130	0.9130		14,415.0369	14,415.0369	0.2763	0.2643	14,502.7645
Total		**1.3214**	**12.0125**	**10.0905**	**0.0721**		**0.9130**	**0.9130**		**0.9130**	**0.9130**		**14,415.0369**	**14,415.0369**	**0.2763**	**0.2643**	**14,502.7645**

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					
Junior College (2Yr)	122.528	1.3214	12.0125	10.0905	0.0721		0.9130	0.9130		0.9130	0.9130		14,415.0369	14,415.0369	0.2763	0.2643	14,502.7645
Total		**1.3214**	**12.0125**	**10.0905**	**0.0721**		**0.9130**	**0.9130**		**0.9130**	**0.9130**		**14,415.0369**	**14,415.0369**	**0.2763**	**0.2643**	**14,502.7645**

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	41.4529	0.0368	3.8005	2.7000e-004		0.0138	0.0138		0.0138	0.0138		7.8756	7.8756	0.0228		8.3545
Unmitigated	41.4529	0.0368	3.8005	2.7000e-004		0.0138	0.0138		0.0138	0.0138		7.8756	7.8756	0.0228		8.3545

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	9.9740					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	31.1032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.3757	0.0368	3.8005	2.7000e-004		0.0138	0.0138		0.0138	0.0138		7.8756	7.8756	0.0228		8.3545
Total	**41.4529**	**0.0368**	**3.8005**	**2.7000e-004**		**0.0138**	**0.0138**		**0.0138**	**0.0138**		**7.8756**	**7.8756**	**0.0228**		**8.3545**

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	9.9740					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	31.1032					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.3757	0.0368	3.8005	2.7000e-004		0.0138	0.0138		0.0138	0.0138		7.8756	7.8756	0.0228		8.3545
Total	**41.4529**	**0.0368**	**3.8005**	**2.7000e-004**		**0.0138**	**0.0138**		**0.0138**	**0.0138**		**7.8756**	**7.8756**	**0.0228**		**8.3545**

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 Vegetation

Construction emission data removed because it was not relevant to the analysis.

MtSAC FMPU Buildout Including Demolition & Excluding PEP

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	259.02	1000sqft	5.95	259,018.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Demolition -

Architectural Coating - Maximum VOC is 75 g/l per Mitigation Monitoring Program

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	75.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	75.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	75.00
tblProjectCharacteristics	OperationalYear	2014	2025

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					
2017	4.9070	51.8466	40.3687	0.0576	18.2675	2.7558	21.0233	9.9840	2.5354	12.5194	0.0000	5,754.2657	5,754.2657	1.2367	0.0000	5,780.2359
2018	90.4154	26.8746	27.4308	0.0503	1.4809	1.5545	3.0354	0.3979	1.4602	1.8581	0.0000	4,614.0008	4,614.0008	0.7068	0.0000	4,628.8441
Total	**95.3225**	**78.7212**	**67.7994**	**0.1079**	**19.7484**	**4.3103**	**24.0587**	**10.3819**	**3.9956**	**14.3775**	**0.0000**	**10,368.2665**	**10,368.2665**	**1.9435**	**0.0000**	**10,409.0799**

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					
2017	4.9070	51.8466	40.3687	0.0576	8.3310	2.7558	11.0869	4.5222	2.5354	7.0575	0.0000	5,754.2657	5,754.2657	1.2367	0.0000	5,780.2359
2018	90.4154	26.8746	27.4308	0.0503	1.4809	1.5545	3.0354	0.3979	1.4602	1.8581	0.0000	4,614.0008	4,614.0008	0.7068	0.0000	4,628.8441
Total	**95.3225**	**78.7212**	**67.7994**	**0.1079**	**9.8120**	**4.3103**	**14.1223**	**4.9201**	**3.9956**	**8.9157**	**0.0000**	**10,368.2665**	**10,368.2665**	**1.9435**	**0.0000**	**10,409.0799**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**50.32**	**0.00**	**41.30**	**52.61**	**0.00**	**37.99**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/10/2017	5	10	
3	Grading	Grading	2/11/2017	3/10/2017	5	20	
4	Building Construction	Building Construction	3/11/2017	1/26/2018	5	230	
5	Paving	Paving	1/27/2018	2/23/2018	5	20	
6	Architectural Coating	Architectural Coating	2/24/2018	3/23/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 388,527; Non-Residential Outdoor: 129,509 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42

Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	427.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	109.00	42.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	22.00	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 Demolition - 2017

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					4.6213	0.0000	4.6213	0.6997	0.0000	0.6997			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**4.6213**	**2.1252**	**6.7465**	**0.6997**	**1.9797**	**2.6794**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

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	0.3631	5.5585	4.5802	0.0157	0.3721	0.0851	0.4572	0.1019	0.0783	0.1802		1,556.8692	1,556.8692	0.0112		1,557.1043
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	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.4205**	**5.6361**	**5.3899**	**0.0177**	**0.5397**	**0.0865**	**0.6262**	**0.1464**	**0.0795**	**0.2259**		**1,717.7984**	**1,717.7984**	**0.0196**		**1,718.2108**

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					2.0796	0.0000	2.0796	0.3149	0.0000	0.3149			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**2.0796**	**2.1252**	**4.2048**	**0.3149**	**1.9797**	**2.2946**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

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	0.3631	5.5585	4.5802	0.0157	0.3721	0.0851	0.4572	0.1019	0.0783	0.1802		1,556.8692	1,556.8692	0.0112		1,557.1043

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	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.4205**	**5.6361**	**5.3899**	**0.0177**	**0.5397**	**0.0865**	**0.6262**	**0.1464**	**0.0795**	**0.2259**		**1,717.7984**	**1,717.7984**	**0.0196**		**1,718.2108**

3.3 Site Preparation - 2017

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339		4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**18.0663**	**2.7542**	**20.8205**	**9.9307**	**2.5339**	**12.4646**		**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.8382	51.7535	39.3970	0.0391		2.7542	2.7542		2.5339	2.5339	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432
Total	**4.8382**	**51.7535**	**39.3970**	**0.0391**	**8.1298**	**2.7542**	**10.8840**	**4.4688**	**2.5339**	**7.0027**	**0.0000**	**4,003.0859**	**4,003.0859**	**1.2265**		**4,028.8432**

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	0.0688	0.0931	0.9716	2.3900e-003	0.2012	1.6200e-003	0.2028	0.0534	1.4900e-003	0.0549		193.1150	193.1150	0.0101		193.3278
Total	**0.0688**	**0.0931**	**0.9716**	**2.3900e-003**	**0.2012**	**1.6200e-003**	**0.2028**	**0.0534**	**1.4900e-003**	**0.0549**		**193.1150**	**193.1150**	**0.0101**		**193.3278**

3.4 Grading - 2017

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000

Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757		3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**6.5523**	**2.0388**	**8.5912**	**3.3675**	**1.8757**	**5.2432**		**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

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	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.0574**	**0.0776**	**0.8097**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9291**	**160.9291**	**8.4500e-003**		**161.1065**

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	3.4555	35.9825	25.3812	0.0297		2.0388	2.0388		1.8757	1.8757	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507
Total	**3.4555**	**35.9825**	**25.3812**	**0.0297**	**2.9486**	**2.0388**	**4.9874**	**1.5154**	**1.8757**	**3.3911**	**0.0000**	**3,043.6667**	**3,043.6667**	**0.9326**		**3,063.2507**

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	0.0574	0.0776	0.8097	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9291	160.9291	8.4500e-003		161.1065
Total	**0.0574**	**0.0776**	**0.8097**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9291**	**160.9291**	**8.4500e-003**		**161.1065**

3.5 Building Construction - 2017

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

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	0.3501	3.3819	4.7669	9.0600e-003	0.2626	0.0538	0.3164	0.0748	0.0495	0.1243		893.3155	893.3155	6.5100e-003		893.4523
Worker	0.4168	0.5640	5.8838	0.0145	1.2184	9.8000e-003	1.2282	0.3231	9.0400e-003	0.3322		1,169.4183	1,169.4183	0.0614		1,170.7073
Total	**0.7669**	**3.9460**	**10.6507**	**0.0235**	**1.4809**	**0.0636**	**1.5445**	**0.3979**	**0.0585**	**0.4564**		**2,062.7338**	**2,062.7338**	**0.0679**		**2,064.1596**

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

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	0.3501	3.3819	4.7669	9.0600e-003	0.2626	0.0538	0.3164	0.0748	0.0495	0.1243		893.3155	893.3155	6.5100e-003		893.4523
Worker	0.4168	0.5640	5.8838	0.0145	1.2184	9.8000e-003	1.2282	0.3231	9.0400e-003	0.3322		1,169.4183	1,169.4183	0.0614		1,170.7073
Total	**0.7669**	**3.9460**	**10.6507**	**0.0235**	**1.4809**	**0.0636**	**1.5445**	**0.3979**	**0.0585**	**0.4564**		**2,062.7338**	**2,062.7338**	**0.0679**		**2,064.1596**

3.5 Building Construction - 2018

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

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	0.3272	3.1023	4.5742	9.0500e-003	0.2626	0.0507	0.3133	0.0748	0.0466	0.1214		878.3094	878.3094	6.4800e-003		878.4454
Worker	0.3749	0.5115	5.3239	0.0145	1.2184	9.5400e-003	1.2279	0.3231	8.8200e-003	0.3319		1,125.7525	1,125.7525	0.0570		1,126.9488
Total	**0.7020**	**3.6138**	**9.8981**	**0.0235**	**1.4809**	**0.0602**	**1.5412**	**0.3979**	**0.0554**	**0.4534**		**2,004.0619**	**2,004.0619**	**0.0635**		**2,005.3942**

