City of Carson

South Bay Pavilion Movie Theater Project

Air Quality Study

April 2013

rincon

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April 4, 2013
Project No. 13-00852

Ms. Joy O'Brien
Vintage Real Estate, LLC
11611 San Vicente Boulevard, 10th Floor
Los Angeles, CA 90049

AIR QUALITY and GREENHOUSE GAS STUDY
South Bay Pavilion Movie Theater Project
Carson, California

Dear Ms. O'Brien:

Rincon Consultants, Inc. is pleased to submit the attached Air Quality and Greenhouse Gas Study for the proposed South Bay Pavilion Movie Theater Project in Carson, California. The proposed project would result in temporary reactive organic gas (ROG) emissions that would exceed the recommended South Coast Air Quality Management District (SCAQMD) threshold. Mitigation was provided, limiting the total area to which architectural coatings could be applied on a daily basis during construction. This mitigation would reduce the project's temporary regional air quality impacts to a less than significant level. The proposed project would not exceed regional SCAQMD significance thresholds for criteria air pollutants or the recommended GHG emissions significance threshold. As such, impacts related to air quality and greenhouse gas emissions as a result of the proposed project would be less than significant. If you have any questions regarding this study or if we can provide you with other environmental consulting services, please feel free to contact us.

Sincerely,

RINCON CONSULTANTS, INC.

Chris Bersbach
Associate Environmental Planner

Joe Power, AICP
Principal

South Bay Pavilion Movie Theater Project

Air Quality Study

Prepared for:

Vintage Real Estate, LLC
11611 San Vicente Boulevard, 10th Floor
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Air Quality and Greenhouse Gas Study

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SOUTH BAY PAVILION MOVIE THEATER PROJECT
CARSON, LOS ANGELES COUNTY
AIR QUALITY and GREENHOUSE GAS STUDY

This report is an analysis of the potential air quality and greenhouse gas emissions impacts of the proposed South Bay Pavilion Movie Theater Project in the City of Carson. The report has been prepared by Rincon Consultants, Inc. under contract to Vintage Real Estate, LLC for use by the City of Carson, in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). The purpose of this study is to analyze the proposed project's air quality and greenhouse gas emissions and associated impacts. This study analyzes the potential for both temporary impacts relating to both temporary construction activity and long-term impacts associated with operation of the proposed project. The analysis herein is based partially on the project traffic study prepared by Linscott, Law & Greenspan, Engineers (March 26, 2013).

PROJECT DESCRIPTION

The project site is located at 20700 Avalon Boulevard at South Bay Pavilion in the City of Carson, California. South Bay Pavilion is an existing regional mall with approximately 1,013,023 square feet (SF) of floor area anchored by Target, IKEA, Sears and JC Penney.

The Movie Theater project would involve the demolition of 41,433 square feet of space in the existing mall that is now occupied by Chuck E. Cheese's and New Millennium Secondary School and the construction of a 55,482 square foot movie theater with 14 screens and 2,474 seats in the same location, for a net increase of 14,049 square feet of development. The additional 14,049 square feet would be built along the east side of the building. Parking for the project would be provided via the existing surplus for the entire South Bay Pavilion, which totals 4,640 spaces; however, the proposed project would also modify the parking lot to add 72 new parking spaces.

There are multiple ingress and egress locations for South Bay Pavilion; however, primary project access is expected to occur at the signalized driveways along Avalon Boulevard at Carson Plaza Drive and Carson Mall. Project-related activity at the other driveways is expected to be nominal. The South Bay Pavilion is also located adjacent to a stop that includes all Carson Circuit Transit System routes, as well as regional transit lines, such as the Los Angeles Metropolitan Transit Authority (MTA) line.

SETTING

Air Pollution Regulation

The federal and state governments have been empowered by the federal and state Clean Air Acts to regulate emissions of airborne pollutants and have established ambient air quality standards for the protection of public health. The EPA is the federal agency designated to administer air quality regulation, while the California Air Resources Board (ARB) is the state equivalent in California. Federal and state standards have been established for six criteria

pollutants, including ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulates less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$), and lead (Pb). California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Table 1 lists the current federal and state standards for each of these pollutants. Standards have been set at levels intended to be protective of public health. California standards are more restrictive than federal standards for each of these pollutants except lead and the eight-hour average for CO.

Local control in air quality management is provided by the ARB through county-level or regional (multi-county) APCDs. The ARB establishes air quality standards and is responsible for control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. The ARB has established 14 air basins statewide. Carson is located within the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD 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." The Basin, in which the project area is located, is a non-attainment area for both the federal and state standards for ozone and PM_{10}. The Basin is in attainment for the state and federal standards for nitrogen dioxide, and for carbon monoxide. Characteristics of ozone, carbon monoxide, nitrogen dioxide, and suspended particulates are described below.

Ozone. Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_X) and reactive organic gases (ROG). 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.

Carbon Monoxide. Carbon monoxide 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 traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes. 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 (NO_2) 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 NO_2, creating the mixture of NO and NO_2 commonly called NO_X. Nitrogen dioxide is an acute irritant. A relationship between NO_2 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 PM_{10} and acid rain.

Suspended Particulates. PM_{10} 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 PM_{10} 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.

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	0.075 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	15 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/m^3 = micrograms per cubic meter
Source: California Air Resources Board, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, last updated June 7, 2012.

Local Air Quality

California's weather is heavily influenced by a semi-permanent high-pressure system west of the Pacific. The Mediterranean climate of the region and the coastal influence produce moderate temperatures year round, with rainfall concentrated in the winter months. The sea breeze, which is the predominant wind, is a primary factor in creating this climate and typically flows from the west-southwest in a day-night cycle with speeds generally ranging from 5 to 15 miles per hour. The sea breeze maintains the cool temperatures and clean air circulation and generally prevents warmer inland temperatures and air pollution from permeating into the peninsula, except under certain seasonal conditions such as the offshore Santa Ana winds.

