

Viejas Casino & Resort – Phase 3 Project Admin Draft TEIR

Appendix C

Air Quality Study

Prepared by Birdseye Planning Group

June 2016

VIEJAS CASINO AND RESORT PHASE 3 PROJECT

AIR QUALITY STUDY

Prepared for:

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June, 2016

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VIEJAS CASINO AND RESORT PHASE 3 PROJECT

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Viejas Casino and Resort Phase 3 Project San Diego County, California

AIR QUALITY STUDY

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Viejas Casino and Resort Phase 3 Project San Diego, California

AIR QUALITY STUDY

This report is an analysis of the potential air quality impacts associated with the proposed Viejas Casino and Resort Phase 3 Project on the Viejas Reservation located in unincorporated San Diego County. The report has been prepared by Birdseye Planning Group under contract to BRG Consultants, Inc. to support preparation of the Tribal Environmental Impact Report (TEIR). The TEIR will be prepared consistent with Tribal Gaming Compact Section 10.8 which defines the scope of activities required to evaluate off-Reservation impacts associated with activities occurring on the reservation. This study analyzes the potential for temporary air quality impacts associated with construction activity and long-term air quality impacts associated with operation of the proposed project.

PROJECT DESCRIPTION

The proposed Viejas Casino and Resort Phase 3 Project would construct and operate a third hotel, demolish and reconstruct a portion of the existing Casino and make interior renovations to the existing Casino. There is no net change in gaming space as a result of construction, reconstruction or renovations.

The proposed five-story hotel will accommodate up to 170 all-suite rooms plus one basement level for back of house functions including service kitchens and offices. Amenities include a full service spa with private pool located at the main level of the hotel and an outside hotel pool with bar service.

A portion of the existing Casino will be demolished and reconstructed in place and a portion will be renovated. Casino amenities include three restaurant/bar venues.

A new bus terminal and bus drop off area will be constructed near the existing Casino's northwest entry and a new casino walk will provide access to the proposed hotel. The valet will be relocated to the new hotel porte cochère.

The total project building area is approximately 215,000 square feet (sq. ft.) consisting of: 165,000 sq. ft. of hotel including a 9,000 sq. ft. spa; 20,000 sq. ft. of demolished and replaced in kind Casino; 20,000 sq. ft. of existing Casino renovation; 9,750 sq. ft. of restaurants/kitchen; and, a 1,900 sq. ft. bus depot. The total project landscaped area is approximately 200,000 sq. ft.

All new construction work, renovation and landscaping will occur on existing developed land (existing parking lot and existing Casino) within an approximately 280,000 sq. ft. project footprint area.

REGULATORY SETTING

Air pollutants are regulated at the national, State, and air basin level; each agency has a different degree of control. The United States Environmental Protection Agency (USEPA)

regulates at the national level; the California Air Resources Control Board (CARB) regulates at the State level; and the San Diego Air Pollution Control District (SDAPCD) regulates air quality in San Diego County.

The federal and state governments have been empowered by the federal and state Clean Air Acts to regulate the emission of airborne pollutants and have established ambient air quality standards for the protection of public health. The USEPA is the federal agency designated to administer national air quality regulations, while CARB is the state equivalent in the California Environmental Protection Agency. Local control over air quality management is provided by CARB through multi-county and county-level Air Pollution Control Districts (APCDs) (also referred to as Air Quality Management Districts). CARB establishes statewide air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. CARB has established 15 air basins statewide. The Viejas Reservation is located in the San Diego Air Basin (SDAB), which is under the jurisdiction of the SDAPCD.

California Air Resources Board

CARB, which became part of the California EPA (CalEPA) in 1991, is responsible for ensuring implementation of the California Clean Air Act (CCAA), meeting state requirements of the federal Clean Air Act and establishing California Ambient Air Quality Standards (CAAQs). It is also responsible for setting emission standards for vehicles sold in California and for other emission sources such as consumer products and certain off-road equipment. CARB also established passenger vehicle fuel specifications and oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level. The CCAA is administered by CARB at the state level and by the Air Quality Management Districts at the regional level. Both state and federal standards are summarized in Table 1. The federal "primary" standards have been established to protect the public health. The federal "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soil, water, visibility, materials, vegetation, and other aspects of the general welfare.

San Diego Air Pollution Control District

The SDAPCD was created to protect the public from the harmful effects of air pollution, achieve and maintain air quality standards, foster community involvement and develop and implement cost-effective programs that meet state and federal mandates while considering environmental and economic impacts.

Specifically, the SDAPCD is responsible for monitoring air quality and planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the district. Programs developed include air quality rules and regulations that regulate stationary source emissions, including area sources, point sources, and certain mobile source emissions. The SDAPCD is also responsible for establishing permitting requirements for stationary sources and ensuring that new, modified or relocated stationary sources do not create net emissions increases; and thus, are consistent with the region's air quality goals. The

**Table 1
 Current Federal and State Ambient Air Quality Standards**

Pollutant	Averaging Time	Federal Primary Standards	California Standard
Ozone	1-Hour	---	0.09 ppm
	8-Hour	0.070 µg/m ³	0.070 µg/m ³
PM ₁₀	24-Hour	150 µg/m ³	50 µg/m ³
	Annual	---	20 µg/m ³
PM _{2.5}	24-Hour	35 µg/m ³	---
	Annual	12 µg/m ³	12 µg/m ³
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	24-Hour	---	0.04 ppm
	3-Hour	0.5 ppm (secondary)	---
	1-Hour	0.075 ppm (primary)	0.25 ppm
Lead	30-Day Average	---	1.5 µg/m ³
	3-Month Average	0.15 µg/m ³	---

ppm = parts per million

µg/m³ = micrograms per cubic meter

Source: California Air Resources Board, <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf> May 4, 2016.