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517

Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

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	0.3272	3.1023	4.5742	9.0500e-003	0.2626	0.0507	0.3133	0.0748	0.0466	0.1214		878.3094	878.3094	6.4800e-003		878.4454
Worker	0.3749	0.5115	5.3239	0.0145	1.2184	9.5400e-003	1.2279	0.3231	8.8200e-003	0.3319		1,125.7525	1,125.7525	0.0570		1,126.9488
Total	**0.7020**	**3.6138**	**9.8981**	**0.0235**	**1.4809**	**0.0602**	**1.5412**	**0.3979**	**0.0554**	**0.4534**		**2,004.0619**	**2,004.0619**	**0.0635**		**2,005.3942**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6114**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6114**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.7 Architectural Coating - 2018

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	90.0411					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**90.3398**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.0757	0.1032	1.0746	2.9200e-003	0.2459	1.9200e-003	0.2478	0.0652	1.7800e-003	0.0670		227.2161	227.2161	0.0115		227.4576
Total	**0.0757**	**0.1032**	**1.0746**	**2.9200e-003**	**0.2459**	**1.9200e-003**	**0.2478**	**0.0652**	**1.7800e-003**	**0.0670**		**227.2161**	**227.2161**	**0.0115**		**227.4576**

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	90.0411					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**90.3398**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.0757	0.1032	1.0746	2.9200e-003	0.2459	1.9200e-003	0.2478	0.0652	1.7800e-003	0.0670		227.2161	227.2161	0.0115		227.4576
Total	**0.0757**	**0.1032**	**1.0746**	**2.9200e-003**	**0.2459**	**1.9200e-003**	**0.2478**	**0.0652**	**1.7800e-003**	**0.0670**		**227.2161**	**227.2161**	**0.0115**		**227.4576**

MtSAC FMPU - Building G Construction Including Demolition

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	50.00	1000sqft	5.00	50,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage corresponds to demolition area.

Construction Phase -

Demolition -

Architectural Coating - Maximum VOC is 75 g/l per Mitigation Monitoring Program

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	75.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	75.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	75.00
tblConstructionPhase	PhaseEndDate	1/2/2020	1/3/2020
tblConstructionPhase	PhaseStartDate	2/15/2019	2/16/2019

tblLandUse	LotAcreage	1.15	5.00
tblProjectCharacteristics	OperationalYear	2014	2021

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					
2019	4.0757	42.5821	35.6146	0.0515	18.2675	2.1520	20.4195	9.9840	1.9799	11.9639	0.0000	4,995.9071	4,995.9071	1.2354	0.0000	5,021.8497
2020	19.5665	19.6428	18.5011	0.0313	0.2848	1.1230	1.4078	0.0765	1.0558	1.1323	0.0000	2,902.9777	2,902.9777	0.7058	0.0000	2,917.7991
Total	**23.6423**	**62.2248**	**54.1156**	**0.0828**	**18.5522**	**3.2750**	**21.8272**	**10.0605**	**3.0357**	**13.0962**	**0.0000**	**7,898.8848**	**7,898.8848**	**1.9411**	**0.0000**	**7,939.6488**

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					
2019	4.0757	42.5821	35.6146	0.0515	8.3310	2.1520	10.4830	4.5222	1.9799	6.5020	0.0000	4,995.9071	4,995.9071	1.2354	0.0000	5,021.8497
2020	19.5665	19.6428	18.5011	0.0313	0.2848	1.1230	1.4078	0.0765	1.0558	1.1323	0.0000	2,902.9777	2,902.9777	0.7058	0.0000	2,917.7991
Total	**23.6423**	**62.2248**	**54.1156**	**0.0828**	**8.6158**	**3.2750**	**11.8908**	**4.5987**	**3.0357**	**7.6344**	**0.0000**	**7,898.8848**	**7,898.8848**	**1.9411**	**0.0000**	**7,939.6488**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**53.56**	**0.00**	**45.52**	**54.29**	**0.00**	**41.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	2/4/2019	5	5	
3	Grading	Grading	2/5/2019	2/14/2019	5	8	
4	Building Construction	Building Construction	2/16/2019	1/3/2020	5	230	
5	Paving	Paving	1/4/2020	1/29/2020	5	18	
6	Architectural Coating	Architectural Coating	1/30/2020	2/24/2020	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 75,000; Non-Residential Outdoor: 25,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	162	0.38
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	261.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	21.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2019

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					2.8247	0.0000	2.8247	0.4277	0.0000	0.4277			0.0000			0.0000
Off-Road	3.3224	33.9413	30.8050	0.0399		1.6448	1.6448		1.5316	1.5316		3,929.2327	3,929.2327	1.0974		3,952.2774

Total	**3.3224**	**33.9413**	**30.8050**	**0.0399**	**2.8247**	**1.6448**	**4.4694**	**0.4277**	**1.5316**	**1.9592**		**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

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	0.2100	2.9441	2.6981	9.5500e-003	0.2275	0.0519	0.2794	0.0623	0.0478	0.1101		917.6518	917.6518	6.8900e-003		917.7965
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	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.2574**	**3.0087**	**3.3696**	**0.0115**	**0.3951**	**0.0532**	**0.4483**	**0.1068**	**0.0490**	**0.1557**		**1,066.6745**	**1,066.6745**	**0.0142**		**1,066.9732**

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					1.2711	0.0000	1.2711	0.1925	0.0000	0.1925			0.0000			0.0000
Off-Road	3.3224	33.9413	30.8050	0.0399		1.6448	1.6448		1.5316	1.5316	0.0000	3,929.2327	3,929.2327	1.0974		3,952.2774
Total	**3.3224**	**33.9413**	**30.8050**	**0.0399**	**1.2711**	**1.6448**	**2.9159**	**0.1925**	**1.5316**	**1.7240**	**0.0000**	**3,929.2327**	**3,929.2327**	**1.0974**		**3,952.2774**

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	0.2100	2.9441	2.6981	9.5500e-003	0.2275	0.0519	0.2794	0.0623	0.0478	0.1101		917.6518	917.6518	6.8900e-003		917.7965
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	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.2574**	**3.0087**	**3.3696**	**0.0115**	**0.3951**	**0.0532**	**0.4483**	**0.1068**	**0.0490**	**0.1557**		**1,066.6745**	**1,066.6745**	**0.0142**		**1,066.9732**

3.3 Site Preparation - 2019

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0188	42.5046	34.8088	0.0391		2.1505	2.1505		1.9784	1.9784		3,876.7233	3,876.7233	1.2266		3,902.4810
Total	**4.0188**	**42.5046**	**34.8088**	**0.0391**	**18.0663**	**2.1505**	**20.2167**	**9.9307**	**1.9784**	**11.9091**		**3,876.7233**	**3,876.7233**	**1.2266**		**3,902.4810**

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	0.0569	0.0775	0.8058	2.3800e-003	0.2012	1.5500e-003	0.2027	0.0534	1.4300e-003	0.0548		178.8272	178.8272	8.8100e-003		179.0121

Total	**0.0569**	**0.0775**	**0.8058**	**2.3800e-003**	**0.2012**	**1.5500e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**		**178.8272**	**178.8272**	**8.8100e-003**		**179.0121**

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.0188	42.5046	34.8088	0.0391		2.1505	2.1505		1.9784	1.9784	0.0000	3,876.7233	3,876.7233	1.2266		3,902.4810
Total	**4.0188**	**42.5046**	**34.8088**	**0.0391**	**8.1298**	**2.1505**	**10.2803**	**4.4688**	**1.9784**	**6.4472**	**0.0000**	**3,876.7233**	**3,876.7233**	**1.2266**		**3,902.4810**

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	0.0569	0.0775	0.8058	2.3800e-003	0.2012	1.5500e-003	0.2027	0.0534	1.4300e-003	0.0548		178.8272	178.8272	8.8100e-003		179.0121
Total	**0.0569**	**0.0775**	**0.8058**	**2.3800e-003**	**0.2012**	**1.5500e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**		**178.8272**	**178.8272**	**8.8100e-003**		**179.0121**

3.4 Grading - 2019

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.7610	28.3800	23.3864	0.0297		1.5329	1.5329		1.4103	1.4103		2,944.1998	2,944.1998	0.9315		2,963.7615
Total	**2.7610**	**28.3800**	**23.3864**	**0.0297**	**6.5523**	**1.5329**	**8.0852**	**3.3675**	**1.4103**	**4.7778**		**2,944.1998**	**2,944.1998**	**0.9315**		**2,963.7615**

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	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.0474**	**0.0645**	**0.6715**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**149.0226**	**149.0226**	**7.3400e-003**		**149.1767**

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.7610	28.3800	23.3864	0.0297		1.5329	1.5329		1.4103	1.4103	0.0000	2,944.1998	2,944.1998	0.9315		2,963.7615
Total	**2.7610**	**28.3800**	**23.3864**	**0.0297**	**2.9486**	**1.5329**	**4.4815**	**1.5154**	**1.4103**	**2.9256**	**0.0000**	**2,944.1998**	**2,944.1998**	**0.9315**		**2,963.7615**

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	0.0474	0.0645	0.6715	1.9800e-003	0.1677	1.2900e-003	0.1690	0.0445	1.1900e-003	0.0457		149.0226	149.0226	7.3400e-003		149.1767
Total	**0.0474**	**0.0645**	**0.6715**	**1.9800e-003**	**0.1677**	**1.2900e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**149.0226**	**149.0226**	**7.3400e-003**		**149.1767**