The City of Carson is located within the South Coast Air Basin. Air quality in the Basin is affected by the emission sources located in the region, as well as by three natural factors:

- A **natural terrain barrier** to emission dispersion north and east of the metropolitan Los Angeles area.
- A **dominant on-shore flow** transports and disperses air pollution by driving air pollution originating in industrial areas along the coast toward the natural terrain barrier, limiting horizontal dispersion. The effect of this flow is a gradual degradation of air quality from coastal to inland areas. The greatest impacts can be seen in the San Gabriel Valley and near Riverside at the foot of the San Gabriel Mountains.
- **Atmospheric inversions** limit dispersion of air pollution on a vertical scale. Temperature typically decreases with altitude. However, under inversion conditions temperature begins to increase at some height above the ground. This height is called the base of the inversion. The temperature increase continues through an unspecified layer after which the temperature change with height returns to standard conditions. The inversion layer is typically very stable and acts as a cap to the vertical dispersions of pollutants.

The SCAQMD operates a network of 34 ambient air monitoring stations throughout the South Coast Basin. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the California and federal standards. The air quality monitoring station located nearest to the project site is the North Long Beach station, located approximately 4 miles east of the project site. The second-closest station is the South Long Beach monitoring station, located approximately 6 miles southeast of the project site.

Table 2 indicates the number of days that each of the standards has been exceeded at the closest monitoring station in North Long Beach.

Table 2
Ambient Air Quality Data

Pollutant	2009	2010	2011
Ozone, ppm - Worst Hour	0.089	0.101	0.073
Number of days of State exceedances (>0.09 ppm)	0	0	0
Number of days of Federal exceedances (>0.12 ppm)	0	1	0
Carbon Monoxide, ppm - Worst 8 Hours	2.17	2.08	2.56
Number of days of State/Federal exceedances (>9.0 ppm)	0	0	0
Nitrogen Dioxide, ppm - Worst Hour	0.111	0.093	0.106
Number of days of State exceedances (>0.25 ppm)	0	0	0
Particulate Matter <10 microns, $\mu g/m^3$ Worst 24 Hours	76.9	44.0	43.0
Number of samples of State exceedances (>50 $\mu g/m^3$)	3	0	0
Number of samples of Federal exceedances (>150 $\mu g/m^3$)	0	0	0
Particulate Matter <2.5 microns, $\mu g/m^3$ Worst 24 Hours	63.0	35.0	39.7
Number of samples of Federal exceedances (>35 $\mu g/m^3$)	6	0	2

North Long Beach Monitoring Station Monitoring Station
Source: California Air Resources Board, 2009, 2010, 2011 Annual Air Quality Data Summaries available at http://www.arb.ca.gov/adam/topfour/topfour1.php

As shown, the ozone concentration exceeded federal standards once in 2010. The PM_{10} concentration exceeded the state standards three times in 2009. The $PM_{2.5}$ concentration exceeded federal standards on six days in 2009 and two days in 2011. No exceedances of either the state or federal standards for NO_2 or CO have occurred in the last three years. Background CO levels are generally low.

Air Quality Management Plan

Under state law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the District is in non-compliance. The SCAQMD updates the plan every three years. Each iteration of the SCAQMD's Air Quality Management Plan (AQMP) is an update of the previous plan and has a 20-year horizon. SCAQMD staff is currently developing the 2015 AQMP. The 2012 AQMP incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2007 AQMP. The SCAQMD adopted the 2012 AQMP on December 7, 2012.

The 2012 AQMP was prepared to ensure continued progress towards clean air and comply with state and federal requirements. This AQMP builds upon the approaches taken in the 2007 AQMP for the South Coast Air Basin for the attainment of State and federal ozone air quality standards. The 2012 AQMP incorporates the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for applicable source

categories. The 2012 AQMP also includes the new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. The 2012 AQMP is incorporated by reference and available to download at http://www.aqmd.gov/aqmp/07aqmp/index.html.

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 under 14; the elderly over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases. The majority of sensitive receptor locations are therefore schools and hospitals. Nearby sensitive receptors include multi-family residences approximately 650 feet east of the proposed movie theater site and approximately 100 feet east of the proposed parking lot improvements; single-family residences approximately 765 feet north of the proposed movie theater site and approximately 180 feet north of the proposed parking lot improvements; a church located approximately 775 feet east of the proposed movie theater site and approximately 710 feet south of the proposed parking lot improvements; and an ambulance center approximately 1,075 feet east of the movie theater site and approximately 900 feet southeast of the parking lot improvements.

AIR QUALITY IMPACT ANALYSIS

Methodology and Significance Thresholds

This air quality analysis conforms to the methodologies recommended in the SCAQMD's *CEQA Air Quality Handbook* (1993). The handbook includes thresholds for emissions associated with both construction and operation of proposed projects.

The demolition and construction activities associated with development would generate diesel emissions and dust. Construction equipment that would generate criteria air pollutants includes excavators, graders, dump trucks, and loaders. Some of this equipment would be used during demolition and grading activities, as well as when structures are constructed. It is assumed that all construction equipment used would be diesel-powered. The regional construction emissions associated with development of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod) software developed for the SCAQMD by estimating the types and number of pieces of equipment that would be used on-site during each of the construction phases. These construction emissions are analyzed using the regional thresholds established by the SCAQMD and published in the *CEQA Air Quality Handbook*, as well as Localized Significance Thresholds (LSTs), based on SCAQMD's *Final Localized Significant (LST) Thresholds Methodology*.

Operational emissions associated with on-site development were estimated using CalEEMod. Operational emissions include mobile source emissions, energy emissions, and area source emissions. Mobile source emissions are generated by the increase in motor vehicle trips to and from the project site associated with operation of on-site development. 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, consumer products and

architectural coating. To determine whether a regional air quality impact would occur, the increase in emissions would be compared with the SCAQMD's recommended regional thresholds for operational emissions.

Regional Thresholds. Based on Appendix G of the *CEQA Guidelines*, a project would have a significant impact to air quality 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 sensitive receptors to substantial pollutant concentrations; or
e) Create objectionable odors affecting a substantial number of people.