SDAPCD provides significance thresholds in Regulation II, Rule 20.2, Table 20-2-1. "AQIA Trigger Levels." These trigger levels were established for stationary sources of air pollution and are commonly used for environmental evaluations. The SDAPCD enforces air quality rules and regulations through a variety of means, including inspections, educational or training programs, or fines, when necessary.

State Implementation Plan/Air Quality Management Plan/Regional Air Quality Strategy

The federal Clean Air Act Amendments (CAAA) mandate that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. SIPs are comprehensive plans that describe how an area will attain national and state ambient air quality standards. SIPs are a compilation of new and previously submitted plans, programs (i.e., monitoring, modeling and permitting programs), district rules, state regulations and federal controls and include pollution control measures that demonstrate how the standards will be met through those measures.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB forwards SIP revisions to the USEPA for approval and publication in the Federal Register. Thus, the Regional Air Quality Strategy (RAQS) and Air Quality Management Plan (AQMP) prepared by SDAPCD and referenced herein become part of the SIP as the material relates to efforts ongoing in San Diego to achieve the national and state ambient air quality standards. The most recent SIP for San Diego County was submitted in 2012 requesting the USEPA redesignate the SDAB a maintenance area for the 1997 federal 8-hour ozone standard. The SIP was adopted by CARB in 2012 and is awaiting USEPA approval.

The San Diego RAQS was developed pursuant to California Clean Air Act (CCAA) requirements. The RAQS was initially adopted in 1991 and was updated in 1995, 1998, 2001, 2004, and most recently in 2009. The 2016 RAQS revisions are pending (SDAPCD, 2016). The RAQS can be found at the following: <http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/2009-RAQS.pdf>. The RAQS identifies feasible emission control measures to provide progress in San Diego County toward attaining the State ozone standard. The pollutants addressed in the RAQS are volatile organic compounds (VOC) and oxides of nitrogen (NO_x), precursors to the photochemical formation of ozone (the primary component of smog). The RAQS was initially adopted by the San Diego County Air Pollution Control Board on June 30, 1992, and amended on March 2, 1993, in response to ARB comments. At present, no attainment plan for particulate matter less than 10 microns in diameter (PM₁₀) or particulate matter less than 2.5 microns in diameter (PM_{2.5}) is required by the state regulations; however, SDAPCD has adopted measures to reduce particulate matter in San Diego County. These measures range from regulation against open burning to incentive programs that introduce cleaner technology. These measures can be found in a report titled "*Measures to Reduce Particulate Matter in San Diego County*" December 2005 and can be found at: <http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/PM-Measures.pdf>.

The RAQS relies on information from CARB and San Diego Association of Governments (SANDAG), including mobile and area source emissions, as well as information regarding projected growth in the County, to estimate future emissions and then determine strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and the County as part of the development of the individual General Plans. As such, projects that propose development consistent with the growth anticipated by the general plans would be consistent with the RAQS. In the event that a project would propose development which is less dense than anticipated within the General Plan, the project would likewise be consistent with the RAQS. If a project proposes development that is greater than that anticipated in the General Plan and SANDAG's growth projections, the project might conflict with the RAQS and SIP; and thus, have a potentially significant impact on air quality.

Under state law, the SDAPCD is required to prepare an AQMP for pollutants for which the SDAB is designated non-attainment. Each iteration of the SDAPCD's AQMP is an update of the

previous plan and has a 20-year horizon. Currently the SDAPCD has implemented a 2012 8-hour National Ozone Implementation/Maintenance Plan, a 2007 8-hour Ozone Plan, and a 2004 Carbon Monoxide Plan. These plans are available for download on the ARB website located at the following URL: <http://www.arb.ca.gov/planning/sip/planarea/sansip.htm>.

ENVIRONMENTAL SETTING

REGIONAL CLIMATE

The weather of San Diego County is profoundly influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average minimum temperature for January ranges from the mid-40s to the high-50s degrees Fahrenheit (4 to 15 degrees Celsius) across the county. July maximum temperatures average in the mid-80s to the high-90s degrees Fahrenheit (high-20s to the high-30s degrees Celsius). Most of the county's precipitation falls from November to April, with infrequent (approximately 10 percent) precipitation during the summer. The average seasonal precipitation along the coast is approximately 10 inches (254 millimeters); the amount increases with elevations as moist air is lifted over the mountains.

The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and drives the prevailing winds. Local terrain is often the dominant factor inland and winds in inland mountainous areas tend to blow upwards in the valleys during the day and down the hills and valleys at night.

In conjunction with the two characteristic onshore/offshore wind patterns, there are two types of temperature inversions (reversals of the normal decrease of temperature with height), which occur within the region that affect atmospheric dispersive capability and that act to degrade local air quality. In the summer, an inversion at about 1,100 to 2,500 feet (335 to 765 meters) is formed over the entire coastal plain when the warm air mass over land is undercut by a shallow layer of cool marine air flowing onshore. The prevailing sunny days in this region further exacerbate the smog problem by inducing additional adverse photochemical reactions. During the winter, a nightly shallow inversion layer (usually at about 800 feet or 243 meters) forms between the cooled air at the ground and the warmer air above, which can trap vehicular pollutants. The days of highest Carbon Monoxide (CO) concentrations occur during the winter months.