3.5 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	0.0589	0.5446	0.8426	1.7200e-003	0.0500	9.1600e-003	0.0592	0.0143	8.4200e-003	0.0227		164.0406	164.0406	1.2100e-003		164.0661
Worker	0.0664	0.0904	0.9401	2.7800e-003	0.2347	1.8000e-003	0.2365	0.0623	1.6700e-003	0.0639		208.6317	208.6317	0.0103		208.8474
Total	**0.1253**	**0.6350**	**1.7827**	**4.5000e-003**	**0.2848**	**0.0110**	**0.2957**	**0.0765**	**0.0101**	**0.0866**		**372.6723**	**372.6723**	**0.0115**		**372.9135**

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	0.0589	0.5446	0.8426	1.7200e-003	0.0500	9.1600e-003	0.0592	0.0143	8.4200e-003	0.0227		164.0406	164.0406	1.2100e-003		164.0661
Worker	0.0664	0.0904	0.9401	2.7800e-003	0.2347	1.8000e-003	0.2365	0.0623	1.6700e-003	0.0639		208.6317	208.6317	0.0103		208.8474
Total	**0.1253**	**0.6350**	**1.7827**	**4.5000e-003**	**0.2848**	**0.0110**	**0.2957**	**0.0765**	**0.0101**	**0.0866**		**372.6723**	**372.6723**	**0.0115**		**372.9135**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0558	0.4751	0.8182	1.7100e-003	0.0500	8.3800e-003	0.0584	0.0143	7.7100e-003	0.0220		160.3435	160.3435	1.1900e-003		160.3685
Worker	0.0622	0.0837	0.8745	2.7800e-003	0.2347	1.7900e-003	0.2365	0.0623	1.6600e-003	0.0639		200.1542	200.1542	9.7300e-003		200.3585
Total	**0.1181**	**0.5588**	**1.6926**	**4.4900e-003**	**0.2848**	**0.0102**	**0.2949**	**0.0765**	**9.3700e-003**	**0.0859**		**360.4977**	**360.4977**	**0.0109**		**360.7270**

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0558	0.4751	0.8182	1.7100e-003	0.0500	8.3800e-003	0.0584	0.0143	7.7100e-003	0.0220		160.3435	160.3435	1.1900e-003		160.3685
Worker	0.0622	0.0837	0.8745	2.7800e-003	0.2347	1.7900e-003	0.2365	0.0623	1.6600e-003	0.0639		200.1542	200.1542	9.7300e-003		200.3585
Total	**0.1181**	**0.5588**	**1.6926**	**4.4900e-003**	**0.2848**	**0.0102**	**0.2949**	**0.0765**	**9.3700e-003**	**0.0859**		**360.4977**	**360.4977**	**0.0109**		**360.7270**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3301**	**13.7845**	**14.3523**	**0.0223**		**0.7390**	**0.7390**		**0.6799**	**0.6799**		**2,160.7571**	**2,160.7571**	**0.6988**		**2,175.4326**

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	0.0445	0.0598	0.6246	1.9800e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		142.9673	142.9673	6.9500e-003		143.1132
Total	**0.0445**	**0.0598**	**0.6246**	**1.9800e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**142.9673**	**142.9673**	**6.9500e-003**		**143.1132**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799	0.0000	2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3301**	**13.7845**	**14.3523**	**0.0223**		**0.7390**	**0.7390**		**0.6799**	**0.6799**	**0.0000**	**2,160.7571**	**2,160.7571**	**0.6988**		**2,175.4326**

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	0.0445	0.0598	0.6246	1.9800e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		142.9673	142.9673	6.9500e-003		143.1132
Total	**0.0445**	**0.0598**	**0.6246**	**1.9800e-003**	**0.1677**	**1.2800e-003**	**0.1690**	**0.0445**	**1.1900e-003**	**0.0457**		**142.9673**	**142.9673**	**6.9500e-003**		**143.1132**

3.7 Architectural Coating - 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					
Archit. Coating	19.3125					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9057
Total	**19.5547**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9057**

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	0.0119	0.0160	0.1666	5.3000e-004	0.0447	3.4000e-004	0.0451	0.0119	3.2000e-004	0.0122		38.1246	38.1246	1.8500e-003		38.1635
Total	**0.0119**	**0.0160**	**0.1666**	**5.3000e-004**	**0.0447**	**3.4000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**38.1246**	**38.1246**	**1.8500e-003**		**38.1635**

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	19.3125					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9057
Total	**19.5547**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9057**

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	0.0119	0.0160	0.1666	5.3000e-004	0.0447	3.4000e-004	0.0451	0.0119	3.2000e-004	0.0122		38.1246	38.1246	1.8500e-003		38.1635
Total	**0.0119**	**0.0160**	**0.1666**	**5.3000e-004**	**0.0447**	**3.4000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**38.1246**	**38.1246**	**1.8500e-003**		**38.1635**

Operational emission data removed because it is not relevant to the analysis.

MtSAC FMPU - Building A Construction (No Demolition)

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	50.00	1000sqft	1.15	50,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Demolition -

Architectural Coating - Maximum VOC is 75 g/l per Mitigation Monitoring Program

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	75.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	75.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	75.00
tblConstructionPhase	PhaseEndDate	1/30/2025	1/31/2025
tblConstructionPhase	PhaseStartDate	1/29/2025	1/28/2025

tblProjectCharacteristics	OperationalYear	2014	2025

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					
2025	34.9425	22.5279	27.5026	0.0444	6.0343	1.0105	7.0448	3.0160	0.9371	3.9530	0.0000	4,205.6518	4,205.6518	1.1423	0.0000	4,229.6397
Total	**34.9425**	**22.5279**	**27.5026**	**0.0444**	**6.0343**	**1.0105**	**7.0448**	**3.0160**	**0.9371**	**3.9530**	**0.0000**	**4,205.6518**	**4,205.6518**	**1.1423**	**0.0000**	**4,229.6397**

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					
2025	34.9425	22.5279	27.5026	0.0444	2.8445	1.0105	3.8550	1.3914	0.9371	2.3285	0.0000	4,205.6518	4,205.6518	1.1423	0.0000	4,229.6397
Total	**34.9425**	**22.5279**	**27.5026**	**0.0444**	**2.8445**	**1.0105**	**3.8550**	**1.3914**	**0.9371**	**2.3285**	**0.0000**	**4,205.6518**	**4,205.6518**	**1.1423**	**0.0000**	**4,229.6397**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**52.86**	**0.00**	**45.28**	**53.86**	**0.00**	**41.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2025	1/28/2025	5	20	
2	Site Preparation	Site Preparation	1/28/2025	1/31/2025	5	2	
3	Grading	Grading	2/1/2025	2/6/2025	5	4	
4	Building Construction	Building Construction	2/7/2025	11/13/2025	5	200	
5	Paving	Paving	11/14/2025	11/27/2025	5	10	
6	Architectural Coating	Architectural Coating	11/28/2025	12/11/2025	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 75,000; Non-Residential Outdoor: 25,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Graders	1	8.00	174	0.41
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74

Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	21.00	8.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	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 Demolition - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.3514	12.3363	15.6569	0.0245		0.5261	0.5261		0.4914	0.4914		2,360.7055	2,360.7055	0.5979		2,373.2613

Total	**1.3514**	**12.3363**	**15.6569**	**0.0245**	**0.0000**	**0.5261**	**0.5261**	**0.0000**	**0.4914**	**0.4914**		**2,360.7055**	**2,360.7055**	**0.5979**		**2,373.2613**

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	0.0297	0.0385	0.4075	1.7300e-003	0.1453	1.1200e-003	0.1464	0.0385	1.0400e-003	0.0396		115.5652	115.5652	5.0000e-003		115.6702
Total	**0.0297**	**0.0385**	**0.4075**	**1.7300e-003**	**0.1453**	**1.1200e-003**	**0.1464**	**0.0385**	**1.0400e-003**	**0.0396**		**115.5652**	**115.5652**	**5.0000e-003**		**115.6702**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.3514	12.3363	15.6569	0.0245		0.5261	0.5261		0.4914	0.4914	0.0000	2,360.7055	2,360.7055	0.5979		2,373.2613
Total	**1.3514**	**12.3363**	**15.6569**	**0.0245**	**0.0000**	**0.5261**	**0.5261**	**0.0000**	**0.4914**	**0.4914**	**0.0000**	**2,360.7055**	**2,360.7055**	**0.5979**		**2,373.2613**

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	0.0297	0.0385	0.4075	1.7300e-003	0.1453	1.1200e-003	0.1464	0.0385	1.0400e-003	0.0396		115.5652	115.5652	5.0000e-003		115.6702
Total	**0.0297**	**0.0385**	**0.4075**	**1.7300e-003**	**0.1453**	**1.1200e-003**	**0.1464**	**0.0385**	**1.0400e-003**	**0.0396**		**115.5652**	**115.5652**	**5.0000e-003**		**115.6702**

3.3 Site Preparation - 2025

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					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.1233	10.1294	11.1875	0.0171		0.4826	0.4826		0.4440	0.4440		1,658.2640	1,658.2640	0.5363		1,669.5266
Total	**1.1233**	**10.1294**	**11.1875**	**0.0171**	**5.7996**	**0.4826**	**6.2822**	**2.9537**	**0.4440**	**3.3977**		**1,658.2640**	**1,658.2640**	**0.5363**		**1,669.5266**

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	0.0183	0.0237	0.2508	1.0600e-003	0.0894	6.9000e-004	0.0901	0.0237	6.4000e-004	0.0244		71.1171	71.1171	3.0800e-003		71.1817

Total	**0.0183**	**0.0237**	**0.2508**	**1.0600e-003**	**0.0894**	**6.9000e-004**	**0.0901**	**0.0237**	**6.4000e-004**	**0.0244**		**71.1171**	**71.1171**	**3.0800e-003**		**71.1817**