The SCAQMD has developed specific quantitative thresholds that apply to projects within the South Coast Air Basin. The SCAQMD has established the following significance thresholds for short-term construction activities within the South Coast Air Basin:

- *75 pounds per day of ROG*
- *100 pounds per day of NO_X*
- *550 pounds per day of CO*
- *150 pounds per day of PM_{10}*
- *55 pounds per day of $PM_{2.5}$*

The SCAQMD has also established the following significance thresholds for long-term operational emissions within the South Coast Air Basin:

- *55 pounds per day of ROG*
- *55 pounds per day of NO_X*
- *550 pounds per day of CO*
- *150 pounds per day of SO_X*
- *150 pounds per day of PM_{10}*
- *55 pounds per day of $PM_{2.5}$*

Localized Significance Thresholds. In addition to the above thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the *CEQA Air Quality Handbook*. LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size, distance to the sensitive receptor, etc. However, LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation.

According to the SCAQMD's publication *Final Localized Significant (LST) Thresholds Methodology*, the use of LSTs is voluntary, to be implemented at the discretion of local agencies.

The project site is located in Source Receptor Area 4 (SRA-4). LSTs have been developed for NO_X, CO, PM_{10} and $PM_{2.5}$. LSTs are not applicable to mobile sources such as cars on a roadway (SCAQMD, June 2003). As such, LSTs for operational emissions would not apply to on-site development, as the majority of emissions would be generated by additional vehicle traffic on area roadways. LSTs have been developed for emissions within construction areas up to five acres in size. The SCAQMD provides lookup tables for project sites that measure one, two, or five acres. The project involves 1.3 acres of on-site construction, plus additional parking lot improvements; therefore, this analysis uses the two-acre LSTs, which represent a conservative approach to analyzing localized construction emissions. The applicable LSTs for construction are shown in Table 3.

Table 3
SCAQMD LSTs for Construction

Pollutant	Allowable emissions as a function of receptor distance in feet from a two-acre site in SRA-4 (lbs/day)				
	25 Feet	50 Feet	100 Feet	200 Feet	500 Feet
Gradual conversion of NO_x to NO_2	82	80	87	106	151
CO	842	1,158	1,611	2,869	8,253
PM_{10}	7	21	37	70	167
$PM_{2.5}$	5	7	13	30	101

Source: SCAQMD, October 2009, http://www.aqmd.gov/CEQA/handbook/LST/appC.pdf, accessed online March 2013.

Construction Impacts

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction vehicles, in addition to ROG that would be released during the drying phase upon application of architectural coatings. Construction would generally consist of demolition, site preparation, grading, construction of the proposed buildings, paving, and architectural coating.

The site preparation phase would involve the greatest amount of heavy equipment and the most substantial generation of fugitive dust. This analysis assumes that cut and fill soil would be balanced on the project site, and that no soil import or export would be required. The project would be required to comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located within the South Coast Air Basin. Therefore, the following conditions, which are required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod for the 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.

Construction emissions modeling for demolition, site preparation, grading, building construction, paving, and application of architectural coatings is based on the proposed development and phasing. Based on CalEEMod default values, construction of the proposed project is estimated to take 246 days, beginning in January 2014 and ending in December 2014. In addition to the SCAQMD Rule 403 requirements, the emissions modeling also accounts for the use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113. Table 4 summarizes the estimated maximum daily emissions of pollutants during each of the major phases of construction.

Table 4
Estimated Maximum Daily Construction Emissions

Construction Phase	Maximum Emissions (lbs/day)				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
2014 Maximum lbs/day	77.55	40.54	26.06	8.88	4.37
Overall Maximum lbs/day	**77.55**	**40.54**	**26.06**	**8.88**	**4.37**
SCAQMD Regional Thresholds	*75*	*100*	*550*	*150*	*55*
Threshold Exceeded?	**Yes**	**No**	**No**	**No**	**No**
Maximum lbs/day (on-site only)	*n/a*	**35.99**	**22.84**	**7.27**	**4.37**
Local Significance Threshold [1] (on-site only)	*n/a*	*87*	*1,611*	*37*	*13*
Threshold Exceeded?	**n/a**	**No**	**No**	**No**	**No**

Notes: All calculations were made using the CalEEMod software. See the Appendix for calculations. Site Preparation, Grading, Paving, Building Construction, and Architectural Coating totals include worker trips, construction vehicle emissions and fugitive dust.
[1] LSTs are for a two-acre project in SRA-4 within a distance of 100 feet from the site boundary.

As shown in Table 4, with the use of low-VOC paint, temporary ROG emissions would still result in a slight exceedance of SCAQMD regional thresholds for ROG. Maximum daily emissions of NO_X, CO, PM_{10}, and $PM_{2.5}$ would not exceed SCAQMD regional thresholds or the appropriate LSTs. Because ROG emissions would exceed SCAQMD regional thresholds, Mitigation Measure AQ-1 is recommended.

Mitigation Measure

This impact could be reduced to a less than significant level through implementation of the following mitigation:

AQ-1 **Low-VOC Architectural Coatings**. The applicant should use low-VOC architectural coatings for all buildings. At a minimum, all architectural coatings shall comply with the most recent standards in SCAQMD Rule 1113 – Architectural Coatings. Architectural coatings shall not be applied to more than 5,357 square feet of construction per day, including both interior and exterior surfaces.

Residual Impacts

The maximum daily emissions of ROG shown in Table 4 is based on an assumption that architectural coatings would be applied over a period of ten days, which is the default length for this phase of construction in the CalEEMod software. Therefore, extending the duration of this phase of development and reducing the daily square footage of application of architectural coatings would result in lower daily emissions of ROG. Based on the proposed square footage of new construction, a maximum area of 5,357 square feet of architectural coatings per day was

determined to result in maximum daily ROG emissions below the SCAQMD regional threshold of 75 lbs/day, based on the following calculations:

*77.55 lbs ROG/day * 10 days = 776.00 lbs ROG*

776.00 lbs ROG / 55,482 sf architectural coatings (interior and exterior) = 0.014 lbs ROG/sf

75 lbs ROG/day (SCAQMD threshold) / 0.014 lbs ROG/sf = 5,357 sf/day

Therefore, implementation of Mitigation Measure AQ-1 would result in short-term emissions that would not exceed the SCAQMD regional threshold for ROG.