The predominant onshore/offshore wind pattern is sometimes interrupted by so-called Santa Ana conditions, when high pressure over the Nevada-Utah region overcomes the prevailing westerly wind direction. This draws strong, steady, hot, and dry winds from the east over the mountains and out to sea. Strong Santa Ana winds tend to blow pollutants out over the ocean, producing clear days. However, at the onset or breakdown of these conditions or if the Santa Ana is weak, prevailing northwesterly winds are reestablished which send polluted air from the Los Angeles basin ashore in the SDAB. "Smog transport from the South Coast Air Basin (the metropolitan areas of Los Angeles, Orange, San Bernardino, and Riverside counties) is a key factor on more than half the days San Diego exceeds clean air standards" (San Diego Air Pollution Control District, 2010).

Pollutants

The SDAPCD is required to monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in “attainment” or “non-attainment.” San Diego County is listed as a federal non-attainment area for ozone (eight hour) and a state non-attainment area for ozone (one hour and eight hour standards), PM₁₀ and PM_{2.5}. As shown in Table 2, the SDAB is in attainment for the state and federal standards for nitrogen dioxide, carbon monoxide, sulfur dioxide and lead. Characteristics of ozone, carbon monoxide, nitrogen dioxide, and suspended particulates are described below.

Table 2
San Diego County Attainment Status

Criteria Pollutant	Federal Designation	State Designation
Ozone (one hour)	Attainment*	Non-Attainment
Ozone (eight hour)	Non-Attainment	Non-Attainment
Carbon Monoxide	Attainment	Attainment
PM ₁₀	Unclassified**	Non-Attainment
PM _{2.5}	Attainment	Non-Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(no federal standard)	Attainment
Hydrogen Sulfide	(no federal standard)	Unclassified
Visibility	(no federal standard)	Unclassified

* The federal 1-hour standard of 12 ppm was in effect from 1979 through June 1, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans (SIPs).

** At the time of designation, if the available data does not support a designation of attainment or non-attainment, the area is designated as unclassifiable.

Source: San Diego Air Pollution Control District. June, 2016. <http://www.sandiegocounty.gov/content/sdc/apcd/en/air-quality-planning/attainment-status.html>

Ozone. Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and reactive organic gases (ROG)¹. Nitrogen oxides are formed during the combustion of fuels, while reactive organic compounds are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in concentrations considered serious between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

¹ Organic compound precursors of ozone are routinely described by a number of variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in a rather confusing array of acronyms: HC, THC (total hydrocarbons), RHC (reactive hydrocarbons), TOG (total organic gases), ROG (reactive organic gases), TOC (total organic compounds), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, from an air quality perspective

Carbon Monoxide. Carbon monoxide (CO) is a local pollutant that is found in high concentrations only near the source. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile exhaust. Elevated CO concentrations; therefore, are usually only found near areas of high traffic volumes operating in congested conditions. Carbon monoxide's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, carbon monoxide reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities.

Nitrogen Dioxide. Nitrogen dioxide (NO₂) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. Nitrogen dioxide is an acute irritant. A relationship between NO₂ and chronic pulmonary fibrosis may exist and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Nitrogen dioxide absorbs blue light and causes a reddish brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM₁₀ and acid rain.

Suspended Particulates. PM₁₀ is particulate matter measuring no more than 10 microns in diameter, while PM_{2.5} is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates and sulfates. Both PM₁₀ and PM_{2.5} are by-products of fuel combustion and wind erosion of soil and unpaved roads, and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates (PM_{2.5}) can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

SENSITIVE RECEPTORS

Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children; the elderly; persons engaged in strenuous work or exercise and people with cardiovascular and chronic respiratory diseases. The scope of this analysis focuses on potential impacts to off-Reservation sensitive receptors. The nearest receptors are single-family residences located on the south side of Willows Road approximately 1,750 feet southeast of the proposed construction area. Other sensitive receptors include single-family residences located

two groups are important: non-photochemically reactive in the lower atmosphere, or photochemically reactive in the lower atmosphere (HC, RHC, ROG, ROC, and VOC).

northwest approximately 1,400 feet from the construction area and along Willows Road approximately 4,500 west of the construction area.

Monitored Air Quality

The SDAPCD monitors air quality conditions at locations throughout the SDAB. For the purpose of this analysis, data from the Alpine-Victoria Drive monitoring station in east San Diego County were used to characterize existing ozone and PM_{2.5} conditions in the vicinity of the project site. Data from the El Cajon Redwood Avenue monitoring station are reported to characterize PM₁₀ concentrations. A summary of the data recorded at the Alpine-Victoria and El Cajon Redwood Avenue monitoring stations from 2013 through 2015 is presented in Table 3.

Table 3
Ambient Air Quality Data

Pollutant	2013	2014	2015
Ozone, ppm - Worst 8-Hour Average	0.083	0.082	0.085
Number of days of State 1-hour exceedances (>0.09 ppm)	27	30	31
Number of days of Federal exceedances (>0.070 ppm) ¹	6	10	11
Particulate Matter <10 microns, µg/m ³ Worst 24 Hours*	41.1	47	*
Number of samples of State exceedances (>50 µg/m ³)	0	-	-
Number of samples of Federal exceedances (>150 µg/m ³)	0	-	-
Particulate Matter <2.5 microns, µg/m ³ Worst 24 Hours	20.1	17.4	18.8
Number of samples of State exceedances (>50 µg/m ³)	-	-	-
Number of samples of Federal exceedances (>150 µg/m ³)	0	0	-

¹ – Federal O3 standard reduced from 75 ppm to 70 ppm in October, 2015

*No data

-Insufficient data to determine number of exceedance

O₃ and PM_{2.5} data from the Alpine Victoria Road monitoring station located at 2300 Victoria Drive

PM₁₀ data from the El Cajon monitoring station located at 1155 Redwood Avenue

Source: California Air Resources Board, 2013, 2014, 2015 Air Quality Data Summaries available at:

<http://www.arb.ca.gov/adam/topfour/topfourdisplay.php> Access May 31, 2016.