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					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.1233	10.1294	11.1875	0.0171		0.4826	0.4826		0.4440	0.4440	0.0000	1,658.2640	1,658.2640	0.5363		1,669.5266
Total	**1.1233**	**10.1294**	**11.1875**	**0.0171**	**2.6098**	**0.4826**	**3.0924**	**1.3292**	**0.4440**	**1.7732**	**0.0000**	**1,658.2640**	**1,658.2640**	**0.5363**		**1,669.5266**

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	0.0183	0.0237	0.2508	1.0600e-003	0.0894	6.9000e-004	0.0901	0.0237	6.4000e-004	0.0244		71.1171	71.1171	3.0800e-003		71.1817
Total	**0.0183**	**0.0237**	**0.2508**	**1.0600e-003**	**0.0894**	**6.9000e-004**	**0.0901**	**0.0237**	**6.4000e-004**	**0.0244**		**71.1171**	**71.1171**	**3.0800e-003**		**71.1817**

3.4 Grading - 2025

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					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	0.9208	8.3322	9.1683	0.0141		0.3941	0.3941		0.3626	0.3626		1,362.2555	1,362.2555	0.4406		1,371.5077
Total	**0.9208**	**8.3322**	**9.1683**	**0.0141**	**4.9143**	**0.3941**	**5.3084**	**2.5256**	**0.3626**	**2.8882**		**1,362.2555**	**1,362.2555**	**0.4406**		**1,371.5077**

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	0.0183	0.0237	0.2508	1.0600e-003	0.0894	6.9000e-004	0.0901	0.0237	6.4000e-004	0.0244		71.1171	71.1171	3.0800e-003		71.1817
Total	**0.0183**	**0.0237**	**0.2508**	**1.0600e-003**	**0.0894**	**6.9000e-004**	**0.0901**	**0.0237**	**6.4000e-004**	**0.0244**		**71.1171**	**71.1171**	**3.0800e-003**		**71.1817**

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					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	0.9208	8.3322	9.1683	0.0141		0.3941	0.3941		0.3626	0.3626	0.0000	1,362.2555	1,362.2555	0.4406		1,371.5077
Total	**0.9208**	**8.3322**	**9.1683**	**0.0141**	**2.2114**	**0.3941**	**2.6055**	**1.1365**	**0.3626**	**1.4991**	**0.0000**	**1,362.2555**	**1,362.2555**	**0.4406**		**1,371.5077**

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	0.0183	0.0237	0.2508	1.0600e-003	0.0894	6.9000e-004	0.0901	0.0237	6.4000e-004	0.0244		71.1171	71.1171	3.0800e-003		71.1817
Total	**0.0183**	**0.0237**	**0.2508**	**1.0600e-003**	**0.0894**	**6.9000e-004**	**0.0901**	**0.0237**	**6.4000e-004**	**0.0244**		**71.1171**	**71.1171**	**3.0800e-003**		**71.1817**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3195	10.3614	12.4112	0.0220		0.3903	0.3903		0.3765	0.3765		1,993.0806	1,993.0806	0.3240		1,999.8837
Total	**1.3195**	**10.3614**	**12.4112**	**0.0220**		**0.3903**	**0.3903**		**0.3765**	**0.3765**		**1,993.0806**	**1,993.0806**	**0.3240**		**1,999.8837**

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	0.0472	0.2884	0.7233	1.7100e-003	0.0500	7.4900e-003	0.0575	0.0143	6.8900e-003	0.0211		159.8016	159.8016	1.1300e-003		159.8253
Worker	0.0480	0.0621	0.6582	2.7900e-003	0.2347	1.8200e-003	0.2366	0.0623	1.6900e-003	0.0639		186.6823	186.6823	8.0700e-003		186.8518
Total	**0.0952**	**0.3506**	**1.3815**	**4.5000e-003**	**0.2848**	**9.3100e-003**	**0.2941**	**0.0765**	**8.5800e-003**	**0.0851**		**346.4839**	**346.4839**	**9.2000e-003**		**346.6771**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3195	10.3614	12.4112	0.0220		0.3903	0.3903		0.3765	0.3765	0.0000	1,993.0806	1,993.0806	0.3240		1,999.8837
Total	**1.3195**	**10.3614**	**12.4112**	**0.0220**		**0.3903**	**0.3903**		**0.3765**	**0.3765**	**0.0000**	**1,993.0806**	**1,993.0806**	**0.3240**		**1,999.8837**

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	0.0472	0.2884	0.7233	1.7100e-003	0.0500	7.4900e-003	0.0575	0.0143	6.8900e-003	0.0211		159.8016	159.8016	1.1300e-003		159.8253
Worker	0.0480	0.0621	0.6582	2.7900e-003	0.2347	1.8200e-003	0.2366	0.0623	1.6900e-003	0.0639		186.6823	186.6823	8.0700e-003		186.8518
Total	**0.0952**	**0.3506**	**1.3815**	**4.5000e-003**	**0.2848**	**9.3100e-003**	**0.2941**	**0.0765**	**8.5800e-003**	**0.0851**		**346.4839**	**346.4839**	**9.2000e-003**		**346.6771**

3.6 Paving - 2025

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	0.5660	5.2611	8.6730	0.0134		0.2434	0.2434		0.2248	0.2248		1,278.7103	1,278.7103	0.4052		1,287.2204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5660**	**5.2611**	**8.6730**	**0.0134**		**0.2434**	**0.2434**		**0.2248**	**0.2248**		**1,278.7103**	**1,278.7103**	**0.4052**		**1,287.2204**

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	0.0297	0.0385	0.4075	1.7300e-003	0.1453	1.1200e-003	0.1464	0.0385	1.0400e-003	0.0396		115.5652	115.5652	5.0000e-003		115.6702
Total	**0.0297**	**0.0385**	**0.4075**	**1.7300e-003**	**0.1453**	**1.1200e-003**	**0.1464**	**0.0385**	**1.0400e-003**	**0.0396**		**115.5652**	**115.5652**	**5.0000e-003**		**115.6702**

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	0.5660	5.2611	8.6730	0.0134		0.2434	0.2434		0.2248	0.2248	0.0000	1,278.7103	1,278.7103	0.4052		1,287.2204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.5660**	**5.2611**	**8.6730**	**0.0134**		**0.2434**	**0.2434**		**0.2248**	**0.2248**	**0.0000**	**1,278.7103**	**1,278.7103**	**0.4052**		**1,287.2204**

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	0.0297	0.0385	0.4075	1.7300e-003	0.1453	1.1200e-003	0.1464	0.0385	1.0400e-003	0.0396		115.5652	115.5652	5.0000e-003		115.6702
Total	**0.0297**	**0.0385**	**0.4075**	**1.7300e-003**	**0.1453**	**1.1200e-003**	**0.1464**	**0.0385**	**1.0400e-003**	**0.0396**		**115.5652**	**115.5652**	**5.0000e-003**		**115.6702**

3.7 Architectural Coating - 2025

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	34.7625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.7705
Total	**34.9334**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.7705**

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	9.1400e-003	0.0118	0.1254	5.3000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		35.5585	35.5585	1.5400e-003		35.5908
Total	**9.1400e-003**	**0.0118**	**0.1254**	**5.3000e-004**	**0.0447**	**3.5000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**35.5585**	**35.5585**	**1.5400e-003**		**35.5908**

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	34.7625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.7705
Total	**34.9334**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.7705**

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	9.1400e-003	0.0118	0.1254	5.3000e-004	0.0447	3.5000e-004	0.0451	0.0119	3.2000e-004	0.0122		35.5585	35.5585	1.5400e-003		35.5908
Total	**9.1400e-003**	**0.0118**	**0.1254**	**5.3000e-004**	**0.0447**	**3.5000e-004**	**0.0451**	**0.0119**	**3.2000e-004**	**0.0122**		**35.5585**	**35.5585**	**1.5400e-003**		**35.5908**

Mt. SAC FMPU - 2020

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	39,731.00	Student	39.82	1,734,347.04	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Headcount data from Iteris.
Lot acreage from Project Description

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	45.7361	0.0377	4.0825	3.0000e-004		0.0146	0.0146		0.0146	0.0146		8.6952	8.6952	0.0233		9.1849
Energy	1.4589	13.2627	11.1406	0.0796		1.0080	1.0080		1.0080	1.0080		15,915.1846	15,915.1846	0.3050	0.2918	16,012.0418
Mobile	138.9955	371.3045	1,469.3479	4.3611	305.4860	6.0726	311.5586	81.6293	5.6001	87.2293		337,925.0691	337,925.0691	12.2648		338,182.6299
Total	**186.1905**	**384.6048**	**1,484.5710**	**4.4410**	**305.4860**	**7.0952**	**312.5812**	**81.6293**	**6.6227**	**88.2519**		**353,848.9489**	**353,848.9489**	**12.5932**	**0.2918**	**354,203.8566**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	45.7361	0.0377	4.0825	3.0000e-004		0.0146	0.0146		0.0146	0.0146		8.6952	8.6952	0.0233		9.1849
Energy	1.4589	13.2627	11.1406	0.0796		1.0080	1.0080		1.0080	1.0080		15,915.1846	15,915.1846	0.3050	0.2918	16,012.0418
Mobile	138.9955	371.3045	1,469.3479	4.3611	305.4860	6.0726	311.5586	81.6293	5.6001	87.2293		337,925.0691	337,925.0691	12.2648		338,182.6299
Total	**186.1905**	**384.6048**	**1,484.5710**	**4.4410**	**305.4860**	**7.0952**	**312.5812**	**81.6293**	**6.6227**	**88.2519**		**353,848.9489**	**353,848.9489**	**12.5932**	**0.2918**	**354,203.8566**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	138.9955	371.3045	1,469.3479	4.3611	305.4860	6.0726	311.5586	81.6293	5.6001	87.2293		337,925.0691	337,925.0691	12.2648		338,182.6299
Unmitigated	138.9955	371.3045	1,469.3479	4.3611	305.4860	6.0726	311.5586	81.6293	5.6001	87.2293		337,925.0691	337,925.0691	12.2648		338,182.6299