Long-Term Regional Impacts

Regional Pollutant Emissions

Table 5 summarizes emissions associated with the operation of the existing 41,433 square feet of mall space that is currently occupied by Chuck E Cheese's and New Millennium Secondary School, as well as the emissions anticipated to result from operation of the proposed Movie Theater project. The operational emissions from existing development have been subtracted from the operational emissions that would be generated by the proposed project in order to determine the net increase in emissions that would result from the proposed project.

The operational emissions associated with the existing mall space and the proposed movie theater include emissions from electricity consumption (energy sources), vehicle trips (mobile sources), and area sources, such as architectural coating emissions as the existing and proposed structures get repainted over the life of the project. The majority of operational emissions are associated with vehicle trips to and from the project site. The project traffic study utilized the Institute of Transportation Engineers' 9th Edition traffic generation rates for a shopping center and a multiplex movie theater were used for the traffic analysis in order to provide a reasonable estimate of existing and proposed vehicle trips. As described in the project traffic study, no adjustment to the trip generation potential of the proposed theatre to account for internal capture between the existing retail uses was made. However, it is likely that patrons of the proposed theatre would also visit other existing uses on-site, such as the restaurants or retail shops, without leaving the site. Therefore, Linscott, Law & Greenspan, Engineers provided an estimate of internal capture (refer to Appendix) which was incorporated into the emissions model. The average trip length associated with vehicle trips was assumed to be 6.1 miles, consistent with the *San Diego Traffic Generators Manual* (SANDAG, April 2002), which is the most recent local estimate available for a multiplex move theater land use.

Table 5
Estimated Operational Emissions (Existing and Proposed)

	Estimated Emissions (lbs/day)					
	ROG	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Existing Development						
Area	1.08	0.00	0.00	0.00	0.00	0.0
Energy	0.00	0.02	0.02	0.00	0.00	0.00
Mobile	2.51	5.45	22.96	0.04	4.03	0.25
Maximum lbs/day	**3.59**	**5.47**	**22.98**	**0.04**	**4.03**	**0.25**
Proposed Project						
Area	1.31	0.00	0.00	0.00	0.00	0.00
Energy	0.03	0.28	0.24	0.00	0.02	0.02
Mobile	7.51	15.92	66.94	0.10	11.43	0.71
Maximum lbs/day	**8.85**	**16.20**	**67.18**	**0.10**	**11.45**	**0.73**
Net Increase in Emissions						
Net Change (Proposed-Existing)	**5.26**	**10.73**	**44.20**	**0.06**	**7.42**	**0.48**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

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

As shown in Table 5, the net change in emissions would not exceed the SCAQMD thresholds for ROG, NO_X, CO, SO_X, PM_{10} 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.

Objectionable Odors

The movie theater and parking lot land uses proposed for the project would not be expected to create or emit objectionable odors. Therefore, this impact would be less than significant.

AQMP Consistency

A project may also be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. The 2012 AQMP, the most recent AQMP adopted by the SCAQMD, incorporates local city General Plans and the Southern California Association of Government's (SCAG) Regional Transportation Plan socioeconomic forecast projections of regional population, housing and employment growth.

The proposed project involves the demolition of 41,433 square feet of existing mall space and the construction of 57,352 square feet of a new movie theater, as well as parking lot improvements to add 72 new parking spaces. As such, the proposed project would not result in the development of residential uses that would cause a direct increase in the City's population. However, the proposed project could cause an indirect increase in the City's population

through an increase in employment as a result of development of the movie theater. Using the SCAG employment density factors for Los Angeles County of 55.28 employees per acre for low-rise office uses, the development of two acres of commercial space would generate an estimated 111 jobs (two acres * 55.28 employees/acre) (SCAG, 2001).

SCAG forecasts that the region will add 2.5 million new jobs, between 2005 and 2035, for a total of 10.3 million jobs in 2035 (SCAG, 2008). The 111 new employees, generated by development of the proposed project, would constitute less than 0.001% of the new job growth in the region. Moreover, the proposed project would replace an existing 41,433 square feet of commercial mall space, which currently provides employment. Therefore, it is anticipated that most of the new jobs that would result from the proposed development would replace existing jobs associated with the existing retail uses at the South Bay Pavilion. As such, this estimate of new jobs that would result from the proposed project represents a conservative approach to employee generation for the proposed project as the net change between the existing employment and the employment generated by the proposed project would be less than the 111 new employees estimated above. Therefore, the proposed project would be consistent with the AQMP and impacts would be less than significant.

GREENHOUSE GAS EMISSIONS DISCUSSION

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and sulfur hexafluoride (SF_6) (California Environmental Protection Agency [CalEPA], 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO_2E), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a GWP of one. By contrast, methane (CH_4) has a GWP of 21, meaning its global warming effect is 21 times greater than carbon dioxide on a molecule per molecule basis (IPCC, 1997).

Total U.S. GHG emissions were 6,821.8 MMT CO_2E in 2009 (U.S. EPA, April 2012). Total U.S. emissions have increased by 10.5 percent since 1990; emissions rose by 3.2 percent from 2009 to 2010 (U.S. EPA, April 2012). This increase was primarily due to (1) an increase in economic output resulting in an increase in energy consumption across all sectors; and (2) much warmer summer

conditions resulting in an increase in electricity demand for air conditioning. Since 1990, U.S. emissions have increased at an average annual rate of 0.5 percent. In 2010, the transportation and industrial end-use sectors accounted for 32 percent and 26 percent of CO_2 emissions from fossil fuel combustion, respectively. Meanwhile, the residential and commercial end-use sectors accounted for 22 percent and 19 percent of CO_2 emissions from fossil fuel combustion, respectively (U.S. EPA, April 2012).