AIR QUALITY IMPACT ANALYSIS

METHODOLOGY AND SIGNIFICANCE THRESHOLDS

Air quality modeling was performed in general accordance with the methodologies outlined in the SDAPCD 2009 RAQS to identify both construction and operational emissions associated with the proposed project. All emissions were calculated using the California Emissions Estimator Model (CalEEMod) software version 2013.2.2 which incorporates current air emission data, planning methods and protocol approved by CARB.

Construction activities such as clearing, grading and excavation would generate diesel and dust emissions. The use of construction equipment would generate criteria air pollutant emissions. For modeling purposes, it was assumed that all construction equipment used would be diesel-powered. Construction emissions associated with development of the proposed project were quantified by estimating the types of equipment (including the number) that would be used on-site during each of the construction phases as well as off-site haul trips to remove demolition debris. Construction emissions are analyzed using the regional thresholds established by the SDAPCD and published under rule 20-2.

Operational emissions include mobile source emissions, energy emissions and area source emissions. Mobile source emissions are generated by motor vehicle trips associated with operation of the project. Emissions attributed to energy use include electricity and natural gas consumption for space and water heating. Area source emissions are generated by landscape maintenance equipment, use of consumer products and painting. To determine whether a regional air quality impact would occur, the increase in emissions would be compared with the SDAPCD recommended regional thresholds for operational emissions.

Thresholds of Significance. Based on Appendix B of the *Amended and Restated Tribal State Compact Between the State of California and the Viejas band of Kumeyaay Indians*, a project on the Reservation would have a significant air quality impact if it would:

- a) *Conflict with or obstruct implementation of the applicable air quality plan;*
- b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation;*
- c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);*
- d) *Expose off-Reservation sensitive receptors to substantial pollutant concentrations; or*
- e) *Create objectionable odors affecting a substantial number of people off-Reservation.*

The SDAPCD has established thresholds in Rule 20.2 for new or modified stationary sources. San Diego County's Guidelines for Determining Significance and Report Format and Content Requirements incorporate screening level thresholds from Rule 20.2 for use in all County related Air Quality Impact Assessments (AQIA) and for determining CEQA air quality impacts. These screening criteria can be used to demonstrate that a project's total emissions would not result in a significant impact. Further, because SDAPCD does not have AQIA threshold for Volatile Organic Compounds (VOCs), it is acceptable to use the Coachella Valley VOC threshold from South Coast Air Quality Management District. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the project's total air quality impacts are below the state and federal ambient air quality standards. These screening thresholds for construction and daily operations are shown below:

- 75 pounds per day of reactive organic gases (ROG) (ozone precursors)
- 250 pounds per day NO_x (ozone precursors)
- 550 pounds per day of CO
- 100 pounds per day of PM₁₀
- 55 pounds per day of PM_{2.5}

The following significance thresholds apply to long-term operational emissions:

- 75 pounds per day of ROG
- 250 pounds per day of NO_x
- 550 pounds per day of CO
- 250 pounds per day of Sulfur Oxide (SO_x)
- 100 pounds per day of PM₁₀
- 55 pounds per day of PM_{2.5}

CONSTRUCTION EMISSIONS

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM₁₀ and PM_{2.5}) from soil disturbance and exhaust emissions (NO_x and CO) from heavy construction vehicles. For the purpose of estimating emissions, it was assumed that approximately 5 acres would be disturbed during overall construction; however, 2 acres would be in active construction at any one time. Further, it was assumed that all improvements associated with the hotel/casino would occur within the footprint of the 170-room hotel/casino complex comprising approximately 280,000 square feet. Construction would generally consist of demolition, site preparation, grading, and construction of the proposed building, paving, and the application of architectural coating (painting).

The demolition, site preparation and grading phases would involve the greatest concentration of heavy equipment use and the highest potential for fugitive dust emissions. The project would be required to comply with SDAPCD Rules 52 and 54 which identify measures to reduce fugitive dust and is required to be implemented at all construction sites located within the SDAB. Therefore, the following conditions, which are required to reduce fugitive dust in compliance with SDAPCD Rules 52 and 54, were included in CalEEMod for site preparation and grading phases of construction.

1. **Minimization of Disturbance.** Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.
2. **Soil Treatment.** Construction contractors should treat all graded and excavated material, exposed soil areas and active portions of the construction site, including unpaved on-site roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least twice daily, preferably in the late morning and after work is done for the day.

3. **Soil Stabilization.** Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
4. **No Grading During High Winds.** Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).
5. **Street Sweeping.** Construction contractors should sweep all on-site driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

Further, the project would require the demolition of approximately 22,000 square feet of the existing casino building and the import of approximately 65,000 cubic yards of soil material for construction of building pads and related improvements. The demolition, site preparation and grading phases were assumed to occur from June through October, 2017 for modeling purposes. The export of demolition debris was assumed to occur during the demolition phase. Soil import was assumed to occur during both the site preparation (30,000 cubic yards) and grading (35,000 cubic yards) phases. Construction is assumed to be completed in December, 2018. In addition to SDAPCD Rules 52 and 54 requirements, emissions modeling also accounts for the use of low-VOC paint (150 g/L for non-flat coatings) as required by SDAPCD Rule 67. It was assumed painting would occur as the building is constructed rather than as a separate phase in the project schedule. Table 4 summarizes the estimated maximum daily emissions of pollutants occurring during the construction period.