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	47,677.20	16,687.02	1589.24	110,744,568	110,744,568
Total	47,677.20	16,687.02	1,589.24	110,744,568	110,744,568

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.509128	0.059640	0.181069	0.139276	0.042833	0.006726	0.016156	0.033615	0.001941	0.002483	0.004400	0.000574	0.002159

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.4589	13.2627	11.1406	0.0796		1.0080	1.0080		1.0080	1.0080		15,915.1846	15,915.1846	0.3050	0.2918	16,012.0418
NaturalGas Unmitigated	1.4589	13.2627	11.1406	0.0796		1.0080	1.0080		1.0080	1.0080		15,915.1846	15,915.1846	0.3050	0.2918	16,012.0418

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					
Junior College (2Yr)	135279	1.4589	13.2627	11.1406	0.0796		1.0080	1.0080		1.0080	1.0080		15,915.1846	15,915.1846	0.3050	0.2918	16,012.0418
Total		**1.4589**	**13.2627**	**11.1406**	**0.0796**		**1.0080**	**1.0080**		**1.0080**	**1.0080**		**15,915.1846**	**15,915.1846**	**0.3050**	**0.2918**	**16,012.0418**

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					
Junior College (2Yr)	135.279	1.4589	13.2627	11.1406	0.0796		1.0080	1.0080		1.0080	1.0080		15,915.1846	15,915.1846	0.3050	0.2918	16,012.0418
Total		**1.4589**	**13.2627**	**11.1406**	**0.0796**		**1.0080**	**1.0080**		**1.0080**	**1.0080**		**15,915.1846**	**15,915.1846**	**0.3050**	**0.2918**	**16,012.0418**

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	45.7361	0.0377	4.0825	3.0000e-004		0.0146	0.0146		0.0146	0.0146		8.6952	8.6952	0.0233		9.1849
Unmitigated	45.7361	0.0377	4.0825	3.0000e-004		0.0146	0.0146		0.0146	0.0146		8.6952	8.6952	0.0233		9.1849

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	11.0119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	34.3401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.3841	0.0377	4.0825	3.0000e-004		0.0146	0.0146		0.0146	0.0146		8.6952	8.6952	0.0233		9.1849
Total	**45.7361**	**0.0377**	**4.0825**	**3.0000e-004**		**0.0146**	**0.0146**		**0.0146**	**0.0146**		**8.6952**	**8.6952**	**0.0233**		**9.1849**

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					
Consumer Products	34.3401					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.3841	0.0377	4.0825	3.0000e-004		0.0146	0.0146		0.0146	0.0146		8.6952	8.6952	0.0233		9.1849
Architectural Coating	11.0119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**45.7361**	**0.0377**	**4.0825**	**3.0000e-004**		**0.0146**	**0.0146**		**0.0146**	**0.0146**		**8.6952**	**8.6952**	**0.0233**		**9.1849**

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 Vegetation

Construction emission data removed because it was not relevant to this analysis.

Mt. SAC FMPU - 2025

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	43,139.00	Student	43.23	1,883,113.86	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Headcount data from Iteris.
Lot acreage from Project Description

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2025

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	49.6466	0.0398	4.3931	3.3000e-004		0.0156	0.0156		0.0156	0.0156		9.4411	9.4411	0.0246		9.9568
Energy	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Mobile	125.5363	284.8629	1,298.2027	4.8092	331.8937	6.6483	338.5420	88.7042	6.1346	94.8389		355,040.8254	355,040.8254	11.1335		355,274.6288
Total	**176.7670**	**299.3030**	**1,314.6920**	**4.8959**	**331.8937**	**7.7584**	**339.6520**	**88.7042**	**7.2447**	**95.9489**		**372,330.6054**	**372,330.6054**	**11.4893**	**0.3168**	**372,670.0897**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	49.6466	0.0398	4.3931	3.3000e-004		0.0156	0.0156		0.0156	0.0156		9.4411	9.4411	0.0246		9.9568
Energy	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Mobile	125.5363	284.8629	1,298.2027	4.8092	331.8937	6.6483	338.5420	88.7042	6.1346	94.8389		355,040.8254	355,040.8254	11.1335		355,274.6288
Total	**176.7670**	**299.3030**	**1,314.6920**	**4.8959**	**331.8937**	**7.7584**	**339.6520**	**88.7042**	**7.2447**	**95.9489**		**372,330.6054**	**372,330.6054**	**11.4893**	**0.3168**	**372,670.0897**

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	125.5363	284.8629	1,298.2027	4.8092	331.8937	6.6483	338.5420	88.7042	6.1346	94.8389		355,040.8254	355,040.8254	11.1335		355,274.6288
Unmitigated	125.5363	284.8629	1,298.2027	4.8092	331.8937	6.6483	338.5420	88.7042	6.1346	94.8389		355,040.8254	355,040.8254	11.1335		355,274.6288

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	51,766.80	18,118.38	1725.56	120,243,888	120,243,888
Total	51,766.80	18,118.38	1,725.56	120,243,888	120,243,888

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.499131	0.060194	0.182964	0.141782	0.044131	0.007011	0.016488	0.036565	0.002001	0.002519	0.004202	0.000556	0.002456

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
NaturalGas Unmitigated	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042

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					
Junior College (2Yr)	146883	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Total		**1.5840**	**14.4003**	**12.0962**	**0.0864**		**1.0944**	**1.0944**		**1.0944**	**1.0944**		**17,280.3390**	**17,280.3390**	**0.3312**	**0.3168**	**17,385.5042**

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					
Junior College (2Yr)	146.883	1.5840	14.4003	12.0962	0.0864		1.0944	1.0944		1.0944	1.0944		17,280.3390	17,280.3390	0.3312	0.3168	17,385.5042
Total		**1.5840**	**14.4003**	**12.0962**	**0.0864**		**1.0944**	**1.0944**		**1.0944**	**1.0944**		**17,280.3390**	**17,280.3390**	**0.3312**	**0.3168**	**17,385.5042**

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	49.6466	0.0398	4.3931	3.3000e-004		0.0156	0.0156		0.0156	0.0156		9.4411	9.4411	0.0246		9.9568
Unmitigated	49.6466	0.0398	4.3931	3.3000e-004		0.0156	0.0156		0.0156	0.0156		9.4411	9.4411	0.0246		9.9568

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	11.9565					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	37.2857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.4045	0.0398	4.3931	3.3000e-004		0.0156	0.0156		0.0156	0.0156		9.4411	9.4411	0.0246		9.9568
Total	**49.6466**	**0.0398**	**4.3931**	**3.3000e-004**		**0.0156**	**0.0156**		**0.0156**	**0.0156**		**9.4411**	**9.4411**	**0.0246**		**9.9568**

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					
Consumer Products	37.2857					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.4045	0.0398	4.3931	3.3000e-004		0.0156	0.0156		0.0156	0.0156		9.4411	9.4411	0.0246		9.9568
Architectural Coating	11.9565					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**49.6466**	**0.0398**	**4.3931**	**3.3000e-004**		**0.0156**	**0.0156**		**0.0156**	**0.0156**		**9.4411**	**9.4411**	**0.0246**		**9.9568**

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 Vegetation

Construction emission data removed because it was not relevant to the analysis.

Physical Education Projects-- Phase 1 -- Construction Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	91.73	1000sqft	2.11	91,730.00	0
General Light Industry	79.40	1000sqft	1.82	79,400.00	0
Other Non-Asphalt Surfaces	174.43	1000sqft	4.00	174,430.00	0
Parking Lot	107.57	1000sqft	2.47	107,570.00	0
City Park	21.80	Acre	21.80	949,608.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - This has updated painting information from Matt Breyer dated March 3, 2016.

Land Use -

Construction Phase - Demolition duration based on Tilden Coil schedule
Site Prep plus Grading equals 45 days based on Tilden Coil schedule
Construction phase roughly based on Tilden Coil schedule and end date of construction and paint info dates March 3, 2016

Trips and VMT - Demolition is 9800 cy, total export of dirt during grading 81429 cy, and concrete import is 15,800 cy

Demolition -

Grading - Entire site will essentially be re-graded

Architectural Coating - Default values based on requirements of Mitigation Monitoring Program and paint info dated March 3, 2016.