Based upon the California Air Resources Board (ARB) California Greenhouse Gas Inventory for 2000-2009 (ARB, October 2011), California produced 453 MMT CO_2E in 2009. The major source of GHG in California is transportation, contributing 38 percent of the state's total GHG emissions. Electricity generation is the second largest source, contributing 23 percent of the state's GHG emissions (ARB, October 2011). California emissions are due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. The ARB has projected statewide unregulated GHG emissions for the year 2020 will be 507 MMT CO_2E (ARB, April 2012). These projections represent the emissions that would be expected to occur in the absence of any GHG reduction actions.

California Regulations

In 2005, former Governor Schwarzenegger issued Executive Order (EO) S-3-05, establishing statewide GHG emissions reduction targets. EO S-3-05 provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent of 1990 levels (CalEPA, 2006). In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA, 2006). The 2006 CAT Report identified a recommended list of strategies that the state could pursue to reduce GHG emissions. These are strategies that could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, etc.

California's major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the Statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15% reduction below 2005 emission levels; the same requirement as under S-3-05), and requires ARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires ARB to adopt regulations to require reporting and verification of statewide GHG emissions.

After completing a comprehensive review and update process, the ARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO_2E. The Scoping Plan was approved by ARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. The Scoping Plan includes a range of GHG reduction actions that may include direct

regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms.

Executive Order S-01-07 was enacted on January 18, 2007. The order mandates that a Low Carbon Fuel Standard ("LCFS") for transportation fuels be established for California to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.

Local Regulations and CEQA Requirements.

Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, but contain no suggested thresholds of significance for GHG emissions. Instead, they give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The general approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move the state towards climate stabilization. If a project would generate GHG emissions above the threshold level, its contribution to cumulative impacts would be considered significant. To date, the Bay Area Air Quality Management District (BAAQMD), the South Coast Air Quality Management District (SCAQMD), and the San Joaquin Air Pollution Control District (SJVAPCD) have adopted quantitative significance thresholds for GHGs. However, in March 2013 the Bay Area's thresholds were overruled by the Alameda County Superior Court (*California Building Industry Association v. Bay Area Air Quality Management District*), on the basis that adoption of the thresholds constitutes a "project" under CEQA, but did not receive the appropriate environmental review. It is unclear whether BAAQMD will choose to appeal the decision or proceed with CEQA review of its thresholds.

The SCAQMD threshold, which was adopted in December 2008, considers emissions of over 10,000 metric tons CO2E /year to be significant. However, the SCAQMD's threshold applies only to stationary sources and is expressly intended to apply only when the SCAQMD is the CEQA lead agency. Although not formally adopted, the SCAQMD has developed a draft quantitative threshold for all land use types of 3,000 metric tons CO_2E /year (SCAQMD, September 2010). Note that lead agencies retain the responsibility to determine significance on a case-by-case basis for each specific project.

CLIMATE CHANGE IMPACT ANALYSIS

Thresholds of Significance

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions in March 2010. These guidelines are used in evaluating the cumulative significance of GHG emissions from the proposed project. According to the adopted CEQA Guidelines, impacts related to GHG emissions from the proposed project would be significant if the project would:

- *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or*
- *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

For future projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan). However, because no GHG emissions reduction plan or GHG emissions threshold has been adopted in the City of Carson, the proposed project is evaluated based on SCAQMD's recommended/preferred option threshold for all land use types (including retail) of 3,000 metric tons CO_2E per year. It is important to note that the City of Carson has not recommended this threshold for any other project at this time; this quantitative threshold is recommended for the proposed project within the context of this analysis. Therefore, the proposed project's contribution to cumulative impacts related to GHG emissions and climate change would be cumulatively considerable if the project would generate more than 3,000 metric tons of CO_2E per year. In addition, in order to determine whether or not the proposed project's GHG emissions are "cumulatively considerable," the project's consistency with applicable GHG emissions reductions strategies recommended by the 2006 CAT Report and the California Attorney General's Office is also discussed.

Methodology

GHG emissions for the proposed project and existing development have been estimated using California Emissions Estimator Model (CalEEMod). The proposed project's overall contribution to regional GHG emissions has been calculated based on the net difference between the GHG emissions currently emitted by existing development that would be replaced by the proposed new theater, and the GHG emissions anticipated from the proposed new development on the project site.

Construction Emissions. Construction of the proposed project would generate temporary GHG emissions primarily due to the operation of construction equipment and truck trips. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment. Emissions associated with the construction period were estimated using the CalEEMod, based on the projected maximum amount of equipment that would be used onsite at one time. Air districts such as the SCAQMD have recommended amortizing construction-related emissions over a 30-year period in conjunction with the proposed project's operational emissions. Complete CalEEMod results and assumptions can be viewed in the Appendix.

On-site Operational Emissions. Operational emissions from energy use (electricity and natural gas use) for existing development and the proposed project were estimated using CalEEMod (see Appendix for calculations.). The default values on which CalEEMod are based include the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies. CalEEMod provides operational emissions of CO_2, N_2O and CH_4. This methodology has been subjected to peer review by numerous public and private stakeholders, and in particular by the CEC, and therefore, is considered reasonable and reliable for use in GHG impact analysis pursuant to CEQA. It is also recommended by CAPCOA (January 2008).

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod based on standard emission rates from CARB, USEPA, and district supplied emission factor values (CalEEMod User Guide, 2011).

Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CalEEMod User Guide, 2011). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for Northern and Southern California.

Direct Emissions from Mobile Combustion. Emissions of CO_2 and CH_4 from transportation sources for existing development and the proposed project were quantified using CalEEMod. Because CalEEMod does not calculate N_2O emissions from mobile sources, N_2O emissions were quantified using the California Climate Action Registry General Reporting Protocol (January 2009) direct emissions factors for mobile combustion (see Appendix for calculations). The net change estimate of total daily trips associated with existing development and the proposed project was based on the project traffic study, and was calculated and extrapolated to derive total annual mileage in CalEEMod. Emission rates for N_2O emissions were based on the vehicle mix output generated by CalEEMod and the emission factors found in the California Climate Action Registry General Reporting Protocol.