As shown in Table 4, construction of the proposed project would not exceed the SDAPCD regional construction emission thresholds for daily emissions. Thus, the project would not conflict with the SIP, RAQS or AQMP, violate an air quality standard or contribute to an existing or projected violation, result in a cumulatively considerable increase in ozone or particulate matter emissions or expose off-Reservation receptors to substantial pollutant concentrations.

**Table 4
 Estimated Maximum Daily Construction Emissions**

Construction Phase	Maximum Emissions (lbs/day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
2017 Maximum lbs/day	11.5	131.1	99.2	33.1	19.1
2018 Maximum lbs/day	74.3	28.7	27.9	2.9	1.9
SDAPCD Screening Thresholds	75	250	550	100	55
Threshold Exceeded 2017	No	No	No	No	No
Threshold Exceeded 2018	No	No	No	No	No

See Appendix for CalEEMod ver. 2013.2.2 computer model output for the demolition of existing development. Summer emissions shown.

LONG-TERM REGIONAL (OPERATIONAL) IMPACTS

Regional Pollutant Emissions

Table 5 summarizes emissions associated with operation of the proposed project. Operational emissions include emissions from electricity consumption (energy sources), vehicle trips (mobile sources), area sources, landscape equipment and evaporative emissions as the structures are repainted over the life of the project. The majority of operational emissions are associated with vehicle trips to and from the project site. As shown in Table 5, the net change in emissions would not exceed the SDAPCD thresholds for ROG, NO_x, CO, SO_x, PM₁₀ or PM_{2.5}. Therefore, the project's regional air quality impacts (including impacts related to criteria pollutants, sensitive receptors and violations of air quality standards) would be less than significant.

**Table 5
 Estimated Operational Emissions**

	Estimated Emissions (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Proposed Project						
Area	6.5	0.01	0.01	0	0.01	0.01
Energy	0.44	4.03	3.38	0.02	0.3	0.3
Mobile	4.0	7.44	35.7	0.08	5.69	1.5
Maximum lbs/day	11.4	11.4	39.14	0.10	6.0	1.8
SDAPCD Thresholds	55	40	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

See Appendix for CalEEMod ver. 2013.2.2 computer model output for the demolition of existing development. Summer emissions shown.

Objectionable Odors

The proposed project would involve the use of diesel powered construction equipment. Diesel exhaust may be noticeable temporarily at adjacent properties; however, construction activities would be temporary. The project does not include industrial or agricultural uses that are typically associated with objectionable odors. Therefore, this impacts associated with objectionable odors (significance threshold e) would be less than significant.

Local Carbon Monoxide Emissions

As previously discussed, carbon monoxide is a colorless, odorless, poisonous gas that may be found in high concentrations near areas of high traffic volumes. CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. The SDAB is in attainment of state and federal CO standards. At the monitoring station located in El Cajon –Redwood Avenue, the station closest to project site that provides CO data, the maximum 8-hour average CO level recorded in 2012 (the last year data were recorded) was 1.86 parts per million (ppm). Concentrations are below the 9 ppm state and federal 8-hour standard.

Although CO is not a regional air quality concern in SDAB, elevated CO levels can occur at or near intersections that experience severe traffic congestion. A project's localized air quality impact is considered significant if the additional CO emissions resulting from the project create a "hot spot" where the California 1-hour standard of 20.0 ppm or the 8-hour standard of 9 ppm is exceeded. This can occur at severely congested intersections during cold winter temperatures. Screening for possible elevated CO levels is recommended for severely congested intersections experiencing levels of service E or F with project traffic where a significant project traffic impact may occur. The potential for CO hotspots is based on the University of California Davis CO Protocol defined in the Transportation Project-Level Carbon Monoxide Protocol Revised December, 1997 UCD-ITS-RR-97. Section 4.7 of the protocol provides specific criteria for performing a screening level CO review for projects within a CO attainment area. Specifically, project-related traffic that would worsen the LOS at intersections operating at LOS E or F, would be subject to a detailed evaluation. If not, no further review is necessary.

As discussed in the Traffic Impact Analysis (Linscott Law & Greenspan, June, 2016), during cumulative conditions, the signalized intersections surrounding the site would operate at LOS D or better with the project. The proposed project would have no adverse impact on traffic operations; thus, off-Reservation receptors would not be exposed to substantial pollutant concentrations (threshold d) related to CO hotspots. No further evaluation with respect to CO hotspots is required.

SIP/AQMP/RAQS Consistency

As noted, the RAQS relies on information from CARB and SANDAG, including projected growth in the County, mobile, area and all other source emissions to project future emissions and determine from that the strategies necessary for the reduction of stationary source emissions through regulatory controls. Projects that propose development that is consistent with the growth anticipated by the general plan is consistent with the SIP, AQMP and RAQS. The proposed project involves the construction/expansion of a casino/hotel within

unincorporated San Diego County. The project would not add housing; however, new jobs would be created. Based on the type of jobs created, it is assumed that these would be filled by the local labor force rather than require relocation of workers from outside the region. Therefore, operation of the proposed project would not increase the local population; and thus, would be consistent with the SIP, AQMP and RAQS and significance threshold (a) (air quality plans) referenced above. Impacts related to this threshold would be less than significant.