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	649,198.00	9,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,947,593.00	151,650.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	75.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	75.00
tblConstructionPhase	NumDays	35.00	58.00
tblConstructionPhase	NumDays	500.00	381.00
tblConstructionPhase	NumDays	30.00	56.00
tblConstructionPhase	NumDays	45.00	40.00
tblConstructionPhase	NumDays	20.00	5.00
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
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	PhaseEndDate	12/12/2016	12/24/2016
tblConstructionPhase	PhaseStartDate	12/25/2016	12/26/2016
tblConstructionPhase	PhaseStartDate	12/7/2016	12/20/2016
tblGrading	AcresOfGrading	100.00	112.50

tblGrading	MaterialImported	0.00	81,429.00
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripNumber	0.00	1,580.00

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					
2016	11.1635	147.2165	106.8954	0.2517	32.9577	4.6960	37.6537	9.9840	4.3202	13.9404	0.0000	25,504.5115	25,504.5115	2.0834	0.0000	25,548.2623
2017	10.5035	135.9483	102.4764	0.2514	14.4870	4.3333	18.8202	5.0866	3.9865	9.0731	0.0000	25,084.5826	25,084.5826	2.0791	0.0000	25,128.2432
2018	10.3331	44.0146	72.2222	0.1575	8.2418	1.8399	10.0817	2.2117	1.7229	3.9346	0.0000	13,800.3014	13,800.3014	0.9842	0.0000	13,820.9698
Total	**32.0001**	**327.1794**	**281.5940**	**0.6606**	**55.6864**	**10.8692**	**66.5556**	**17.2823**	**10.0296**	**26.9482**	**0.0000**	**64,389.3955**	**64,389.3955**	**5.1467**	**0.0000**	**64,497.4753**

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					
2016	11.1635	147.2165	106.8954	0.2517	27.8784	4.6960	32.5745	7.6033	4.3202	11.9235	0.0000	25,504.5115	25,504.5115	2.0834	0.0000	25,548.2623

2017	10.5035	135.9483	102.4764	0.2514	9.4077	4.3333	13.7410	3.0697	3.9865	7.0562	0.0000	25,084.5826	25,084.5826	2.0791	0.0000	25,128.2432
2018	10.3331	44.0146	72.2222	0.1575	8.2418	1.8399	10.0817	2.2117	1.7229	3.9346	0.0000	13,800.3014	13,800.3014	0.9842	0.0000	13,820.9698
Total	**32.0001**	**327.1794**	**281.5940**	**0.6606**	**45.5280**	**10.8692**	**56.3971**	**12.8847**	**10.0296**	**22.9143**	**0.0000**	**64,389.3955**	**64,389.3955**	**5.1467**	**0.0000**	**64,497.4753**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**18.24**	**0.00**	**15.26**	**25.45**	**0.00**	**14.97**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/3/2016	12/6/2016	6	56	
2	Site Preparation	Site Preparation	12/20/2016	12/24/2016	6	5	
3	Grading	Grading	12/26/2016	2/9/2017	6	40	
4	Building Construction	Building Construction	2/10/2017	4/30/2018	6	381	
5	Paving	Paving	5/1/2018	6/9/2018	6	35	
6	Architectural Coating	Architectural Coating	6/10/2018	8/16/2018	6	58	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 151,650; Non-Residential Outdoor: 9,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73

Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,962.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	10,179.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	589.00	230.00	1,580.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	118.00	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 Demolition - 2016

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					7.5833	0.0000	7.5833	1.1482	0.0000	1.1482			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**	**7.5833**	**2.2921**	**9.8754**	**1.1482**	**2.1365**	**3.2847**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

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	0.6332	9.9525	7.7871	0.0258	0.6105	0.1528	0.7633	0.1672	0.1406	0.3077		2,597.4943	2,597.4943	0.0188		2,597.8881
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	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495

Total	**0.6971**	**10.0385**	**8.6855**	**0.0278**	**0.7781**	**0.1542**	**0.9323**	**0.2116**	**0.1419**	**0.3535**		**2,764.8516**	**2,764.8516**	**0.0279**		**2,765.4376**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4125	0.0000	3.4125	0.5167	0.0000	0.5167			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**	**3.4125**	**2.2921**	**5.7046**	**0.5167**	**2.1365**	**2.6532**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

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	0.6332	9.9525	7.7871	0.0258	0.6105	0.1528	0.7633	0.1672	0.1406	0.3077		2,597.4943	2,597.4943	0.0188		2,597.8881
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	0.0640	0.0860	0.8984	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3573	167.3573	9.1500e-003		167.5495
Total	**0.6971**	**10.0385**	**8.6855**	**0.0278**	**0.7781**	**0.1542**	**0.9323**	**0.2116**	**0.1419**	**0.3535**		**2,764.8516**	**2,764.8516**	**0.0279**		**2,765.4376**

3.3 Site Preparation - 2016

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**		**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

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	0.0768	0.1032	1.0780	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8288	200.8288	0.0110		201.0594
Total	**0.0768**	**0.1032**	**1.0780**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8288**	**200.8288**	**0.0110**		**201.0594**

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**8.1298**	**2.9387**	**11.0685**	**4.4688**	**2.7036**	**7.1724**	**0.0000**	**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

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	0.0768	0.1032	1.0780	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8288	200.8288	0.0110		201.0594
Total	**0.0768**	**0.1032**	**1.0780**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8288**	**200.8288**	**0.0110**		**201.0594**

3.4 Grading - 2016

Unmitigated Construction On-Site

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

Fugitive Dust					9.2350	0.0000	9.2350	3.6672	0.0000	3.6672			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**9.2350**	**3.5842**	**12.8192**	**3.6672**	**3.2975**	**6.9647**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

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	4.5988	72.2881	56.5602	0.1873	23.4991	1.1099	24.6091	5.8938	1.0210	6.9148		18,866.3877	18,866.3877	0.1362		18,869.2475
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	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**4.6841**	**72.4028**	**57.7580**	**0.1899**	**23.7227**	**1.1118**	**24.8345**	**5.9531**	**1.0227**	**6.9758**		**19,089.5308**	**19,089.5308**	**0.1484**		**19,092.6469**

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					4.1557	0.0000	4.1557	1.6502	0.0000	1.6502			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154

Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**4.1557**	**3.5842**	**7.7400**	**1.6502**	**3.2975**	**4.9477**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

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	4.5988	72.2881	56.5602	0.1873	23.4991	1.1099	24.6091	5.8938	1.0210	6.9148		18,866.3877	18,866.3877	0.1362		18,869.2475
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	0.0853	0.1147	1.1978	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1431	223.1431	0.0122		223.3994
Total	**4.6841**	**72.4028**	**57.7580**	**0.1899**	**23.7227**	**1.1118**	**24.8345**	**5.9531**	**1.0227**	**6.9758**		**19,089.5308**	**19,089.5308**	**0.1484**		**19,092.6469**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2350	0.0000	9.2350	3.6672	0.0000	3.6672			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518		6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**9.2350**	**3.3172**	**12.5522**	**3.6672**	**3.0518**	**6.7190**		**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

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	4.3279	66.2528	54.5918	0.1871	5.0284	1.0143	6.0427	1.3602	0.9330	2.2932		18,556.6415	18,556.6415	0.1334		18,559.4430
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	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**4.4044**	**66.3563**	**55.6714**	**0.1897**	**5.2520**	**1.0161**	**6.2681**	**1.4195**	**0.9347**	**2.3542**		**18,771.2136**	**18,771.2136**	**0.1447**		**18,774.2517**

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					4.1557	0.0000	4.1557	1.6502	0.0000	1.6502			0.0000			0.0000
Off-Road	6.0991	69.5920	46.8050	0.0617		3.3172	3.3172		3.0518	3.0518	0.0000	6,313.3690	6,313.3690	1.9344		6,353.9915
Total	**6.0991**	**69.5920**	**46.8050**	**0.0617**	**4.1557**	**3.3172**	**7.4729**	**1.6502**	**3.0518**	**4.7020**	**0.0000**	**6,313.3690**	**6,313.3690**	**1.9344**		**6,353.9915**

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	4.3279	66.2528	54.5918	0.1871	5.0284	1.0143	6.0427	1.3602	0.9330	2.2932		18,556.6415	18,556.6415	0.1334		18,559.4430
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	0.0765	0.1035	1.0796	2.6500e-003	0.2236	1.8000e-003	0.2254	0.0593	1.6600e-003	0.0610		214.5722	214.5722	0.0113		214.8087
Total	**4.4044**	**66.3563**	**55.6714**	**0.1897**	**5.2520**	**1.0161**	**6.2681**	**1.4195**	**0.9347**	**2.3542**		**18,771.2136**	**18,771.2136**	**0.1447**		**18,774.2517**

3.5 Building Construction - 2017

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

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	0.0705	1.0797	0.8896	3.0500e-003	0.0926	0.0165	0.1091	0.0248	0.0152	0.0400		302.4032	302.4032	2.1700e-003		302.4488
Vendor	1.9171	18.5201	26.1046	0.0496	1.4379	0.2946	1.7325	0.4096	0.2709	0.6805		4,891.9658	4,891.9658	0.0357		4,892.7149
Worker	2.2525	3.0478	31.7942	0.0781	6.5836	0.0529	6.6366	1.7460	0.0488	1.7948		6,319.1504	6,319.1504	0.3317		6,326.1157
Total	**4.2401**	**22.6476**	**58.7884**	**0.1308**	**8.1141**	**0.3640**	**8.4782**	**2.1803**	**0.3349**	**2.5153**		**11,513.5193**	**11,513.5193**	**0.3695**		**11,521.2794**

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

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	0.0705	1.0797	0.8896	3.0500e-003	0.0926	0.0165	0.1091	0.0248	0.0152	0.0400		302.4032	302.4032	2.1700e-003		302.4488
Vendor	1.9171	18.5201	26.1046	0.0496	1.4379	0.2946	1.7325	0.4096	0.2709	0.6805		4,891.9658	4,891.9658	0.0357		4,892.7149

Worker	2.2525	3.0478	31.7942	0.0781	6.5836	0.0529	6.6366	1.7460	0.0488	1.7948		6,319.1504	6,319.1504	0.3317		6,326.1157
Total	**4.2401**	**22.6476**	**58.7884**	**0.1308**	**8.1141**	**0.3640**	**8.4782**	**2.1803**	**0.3349**	**2.5153**		**11,513.5193**	**11,513.5193**	**0.3695**		**11,521.2794**