Estimate of GHG Emissions

Construction Emissions

Construction activity is assumed to occur over a period of approximately one year (246 working days), beginning in January 2014 and concluding in December 2014. Based on CalEEMod results, construction activity for the project would generate an estimated 338 metric tons of carbon dioxide equivalent (CO_2E), as shown in Table 6. Amortized over a 30-year period (the assumed life of the project), construction of the proposed project would generate approximately 11 metric tons of CO_2E per year.

Table 6
Estimated Construction Emissions
of Greenhouse Gases

Year	Annual Emissions (metric tons CO_2E)
2014	338.0
Total	**338.0**
Amortized over 30 years	**11.3 metric tons per year**

See Appendix for CalEEMod software program output for new construction.

Operational Indirect and Stationary Direct Emissions

Long-term emissions relate to energy use, solid waste, water use, and transportation. Each of these sources is discussed below and includes the emissions associated with existing development and the anticipated emissions that would result from the proposed project.

Energy Use. Operation of onsite development would consume both electricity and natural gas (see Appendix for CalEEMod results). The generation of electricity through combustion of fossil fuels typically yields CO_2, and to a smaller extent, N_2O and CH_4. As discussed above, annual electricity and natural gas emissions can be calculated using default values from the CEC sponsored CEUS and RASS studies which are built into CalEEMod.

As shown in Table 7, the net increase in electricity consumption associated with the proposed project would result in approximately 12 metric tons of CO_2E per year, and the net increase in natural gas use would result in approximately 52 metric tons of CO_2E per year. Thus, the overall net increase in energy use at the project site would result in approximately 64 metric tons of CO_2E per year.

Solid Waste Emissions. For solid waste generated onsite, it was assumed that the project would be involved in a municipal recycling program that would achieve a 50% diversion rate, as required by the California Integrated Waste Management Act of 1989 (AB 939). The City has consistently met its goals for solid waste diversion, and achieved a diversion rate of 70% in 2006. The CalEEMod results indicate that the project would result in approximately 316 metric tons of solid waste per year disposed of within landfills. Table 8 below, shows the net change between the emissions associated with existing development and those of the proposed project. As shown in Table 8, the proposed project would result in a net increase of approximately 124 metric tons of CO_2E per year, which would be reduced to approximately 62 metric tons of CO_2E with the 50% diversion rate as required by the California Integrated Waste Management Act.

Table 7
Existing and Proposed Estimated Annual Energy-Related Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO_2E)
Existing Development	
Electricity	184.0 metric tons
Natural Gas	3.8 metric tons
Total	**187.8 metric tons**
Proposed Project	
Electricity	195.7 metric tons
Natural Gas	56.0 metric tons
Total	**251.7 metric tons**
Net Change (Proposed minus Existing)	
Electricity	11.7 metric tons
Natural Gas	52.3 metric tons
Total	**63.9 metric tons**

See Appendix for CalEEMod software program output (demolition and new construction).

Table 8
Existing and Proposed Estimated Annual Solid Waste Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO_2E)
Existing Development	
Solid Waste	19.8 metric tons
Proposed Project	
Solid Waste	143.9 metric tons
Net Change (Proposed-Existing)	**124.1 metric tons**
Total Waste Diverted[1]	62.1 metric tons
Total Waste Disposed at Landfill	**62.1 metric tons**

See Appendix for CalEEMod software program output (demolition and new construction).
[1]Based on a 50% diversion rate, as required by the California Integrated Waste Management Act (AB 939).

Water Use Emissions**.** The CalEEMod results indicate that the project would use approximately 23.7 million gallons of water per year. Based on the amount of electricity generated in order to supply and convey this amount of water, as shown in Table 9, the project would generate a net change of approximately 89 metric tons of CO_2E per year.

Table 9
Existing and Proposed Estimated Greenhouse Gas Emissions from Water Use

Emission Source	Annual Emissions (CO_2E)
Existing Development	
Water Use	20.5 metric tons
Proposed Project	
Water Use	109.3 metric tons
Net Change (Proposed-Existing)	**88.8 metric tons**

See Appendix for CalEEMod software program output (demolition and new construction).

Transportation Emissions. Mobile source GHG emissions were estimated using the average daily trips derived from the project traffic study, and by the net change in total VMT estimated in CalEEMod. The Institute of Transportation Engineers 9th Edition traffic generation rates for a shopping center and a multiplex movie theater were used for the traffic analysis in order to provide a reasonable estimate of the potential traffic generation impacts. As described in the project traffic study, no adjustment to the trip generation potential of the proposed theatre to account for internal capture between the existing retail uses was made. However, it is likely that patrons of the proposed theatre would also visit other existing uses on-site, such as the restaurants or retail shops, without leaving the site. Therefore, Linscott, Law & Greenspan, Engineers provided an estimate of internal capture (refer to Appendix) which was incorporated into the emissions model. The average trip length associated with vehicle trips was assumed to be 6.1 miles, consistent with the *San Diego Traffic Generators Manual* (SANDAG, April 2002), which is the most recent local estimate available for a multiplex move theater land use.

With the net change between the vehicle trips generated by existing development that would be eliminated as part of the proposed project and the vehicle trips generated by the proposed new movie theater, the proposed project would result in approximately 1,424 net new ADT and approximately 2,107,352 net new annual VMT.

Table 10 shows the estimated mobile emissions of GHGs for the project based on the net change in estimated annual VMT. As noted above, CalEEMod does not calculate N_2O emissions related to mobile sources. As such, N_2O emissions were calculated based on the project's VMT using calculation methods provided by the California Climate Action Registry General Reporting Protocol (January 2009). As shown in Table 10, the project would result in a net increase of approximately 1,107 metric tons of CO_2E associated with new vehicle trips.