REFERENCES

- California Air Resources Board. *Ambient Air Quality Standards*. Updated May, 2016.
<http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>
- California Air Resources Board, *San Diego Air Quality Management Plans*, January 10, 2013
<http://www.arb.ca.gov/planning/sip/planarea/sansip.htm>
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<http://www.arb.ca.gov/adam/topfour/topfour1.php>. Accessed May 31, 2016.
- California Emission Estimator Model Users Guide. July, 2013.
- County of San Diego, *Guidelines for Determining Significance and Report Format and Content Requirements*, Department of Planning and Land Use, Department of Public Works, March 19, 2007
- Linscott Law & Greenspan, *Viejas Phase III Traffic Impact Assessment*, June, 2016
- San Diego Air Pollution Control District. *Attainment Status*. January 2010.
<http://www.sdapcd.org/info/facts/attain.pdf>
- San Diego Air Pollution Control District. *Smog in San Diego Fact Sheet*. January, 2010.
- San Diego Air Pollution Control District. *Regional Air Quality Strategy*, April 2009.
<http://www.sdapcd.org/planning/2009-RAQS.pdf>
- University of California Davis, *Transportation Project-Level Carbon Monoxide Protocol Revised*, December, 1997

Appendix A

*CalEEMod Air Emission Model Results –
Summer Emissions for Construction and Operation*

Viejas Casino Phase III
San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	170.00	Room	5.67	246,840.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2018
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	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 - Schedule is approximate and based on an 18 month duration

Off-road Equipment - One excavator assumed during demolition based on building size.

Off-road Equipment -

Off-road Equipment -

Demolition -

Grading - Area of disturbance assumes the 5 acre site would be affected during site preparation.

Two acres would be disturbed at any time during grading.

Fill import assumed to occur over both site preparation and grading phases.

Architectural Coating - No residential painting would be required. This value was set to zero.

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	250.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	0.00
tblConstructionPhase	NumDays	20.00	81.00
tblConstructionPhase	NumDays	230.00	261.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	20.00	16.00
tblConstructionPhase	NumDays	10.00	35.00
tblConstructionPhase	PhaseEndDate	2/21/2019	12/7/2018
tblConstructionPhase	PhaseEndDate	11/20/2017	10/31/2017
tblConstructionPhase	PhaseStartDate	11/1/2018	8/1/2018
tblConstructionPhase	PhaseStartDate	8/19/2017	8/1/2017
tblConstructionPhase	PhaseStartDate	12/8/2018	12/10/2018
tblConstructionPhase	PhaseStartDate	7/1/2017	7/3/2017
tblGrading	AcresOfGrading	33.00	2.00
tblGrading	AcresOfGrading	0.00	5.00
tblGrading	MaterialImported	0.00	35,000.00
tblGrading	MaterialImported	0.00	30,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2018

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	6.8513	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0372	0.0372	1.0000e-004		0.0394
Energy	0.4438	4.0344	3.3889	0.0242		0.3066	0.3066		0.3066	0.3066		4,841.3260	4,841.3260	0.0928	0.0888	4,870.7895
Mobile	4.0985	7.4493	35.7425	0.0841	5.5971	0.1006	5.6977	1.4941	0.0927	1.5868		6,871.5015	6,871.5015	0.2751		6,877.2788
Total	11.3936	11.4839	39.1490	0.1084	5.5971	0.4073	6.0044	1.4941	0.3994	1.8935		11,712.8647	11,712.8647	0.3680	0.0888	11,748.1077

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	6.8513	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0372	0.0372	1.0000e-004		0.0394
Energy	0.4438	4.0344	3.3889	0.0242		0.3066	0.3066		0.3066	0.3066		4,841.3260	4,841.3260	0.0928	0.0888	4,870.7895
Mobile	4.0985	7.4493	35.7425	0.0841	5.5971	0.1006	5.6977	1.4941	0.0927	1.5868		6,871.5015	6,871.5015	0.2751		6,877.2788
Total	11.3936	11.4839	39.1490	0.1084	5.5971	0.4073	6.0044	1.4941	0.3994	1.8935		11,712.8647	11,712.8647	0.3680	0.0888	11,748.1077

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2017	6/30/2017	5	22	
2	Site Preparation	Site Preparation	7/3/2017	8/18/2017	5	35	
3	Grading	Grading	8/1/2017	10/31/2017	5	66	
4	Building Construction	Building Construction	11/1/2017	10/31/2018	5	261	
5	Architectural Coating	Architectural Coating	8/1/2018	12/7/2018	5	81	
6	Paving	Paving	12/10/2018	12/31/2018	5	16	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 2

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 370,260; Non-Residential Outdoor: 123,420 (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	1	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	4	10.00	0.00	150.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	3,750.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	4,375.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	104.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	0.00	0.00	10.80	7.30	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					1.4950	0.0000	1.4950	0.2264	0.0000	0.2264			0.0000			0.0000
Off-Road	3.3238	34.6634	27.0513	0.0293		1.7299	1.7299		1.6161	1.6161		2,953.9438	2,953.9438	0.7756		2,970.2322
Total	3.3238	34.6634	27.0513	0.0293	1.4950	1.7299	3.2249	0.2264	1.6161	1.8425		2,953.9438	2,953.9438	0.7756		2,970.2322

3.2 Demolition - 2017

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	0.1252	1.7038	1.3008	5.0900e-003	0.1188	0.0229	0.1418	0.0325	0.0211	0.0536		505.1194	505.1194	3.5000e-003		505.1928
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	0.0318	0.0373	0.4046	1.0400e-003	0.0822	6.0000e-004	0.0827	0.0218	5.5000e-004	0.0223		83.5017	83.5017	4.0300e-003		83.5863
Total	0.1569	1.7410	1.7054	6.1300e-003	0.2010	0.0235	0.2245	0.0543	0.0217	0.0760		588.6211	588.6211	7.5300e-003		588.7791