3.5 Building Construction - 2018

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

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	0.0687	1.0013	0.8718	3.0500e-003	0.2203	0.0165	0.2368	0.0561	0.0152	0.0713		297.3784	297.3784	2.2000e-003		297.4247
Vendor	1.7917	16.9886	25.0489	0.0495	1.4379	0.2775	1.7155	0.4096	0.2553	0.6649		4,809.7893	4,809.7893	0.0355		4,810.5344
Worker	2.0256	2.7639	28.7688	0.0781	6.5836	0.0515	6.6352	1.7460	0.0477	1.7937		6,083.1947	6,083.1947	0.3078		6,089.6590
Total	**3.8860**	**20.7537**	**54.6896**	**0.1307**	**8.2418**	**0.3456**	**8.5874**	**2.2117**	**0.3182**	**2.5298**		**11,190.3624**	**11,190.3624**	**0.3455**		**11,197.6181**

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

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	0.0687	1.0013	0.8718	3.0500e-003	0.2203	0.0165	0.2368	0.0561	0.0152	0.0713		297.3784	297.3784	2.2000e-003		297.4247
Vendor	1.7917	16.9886	25.0489	0.0495	1.4379	0.2775	1.7155	0.4096	0.2553	0.6649		4,809.7893	4,809.7893	0.0355		4,810.5344
Worker	2.0256	2.7639	28.7688	0.0781	6.5836	0.0515	6.6352	1.7460	0.0477	1.7937		6,083.1947	6,083.1947	0.3078		6,089.6590
Total	**3.8860**	**20.7537**	**54.6896**	**0.1307**	**8.2418**	**0.3456**	**8.5874**	**2.2117**	**0.3182**	**2.5298**		**11,190.3624**	**11,190.3624**	**0.3455**		**11,197.6181**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635		2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.1849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7963**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**		**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

Mitigated Construction On-Site

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

Category	lb/day										lb/day					
Off-Road	1.6114	17.1628	14.4944	0.0223		0.9386	0.9386		0.8635	0.8635	0.0000	2,245.2695	2,245.2695	0.6990		2,259.9481
Paving	0.1849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7963**	**17.1628**	**14.4944**	**0.0223**		**0.9386**	**0.9386**		**0.8635**	**0.8635**	**0.0000**	**2,245.2695**	**2,245.2695**	**0.6990**		**2,259.9481**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.7 Architectural Coating - 2018

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	9.6286					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**9.9272**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.4058	0.5537	5.7635	0.0156	1.3190	0.0103	1.3293	0.3498	9.5500e-003	0.3594		1,218.7045	1,218.7045	0.0617		1,219.9996
Total	**0.4058**	**0.5537**	**5.7635**	**0.0156**	**1.3190**	**0.0103**	**1.3293**	**0.3498**	**9.5500e-003**	**0.3594**		**1,218.7045**	**1,218.7045**	**0.0617**		**1,219.9996**

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	9.6286					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**9.9272**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

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	0.4058	0.5537	5.7635	0.0156	1.3190	0.0103	1.3293	0.3498	9.5500e-003	0.3594		1,218.7045	1,218.7045	0.0617		1,219.9996
Total	**0.4058**	**0.5537**	**5.7635**	**0.0156**	**1.3190**	**0.0103**	**1.3293**	**0.3498**	**9.5500e-003**	**0.3594**		**1,218.7045**	**1,218.7045**	**0.0617**		**1,219.9996**

Physical Education Projects-- Phase 2 -- Construction Only

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	117.90	1000sqft	2.71	117,900.00	0
Enclosed Parking Structure	23.09	1000sqft	0.53	23,088.00	0
Other Non-Asphalt Surfaces	68.81	1000sqft	1.58	68,805.00	0
Parking Lot	0.00	1000sqft	0.00	0.00	0
City Park	0.00	Acre	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Construction of enclosed parking structure used to simulate pool areas.
Non-asphalt parking used to simulate construction of tennis courts.

Construction Phase - Painting consistent with March 3, 2016 info.

Trips and VMT -

Demolition -

Grading -

Architectural Coating - Painting consistent with March 3, 2016 info.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	104,897.00	13,644.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	314,690.00	229,901.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	75.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	75.00
tblConstructionPhase	NumDays	18.00	88.00
tblConstructionPhase	NumDays	230.00	535.00
tblConstructionPhase	PhaseEndDate	9/1/2020	9/28/2020
tblConstructionPhase	PhaseStartDate	8/5/2020	9/1/2020
tblLandUse	LandUseSquareFeet	23,090.00	23,088.00
tblLandUse	LandUseSquareFeet	68,810.00	68,805.00
tblProjectCharacteristics	OperationalYear	2014	2021

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					
2018	4.3540	45.6933	37.1138	0.0458	18.2675	2.3670	20.6344	9.9840	2.1776	12.1617	0.0000	4,229.8157	4,229.8157	1.2359	0.0000	4,255.7699
2019	2.8803	23.6584	24.6410	0.0457	1.1962	1.3315	2.5277	0.3214	1.2511	1.5725	0.0000	4,152.2005	4,152.2005	0.6761	0.0000	4,166.3989

2020	9.9162	80.9181	80.8283	0.2231	58.1124	2.4685	60.5808	9.3468	2.2869	11.6337	0.0000	21,032.4367	21,032.4367	1.2312	0.0000	21,058.2918
Total	**17.1505**	**150.2698**	**142.5831**	**0.3147**	**77.5760**	**6.1670**	**83.7430**	**19.6523**	**5.7156**	**25.3679**	**0.0000**	**29,414.4529**	**29,414.4529**	**3.1432**	**0.0000**	**29,480.4606**

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					
2018	4.3540	45.6933	37.1138	0.0458	8.3310	2.3670	10.6980	4.5222	2.1776	6.6998	0.0000	4,229.8157	4,229.8157	1.2359	0.0000	4,255.7698
2019	2.8803	23.6584	24.6410	0.0457	1.1962	1.3315	2.5277	0.3214	1.2511	1.5725	0.0000	4,152.2005	4,152.2005	0.6761	0.0000	4,166.3989
2020	9.9162	80.9181	80.8283	0.2231	28.6187	2.4685	31.0872	4.8812	2.2869	7.1681	0.0000	21,032.4367	21,032.4367	1.2312	0.0000	21,058.2918
Total	**17.1505**	**150.2698**	**142.5831**	**0.3147**	**38.1459**	**6.1670**	**44.3129**	**9.7248**	**5.7156**	**15.4404**	**0.0000**	**29,414.4529**	**29,414.4529**	**3.1432**	**0.0000**	**29,480.4605**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**50.83**	**0.00**	**47.08**	**50.52**	**0.00**	**39.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/1/2018	2/7/2018	5	5	
2	Grading	Grading	2/8/2018	2/19/2018	5	8	
3	Building Construction	Building Construction	2/20/2018	3/9/2020	5	535	

4	Paving	Paving	3/10/2020	4/2/2020	5	18	
5	Architectural Coating	Architectural Coating	4/3/2020	8/4/2020	5	88	
6	Demolition	Demolition	9/1/2020	9/28/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 229,901; Non-Residential Outdoor: 13,644 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36

Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	4,956.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	88.00	34.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	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 - 2018

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.2921	45.6088	36.2346	0.0391		2.3654	2.3654		2.1762	2.1762		3,939.7731	3,939.7731	1.2265		3,965.5297
Total	**4.2921**	**45.6088**	**36.2346**	**0.0391**	**18.0663**	**2.3654**	**20.4317**	**9.9307**	**2.1762**	**12.1069**		**3,939.7731**	**3,939.7731**	**1.2265**		**3,965.5297**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.2921	45.6088	36.2346	0.0391		2.3654	2.3654		2.1762	2.1762	0.0000	3,939.7731	3,939.7731	1.2265		3,965.5297
Total	**4.2921**	**45.6088**	**36.2346**	**0.0391**	**8.1298**	**2.3654**	**10.4952**	**4.4688**	**2.1762**	**6.6450**	**0.0000**	**3,939.7731**	**3,939.7731**	**1.2265**		**3,965.5297**

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	0.0619	0.0845	0.8792	2.3900e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4600e-003	0.0548		185.9041	185.9041	9.4100e-003		186.1016
Total	**0.0619**	**0.0845**	**0.8792**	**2.3900e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4600e-003**	**0.0548**		**185.9041**	**185.9041**	**9.4100e-003**		**186.1016**

3.3 Grading - 2018

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.0028	31.0702	23.9988	0.0297		1.7201	1.7201		1.5825	1.5825		2,993.1005	2,993.1005	0.9318		3,012.6681
Total	**3.0028**	**31.0702**	**23.9988**	**0.0297**	**6.5523**	**1.7201**	**8.2724**	**3.3675**	**1.5825**	**4.9500**		**2,993.1005**	**2,993.1005**	**0.9318**		**3,012.6681**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	3.0028	31.0702	23.9988	0.0297		1.7201	1.7201		1.5825	1.5825	0.0000	2,993.1005	2,993.1005	0.9318		3,012.6681
Total	**3.0028**	**31.0702**	**23.9988**	**0.0297**	**2.9486**	**1.7201**	**4.6686**	**1.5154**	**1.5825**	**3.0979**	**0.0000**	**2,993.1005**	**2,993.1005**	**0.9318**		**3,012.6681**

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	0.0516	0.0704	0.7327	1.9900e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		154.9201	154.9201	7.8400e-003		155.0847
Total	**0.0516**	**0.0704**	**0.7327**	**1.9900e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**154.9201**	**154.9201**	**7.8400e-003**		**155.0847**

3.4 Building Construction - 2018

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048		2,609.9390	2,609.9390	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**		**2,609.9390**	**2,609.9390**	**0.6387**		**2,623.3517**

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	0.2649	2.5114	3.7029	7.3200e-003	0.2126	0.0410	0.2536	0.0605	0.0377	0.0983		711.0123	711.0123	5.2400e-003		711.1225
Worker	0.3026	0.4129	4.2982	0.0117	0.9836	7.7000e-003	0.9913	0.2609	7.1200e-003	0.2680		908.8644	908.8644	0.0460		909.8302