Table 10
Existing and Proposed Estimated Annual Mobile Emissions of Greenhouse Gases

Emission Source	Annual Emissions (CO_2E)
Existing Development	
Mobile Emissions (CO_2 & CH_4)	574.1 metric tons
Mobile Emissions (N_2O) [1]	25.1 metric tons
Total	**599.2 metric tons**
Proposed Project	
Mobile Emissions (CO_2 & CH_4)	1,634.8 metric tons
Mobile Emissions (N_2O) [1]	71.1 metric tons
Total	**1,705.9 metric tons**
Net Change (Proposed-Existing)	**1,106.7 metric tons**

See Appendix for CalEEMod software program output (demolitions and new construction).
[1] California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1,January 2009, page 30-35. See Appendix for calculations.

Combined Construction, Stationary and Mobile Source Emissions

Table 11 combines the net new construction, operational, and mobile GHG emissions associated with the change in onsite development associated with the proposed project. As discussed above, temporary emissions associated with construction activity (approximately 338 metric tons CO_2E) are amortized over 30 years (the anticipated life of the project).

Table 11
Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Emissions (CO_2E)
Construction	11.3 metric tons
Operational	
Energy	63.9 metric tons
Solid Waste	62.1 metric tons
Water	88.8 metric tons
Mobile	1,106.7 metric tons
Total	**1,332.8 metric tons**

See Appendix for CalEEMod software program output (demolition and new construction).

For the proposed project, the combined annual emissions would total approximately 1,333 metric tons per year in CO_2E. This total represents less than 0.001% of California's total 2009 emissions of 453 million metric tons. The majority (83%) of the project's GHG emissions are associated with motor vehicular travel. As noted above, neither the SCAQMD nor the City of Carson has adopted GHG emissions thresholds that apply to land use projects. Additionally, the City of Carson has not adopted a GHG emissions reduction plan. Therefore, the proposed project is evaluated based on the SCAQMD's recommended/preferred option threshold of 3,000 metric tons CO_2E per year for all land use types (SCAQMD, September 2010). Development facilitated by proposed project would generate additional GHG emissions beyond existing conditions. However, the project's net new GHG emissions of approximately 1,333 metric tons CO_2E per year would not exceed the threshold of 3,000 metric tons per year; therefore, impacts from GHG emissions would be less than significant.

GHG Cumulative Significance. As indicated above, the CAT published the Climate Action Team Report to Governor Schwarzenegger and the Legislature (the "2006 CAT Report") in March 2006. The CAT Report identifies a recommended list of strategies that the State could pursue to reduce GHG emissions. The CAT strategies are recommended to reduce GHG emissions at a statewide level to meet the goals of the Executive Order S-3-05. These are strategies that could be implemented by various State agencies to ensure that the Governor's targets are met and can be met with existing authority of the State agencies. In addition, in 2008 the California Attorney General published The California Environmental Quality Act Addressing Global Warming Impacts at the Local Agency Level (Office of the California Attorney General, Global Warming Measures Updated May 21, 2008). This document provides information that may be helpful to local agencies in carrying out their duties under CEQA as they relate to global warming. Included in this document are various measures that may reduce the global warming related impacts of a project. Tables 12 and 13 illustrate that the proposed project would be consistent with the GHG reduction strategies set forth by the 2006 CAT Report as well as the 2008 Attorney General's Greenhouse Gas Reduction Measures.

Table 12
Project Consistency with Applicable Climate Action Team Greenhouse Gas Emission Reduction Strategies

Strategy	***Project Consistency***
California Air Resources Board	
Vehicle Climate Change Standards AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the ARB in September 2004.	**Consistent** The vehicles that travel to and from the project site on public roadways would be in compliance with ARB vehicle standards that are in effect at the time of vehicle purchase.
Diesel Anti-Idling The ARB adopted a measure to limit diesel-fueled commercial motor vehicle idling in July 2004.	**Consistent** Current State law restricts diesel truck idling to five minutes or less. Diesel trucks operating from and making deliveries to the project site are subject to this state-wide law. Construction vehicles are also subject to this regulation.

Table 12
Project Consistency with Applicable Climate Action Team Greenhouse Gas Emission Reduction Strategies

Strategy	*Project Consistency*
Hydrofluorocarbon Reduction 1) Ban retail sale of HFC in small cans. 2) Require that only low GWP refrigerants be used in new vehicular systems. 3) Adopt specifications for new commercial refrigeration. 4) Add refrigerant leak-tightness to the pass criteria for vehicular inspection and maintenance programs. 5) Enforce federal ban on releasing HFCs.	**Consistent** This strategy applies to consumer products. All applicable products would be required to comply with the regulations that are in effect at the time of manufacture.
Alternative Fuels: Biodiesel Blends ARB would develop regulations to require the use of 1 to 4% biodiesel displacement of California diesel fuel.	**Consistent** The diesel vehicles such as construction vehicles or delivery trucks that travel to and from the project site on public roadways could utilize this fuel once it is commercially available.
Alternative Fuels: Ethanol Increased use of E-85 fuel.	**Consistent** Employees and visitors at the project site could choose to purchase flex-fuel vehicles and utilize this fuel once it is commercially available regionally and locally.
Heavy-Duty Vehicle Emission Reduction Measures Increased efficiency in the design of heavy duty vehicles and an education program for the heavy duty vehicle sector.	**Consistent** The heavy-duty vehicles for construction activities that travel to and from the project site on public roadways would be subject to all applicable ARB efficiency standards that are in effect at the time of vehicle manufacture.
Achieve 50% Statewide Recycling Goal Achieving the State's 50% waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48% has been achieved on a statewide basis. Therefore, a 2% additional reduction is needed.	**Consistent** The City has enacted numerous programs to achieve the mandated 50% diversion. The City achieved a diversion rate of 70% in 2006. It is anticipated that the proposed project would participate in the City's waste diversion programs and would similarly divert at least 50% of its solid waste. The project would also be subject to all applicable State and County requirements for solid waste reduction as they change in the future.
Department of Water Resources	
Water Use Efficiency Approximately 19% of all electricity, 30% of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce greenhouse gas emissions.	**Consistent** The proposed project would not be precluded from incorporating water saving features, such as the use of gray water for landscape irrigation and providing low flow plumbing fixtures. In addition, the project would be required to comply with all State and local measures that address water use and conservation.
Energy Commission (CEC)	
Building Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	**Consistent** The proposed project would need to comply with the standards of Title 24 that are in effect at the time of development.