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					0.6727	0.0000	0.6727	0.1019	0.0000	0.1019			0.0000			0.0000
Off-Road	3.3238	34.6634	27.0513	0.0293		1.7299	1.7299		1.6161	1.6161	0.0000	2,953.9438	2,953.9438	0.7756		2,970.2322
Total	3.3238	34.6634	27.0513	0.0293	0.6727	1.7299	2.4027	0.1019	1.6161	1.7180	0.0000	2,953.9438	2,953.9438	0.7756		2,970.2322

3.2 Demolition - 2017

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	0.1252	1.7038	1.3008	5.0900e-003	0.1188	0.0229	0.1418	0.0325	0.0211	0.0536		505.1194	505.1194	3.5000e-003		505.1928
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	0.0318	0.0373	0.4046	1.0400e-003	0.0822	6.0000e-004	0.0827	0.0218	5.5000e-004	0.0223		83.5017	83.5017	4.0300e-003		83.5863
Total	0.1569	1.7410	1.7054	6.1300e-003	0.2010	0.0235	0.2245	0.0543	0.0217	0.0760		588.6211	588.6211	7.5300e-003		588.7791

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					18.3382	0.0000	18.3382	9.9653	0.0000	9.9653			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	18.3382	2.7542	21.0924	9.9653	2.5339	12.4992		4,003.0859	4,003.0859	1.2265		4,028.8432

3.3 Site Preparation - 2017

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	1.9670	26.7734	20.4404	0.0800	1.8670	0.3605	2.2275	0.5112	0.3316	0.8429		7,937.5903	7,937.5903	0.0549		7,938.7440
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	0.0572	0.0671	0.7284	1.8700e-003	0.1479	1.0800e-003	0.1489	0.0392	9.9000e-004	0.0402		150.3031	150.3031	7.2500e-003		150.4553
Total	2.0242	26.8405	21.1688	0.0819	2.0149	0.3616	2.3765	0.5504	0.3326	0.8831		8,087.8934	8,087.8934	0.0622		8,089.1994

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					8.2522	0.0000	8.2522	4.4844	0.0000	4.4844			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	8.2522	2.7542	11.0064	4.4844	2.5339	7.0183	0.0000	4,003.0859	4,003.0859	1.2265		4,028.8432

3.3 Site Preparation - 2017

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	1.9670	26.7734	20.4404	0.0800	1.8670	0.3605	2.2275	0.5112	0.3316	0.8429		7,937.5903	7,937.5903	0.0549		7,938.7440
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	0.0572	0.0671	0.7284	1.8700e-003	0.1479	1.0800e-003	0.1489	0.0392	9.9000e-004	0.0402		150.3031	150.3031	7.2500e-003		150.4553
Total	2.0242	26.8405	21.1688	0.0819	2.0149	0.3616	2.3765	0.5504	0.3326	0.8831		8,087.8934	8,087.8934	0.0622		8,089.1994

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					6.1287	0.0000	6.1287	3.3250	0.0000	3.3250			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	6.1287	2.0388	8.1676	3.3250	1.8757	5.2007		3,043.6667	3,043.6667	0.9326		3,063.2507

3.4 Grading - 2017

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	1.2170	16.5644	12.6462	0.0495	1.1551	0.2231	1.3781	0.3163	0.2052	0.5215		4,910.8829	4,910.8829	0.0340		4,911.5967
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	0.0477	0.0559	0.6070	1.5600e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		125.2526	125.2526	6.0400e-003		125.3794
Total	1.2646	16.6203	13.2532	0.0511	1.2783	0.2240	1.5023	0.3490	0.2060	0.5550		5,036.1355	5,036.1355	0.0400		5,036.9761

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					2.7579	0.0000	2.7579	1.4962	0.0000	1.4962			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	2.7579	2.0388	4.7967	1.4962	1.8757	3.3719	0.0000	3,043.6667	3,043.6667	0.9326		3,063.2507

3.4 Grading - 2017

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	1.2170	16.5644	12.6462	0.0495	1.1551	0.2231	1.3781	0.3163	0.2052	0.5215		4,910.8829	4,910.8829	0.0340		4,911.5967
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	0.0477	0.0559	0.6070	1.5600e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		125.2526	125.2526	6.0400e-003		125.3794
Total	1.2646	16.6203	13.2532	0.0511	1.2783	0.2240	1.5023	0.3490	0.2060	0.5550		5,036.1355	5,036.1355	0.0400		5,036.9761

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

3.5 Building Construction - 2017

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	0.3825	3.3900	4.1765	9.5000e-003	0.2655	0.0498	0.3153	0.0758	0.0458	0.1215		938.2315	938.2315	6.9700e-003			938.3779
Worker	0.3304	0.3877	4.2083	0.0108	0.8543	6.2100e-003	0.8606	0.2266	5.7300e-003	0.2323		868.4181	868.4181	0.0419			869.2975
Total	0.7129	3.7777	8.3848	0.0203	1.1199	0.0560	1.1758	0.3024	0.0515	0.3539		1,806.6497	1,806.6497	0.0488			1,807.6754

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

3.5 Building Construction - 2017

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	0.3825	3.3900	4.1765	9.5000e-003	0.2655	0.0498	0.3153	0.0758	0.0458	0.1215		938.2315	938.2315	6.9700e-003			938.3779
Worker	0.3304	0.3877	4.2083	0.0108	0.8543	6.2100e-003	0.8606	0.2266	5.7300e-003	0.2323		868.4181	868.4181	0.0419			869.2975
Total	0.7129	3.7777	8.3848	0.0203	1.1199	0.0560	1.1758	0.3024	0.0515	0.3539		1,806.6497	1,806.6497	0.0488			1,807.6754