Total	**0.5675**	**2.9243**	**8.0011**	**0.0190**	**1.1962**	**0.0487**	**1.2449**	**0.3214**	**0.0449**	**0.3663**		**1,619.8767**	**1,619.8767**	**0.0512**		**1,620.9527**

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	2.6687	23.2608	17.5327	0.0268		1.4943	1.4943		1.4048	1.4048	0.0000	2,609.9389	2,609.9389	0.6387		2,623.3517
Total	**2.6687**	**23.2608**	**17.5327**	**0.0268**		**1.4943**	**1.4943**		**1.4048**	**1.4048**	**0.0000**	**2,609.9389**	**2,609.9389**	**0.6387**		**2,623.3517**

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	0.2649	2.5114	3.7029	7.3200e-003	0.2126	0.0410	0.2536	0.0605	0.0377	0.0983		711.0123	711.0123	5.2400e-003		711.1225
Worker	0.3026	0.4129	4.2982	0.0117	0.9836	7.7000e-003	0.9913	0.2609	7.1200e-003	0.2680		908.8644	908.8644	0.0460		909.8302
Total	**0.5675**	**2.9243**	**8.0011**	**0.0190**	**1.1962**	**0.0487**	**1.2449**	**0.3214**	**0.0449**	**0.3663**		**1,619.8767**	**1,619.8767**	**0.0512**		**1,620.9527**

3.4 Building Construction - 2019

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**		**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	0.2503	2.3147	3.5812	7.2900e-003	0.2126	0.0389	0.2515	0.0606	0.0358	0.0964		697.1727	697.1727	5.1500e-003		697.2808
Worker	0.2783	0.3787	3.9394	0.0116	0.9836	7.5600e-003	0.9912	0.2609	7.0100e-003	0.2679		874.2661	874.2661	0.0431		875.1702
Total	**0.5286**	**2.6934**	**7.5207**	**0.0189**	**1.1962**	**0.0465**	**1.2427**	**0.3214**	**0.0428**	**0.3642**		**1,571.4388**	**1,571.4388**	**0.0482**		**1,572.4510**

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	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083	0.0000	2,580.7618	2,580.7618	0.6279		2,593.9479
Total	**2.3516**	**20.9650**	**17.1204**	**0.0268**		**1.2850**	**1.2850**		**1.2083**	**1.2083**	**0.0000**	**2,580.7618**	**2,580.7618**	**0.6279**		**2,593.9479**

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	0.2503	2.3147	3.5812	7.2900e-003	0.2126	0.0389	0.2515	0.0606	0.0358	0.0964		697.1727	697.1727	5.1500e-003		697.2808
Worker	0.2783	0.3787	3.9394	0.0116	0.9836	7.5600e-003	0.9912	0.2609	7.0100e-003	0.2679		874.2661	874.2661	0.0431		875.1702
Total	**0.5286**	**2.6934**	**7.5207**	**0.0189**	**1.1962**	**0.0465**	**1.2427**	**0.3214**	**0.0428**	**0.3642**		**1,571.4388**	**1,571.4388**	**0.0482**		**1,572.4510**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

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

Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**		**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	0.2373	2.0192	3.4773	7.2900e-003	0.2126	0.0356	0.2482	0.0606	0.0328	0.0933		681.4601	681.4601	5.0500e-003		681.5660
Worker	0.2608	0.3509	3.6644	0.0116	0.9836	7.5200e-003	0.9912	0.2609	6.9700e-003	0.2678		838.7414	838.7414	0.0408		839.5976
Total	**0.4981**	**2.3701**	**7.1416**	**0.0189**	**1.1962**	**0.0431**	**1.2394**	**0.3214**	**0.0397**	**0.3611**		**1,520.2014**	**1,520.2014**	**0.0458**		**1,521.1637**

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	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465	0.0000	2,542.4799	2,542.4799	0.6194		2,555.4880
Total	**2.1113**	**19.0839**	**16.8084**	**0.0268**		**1.1128**	**1.1128**		**1.0465**	**1.0465**	**0.0000**	**2,542.4799**	**2,542.4799**	**0.6194**		**2,555.4880**

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	0.2373	2.0192	3.4773	7.2900e-003	0.2126	0.0356	0.2482	0.0606	0.0328	0.0933		681.4601	681.4601	5.0500e-003		681.5660
Worker	0.2608	0.3509	3.6644	0.0116	0.9836	7.5200e-003	0.9912	0.2609	6.9700e-003	0.2678		838.7414	838.7414	0.0408		839.5976
Total	**0.4981**	**2.3701**	**7.1416**	**0.0189**	**1.1962**	**0.0431**	**1.2394**	**0.3214**	**0.0397**	**0.3611**		**1,520.2014**	**1,520.2014**	**0.0458**		**1,521.1637**

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1689	11.6447	12.1132	0.0187		0.6432	0.6432		0.5935	0.5935		1,778.2300	1,778.2300	0.5585		1,789.9580
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1689**	**11.6447**	**12.1132**	**0.0187**		**0.6432**	**0.6432**		**0.5935**	**0.5935**		**1,778.2300**	**1,778.2300**	**0.5585**		**1,789.9580**

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	0.0593	0.0797	0.8328	2.6400e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		190.6230	190.6230	9.2700e-003		190.8176
Total	**0.0593**	**0.0797**	**0.8328**	**2.6400e-003**	**0.2236**	**1.7100e-003**	**0.2253**	**0.0593**	**1.5800e-003**	**0.0609**		**190.6230**	**190.6230**	**9.2700e-003**		**190.8176**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1689	11.6447	12.1132	0.0187		0.6432	0.6432		0.5935	0.5935	0.0000	1,778.2300	1,778.2300	0.5585		1,789.9580
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1689**	**11.6447**	**12.1132**	**0.0187**		**0.6432**	**0.6432**		**0.5935**	**0.5935**	**0.0000**	**1,778.2300**	**1,778.2300**	**0.5585**		**1,789.9580**

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	0.0593	0.0797	0.8328	2.6400e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5800e-003	0.0609		190.6230	190.6230	9.2700e-003		190.8176
Total	**0.0593**	**0.0797**	**0.8328**	**2.6400e-003**	**0.2236**	**1.7100e-003**	**0.2253**	**0.0593**	**1.5800e-003**	**0.0609**		**190.6230**	**190.6230**	**9.2700e-003**		**190.8176**

3.6 Architectural Coating - 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					
Archit. Coating	9.6207					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9057
Total	**9.8629**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9057**

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	0.0533	0.0718	0.7495	2.3800e-003	0.2012	1.5400e-003	0.2027	0.0534	1.4300e-003	0.0548		171.5607	171.5607	8.3400e-003		171.7359
Total	**0.0533**	**0.0718**	**0.7495**	**2.3800e-003**	**0.2012**	**1.5400e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**		**171.5607**	**171.5607**	**8.3400e-003**		**171.7359**

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	9.6207					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9057
Total	**9.8629**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9057**

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	0.0533	0.0718	0.7495	2.3800e-003	0.2012	1.5400e-003	0.2027	0.0534	1.4300e-003	0.0548		171.5607	171.5607	8.3400e-003		171.7359
Total	**0.0533**	**0.0718**	**0.7495**	**2.3800e-003**	**0.2012**	**1.5400e-003**	**0.2027**	**0.0534**	**1.4300e-003**	**0.0548**		**171.5607**	**171.5607**	**8.3400e-003**		**171.7359**

3.7 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					53.6248	0.0000	53.6248	8.1193	0.0000	8.1193			0.0000			0.0000
Off-Road	3.0964	31.0154	29.6099	0.0400		1.4899	1.4899		1.3865	1.3865		3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**3.0964**	**31.0154**	**29.6099**	**0.0400**	**53.6248**	**1.4899**	**55.1147**	**8.1193**	**1.3865**	**9.5058**		**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

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	3.9023	49.8430	50.5938	0.1812	4.3199	0.9773	5.2972	1.1831	0.8991	2.0822		17,032.3275	17,032.3275	0.1309		17,035.0765
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	0.0445	0.0598	0.6246	1.9800e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		142.9673	142.9673	6.9500e-003		143.1132
Total	**3.9467**	**49.9028**	**51.2184**	**0.1832**	**4.4875**	**0.9786**	**5.4661**	**1.2276**	**0.9003**	**2.1279**		**17,175.2947**	**17,175.2947**	**0.1379**		**17,178.1897**

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					24.1312	0.0000	24.1312	3.6537	0.0000	3.6537			0.0000			0.0000
Off-Road	3.0964	31.0154	29.6099	0.0400		1.4899	1.4899		1.3865	1.3865	0.0000	3,857.1420	3,857.1420	1.0933		3,880.1021
Total	**3.0964**	**31.0154**	**29.6099**	**0.0400**	**24.1312**	**1.4899**	**25.6210**	**3.6537**	**1.3865**	**5.0402**	**0.0000**	**3,857.1420**	**3,857.1420**	**1.0933**		**3,880.1021**

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	3.9023	49.8430	50.5938	0.1812	4.3199	0.9773	5.2972	1.1831	0.8991	2.0822		17,032.3275	17,032.3275	0.1309		17,035.0765
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	0.0445	0.0598	0.6246	1.9800e-003	0.1677	1.2800e-003	0.1690	0.0445	1.1900e-003	0.0457		142.9673	142.9673	6.9500e-003		143.1132
Total	**3.9467**	**49.9028**	**51.2184**	**0.1832**	**4.4875**	**0.9786**	**5.4661**	**1.2276**	**0.9003**	**2.1279**		**17,175.2947**	**17,175.2947**	**0.1379**		**17,178.1897**

Operational data removed because it was not used.