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

3.5 Building Construction - 2018

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	0.3600	3.0621	3.9799	9.4900e-003	0.2655	0.0462	0.3117	0.0757	0.0425	0.1182		922.1205	922.1205	6.8300e-003			922.2640
Worker	0.3012	0.3538	3.8199	0.0108	0.8543	6.0900e-003	0.8604	0.2266	5.6400e-003	0.2323		835.8441	835.8441	0.0390			836.6620
Total	0.6612	3.4159	7.7998	0.0203	1.1198	0.0523	1.1721	0.3024	0.0481	0.3505		1,757.9646	1,757.9646	0.0458			1,758.9260

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

3.5 Building Construction - 2018

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	0.3600	3.0621	3.9799	9.4900e-003	0.2655	0.0462	0.3117	0.0757	0.0425	0.1182		922.1205	922.1205	6.8300e-003			922.2640
Worker	0.3012	0.3538	3.8199	0.0108	0.8543	6.0900e-003	0.8604	0.2266	5.6400e-003	0.2323		835.8441	835.8441	0.0390			836.6620
Total	0.6612	3.4159	7.7998	0.0203	1.1198	0.0523	1.1721	0.3024	0.0481	0.3505		1,757.9646	1,757.9646	0.0458			1,758.9260

3.6 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	70.6237					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	70.9223	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267			282.0102

3.6 Architectural Coating - 2018

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	0.0608	0.0714	0.7713	2.1900e-003	0.1725	1.2300e-003	0.1737	0.0458	1.1400e-003	0.0469		168.7762	168.7762	7.8600e-003			168.9414
Total	0.0608	0.0714	0.7713	2.1900e-003	0.1725	1.2300e-003	0.1737	0.0458	1.1400e-003	0.0469		168.7762	168.7762	7.8600e-003			168.9414

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	70.6237					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	70.9223	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

3.6 Architectural Coating - 2018

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	0.0608	0.0714	0.7713	2.1900e-003	0.1725	1.2300e-003	0.1737	0.0458	1.1400e-003	0.0469		168.7762	168.7762	7.8600e-003			168.9414
Total	0.0608	0.0714	0.7713	2.1900e-003	0.1725	1.2300e-003	0.1737	0.0458	1.1400e-003	0.0469		168.7762	168.7762	7.8600e-003			168.9414

3.7 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

3.7 Paving - 2018

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	0.0435	0.0510	0.5510	1.5600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		120.5544	120.5544	5.6200e-003			120.6724
Total	0.0435	0.0510	0.5510	1.5600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		120.5544	120.5544	5.6200e-003			120.6724

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

3.7 Paving - 2018

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	0.0435	0.0510	0.5510	1.5600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		120.5544	120.5544	5.6200e-003			120.6724
Total	0.0435	0.0510	0.5510	1.5600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		120.5544	120.5544	5.6200e-003			120.6724

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	4.0985	7.4493	35.7425	0.0841	5.5971	0.1006	5.6977	1.4941	0.0927	1.5868		6,871.5015	6,871.5015	0.2751			6,877.2788
Unmitigated	4.0985	7.4493	35.7425	0.0841	5.5971	0.1006	5.6977	1.4941	0.0927	1.5868		6,871.5015	6,871.5015	0.2751			6,877.2788

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,388.90	1,392.30	1011.50	2,537,303	2,537,303
Total	1,388.90	1,392.30	1,011.50	2,537,303	2,537,303

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511818	0.073499	0.191840	0.131575	0.036332	0.005186	0.012677	0.022513	0.001864	0.002072	0.006564	0.000601	0.003458

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.4438	4.0344	3.3889	0.0242		0.3066	0.3066		0.3066	0.3066		4,841.3260	4,841.3260	0.0928	0.0888	4,870.7895
NaturalGas Unmitigated	0.4438	4.0344	3.3889	0.0242		0.3066	0.3066		0.3066	0.3066		4,841.3260	4,841.3260	0.0928	0.0888	4,870.7895

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					
Hotel	41151.3	0.4438	4.0344	3.3889	0.0242		0.3066	0.3066		0.3066	0.3066		4,841.3260	4,841.3260	0.0928	0.0888	4,870.7895
Total		0.4438	4.0344	3.3889	0.0242		0.3066	0.3066		0.3066	0.3066		4,841.3260	4,841.3260	0.0928	0.0888	4,870.7895

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					
Hotel	41.1513	0.4438	4.0344	3.3889	0.0242		0.3066	0.3066		0.3066	0.3066		4,841.3260	4,841.3260	0.0928	0.0888	4,870.7895
Total		0.4438	4.0344	3.3889	0.0242		0.3066	0.3066		0.3066	0.3066		4,841.3260	4,841.3260	0.0928	0.0888	4,870.7895

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	6.8513	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0372	0.0372	1.0000e-004		0.0394
Unmitigated	6.8513	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0372	0.0372	1.0000e-004		0.0394

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	1.5673					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2824					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6800e-003	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0372	0.0372	1.0000e-004		0.0394
Total	6.8513	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0372	0.0372	1.0000e-004		0.0394

6.2 Area by SubCategory

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	5.2824					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6800e-003	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0372	0.0372	1.0000e-004		0.0394
Architectural Coating	1.5673					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	6.8513	1.6000e-004	0.0176	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0372	0.0372	1.0000e-004		0.0394

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

9.0 Operational Offroad

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