Table 12
Project Consistency with Applicable Climate Action Team Greenhouse Gas Emission Reduction Strategies

Strategy	*Project Consistency*
Appliance Energy Efficiency Standards in Place and in Progress Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	**Consistent** Under State law, appliances that are purchased for the project - both pre- and post-development – would be consistent with energy efficiency standards that are in effect at the time of manufacture.
Fuel-Efficient Replacement Tires & Inflation Programs State legislation established a statewide program to encourage the production and use of more efficient tires.	**Consistent** Employees at and visitors to the project site could purchase tires for their vehicles that comply with state programs for increased fuel efficiency.
Municipal Utility Energy Efficiency Programs/Demand Response Includes energy efficiency programs, renewable portfolio standard, combined heat and power, and transitioning away from carbon-intensive generation.	*Not applicable*, but project development would not preclude the implementation of this strategy by municipal utility providers.
Municipal Utility Renewable Portfolio Standard California's Renewable Portfolio Standard (RPS), established in 2002, requires that all load serving entities achieve a goal of 20% of retail electricity sales from renewable energy sources by 2017, within certain cost constraints.	*Not applicable*, but the project would not preclude the implementation of this strategy by Southern California Edison.
Municipal Utility Combined Heat and Power Cost effective reduction from fossil fuel consumption in the commercial and industrial sector through the application of on-site power production to meet both heat and electricity loads.	*Not applicable* since this strategy addresses incentives that could be provided by utility providers such as Southern California Edison and The Gas Company.
Alternative Fuels: Non-Petroleum Fuels Increasing the use of non-petroleum fuels in California's transportation sector, as recommended as recommended in the CEC's 2003 and 2005 Integrated Energy Policy Reports.	**Consistent** Employees and visitors of the project site could purchase alternative fuel vehicles and utilize these fuels once they are commercially available regionally and locally.
Green Buildings Initiative Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20% by the year 2015, as compared with 2003 levels. The Executive Order and related action plan spell out specific actions state agencies are to take with state-owned and -leased buildings. The order and plan also discuss various strategies and incentives to encourage private building owners and operators to achieve the 20% target.	**Consistent** As discussed previously, the project would be required to be constructed in compliance with the standards of Title 24 that are in effect at the time of development. The 2008 Title 24 standards are approximately 15% more efficient than those of the 2005 standards.

Table 12
Project Consistency with Applicable Climate Action Team Greenhouse Gas Emission Reduction Strategies

Strategy	***Project Consistency***
Business, Transportation and Housing	
Smart Land Use and Intelligent Transportation Systems (ITS) Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services. The Governor is finalizing a comprehensive 10-year strategic growth plan with the intent of developing ways to promote, through state investments, incentives and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity and a quality environment. Smart land use, demand management, ITS, and value pricing are critical elements in this plan for improving mobility and transportation efficiency. Specific strategies include: promoting jobs/housing proximity and transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing; implementing intelligent transportation systems, traveler information/traffic control, incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated, multimodal/intermodal transportation planning.	**Consistent** The project site is located within the South Bay Pavillion and is adjacent to several bus service stops (Metropolitan Transportation Authority (Metro) Route 246, which operates along Avalon Boulevard). Employees and visitors of the project site would have adequate access to and from the site via public transportation.
Public Utilities Commission (PUC)	
Accelerated Renewable Portfolio Standard The Governor has set a goal of achieving 33% renewable in the State's resource mix by 2020. The joint PUC/Energy Commission September 2005 Energy Action Plan II (EAP II) adopts the 33% goal.	*Not applicable*, but project development would not preclude the implementation of this strategy by energy providers.

Table 13
Project Consistency with Applicable Attorney General Greenhouse Gas Reduction Measures

Strategy	***Project Consistency***
Transportation-Related Emissions	
Diesel Anti-Idling Set specific limits on idling time for commercial vehicles, including delivery vehicles.	**Consistent** Currently, the California Air Resources Board's (CARB) Airborne Toxic Control Measure (ATCM) to Limit Diesel-Fueled Commercial Motor Vehicle Idling restricts diesel truck idling to five minutes or less. Diesel trucks operating from and making deliveries to the project site are subject to this state-wide law. Construction vehicles are also subject to this regulation.
Transportation Emissions Reduction Provide shuttle service to public transportation.	**Consistent** The project site is located within walking distance to the Metro Route #246, along Avalon Boulevard.
Solid Waste and Energy Emissions	
Solid Waste Reduction Strategy Project construction shall require reuse and recycling of construction and demolition waste.	**Consistent** It is anticipated that the proposed project would participate in the City's waste diversion programs and would similarly divert at least 50% of its solid waste from construction.
Water Use Efficiency Require measures that reduce the amount of water sent to the sewer system – see examples in CAT standard above. (Reduction in water volume sent to the sewer system means less water has to be treated and pumped to the end user, thereby saving energy.	**Consistent** As described above, the proposed project would not be precluded from incorporating include water saving features such as the use of gray water for landscape irrigation and low flow plumbing fixtures. In addition, the project would be required to comply with all State and local measures that address water use and conservation.
Land Use Measures, Smart Growth Strategies and Carbon Offsets	
Smart Land Use and Intelligent Transportation Systems Require pedestrian-only streets and plazas within the project site and destinations that may be reached conveniently by public transportation, walking or bicycling.	**Consistent** The project site is located within walking distance of public transportation, such as the Metro Route #246, along civic Avalon Boulevard.

As indicated in Tables 12 and 13, the proposed project would be consistent with the applicable CAT strategies and the 2008 Attorney General Greenhouse Gas Reduction Measures.

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Appendix

CalEEMod Air Quality and Greenhouse Gas Emissions Model Results – Summer/Annual, and N2O from Mobile Emissions Sources

TABLE

PROJECT TRAFFIC GENERATION FORECAST (WITH INTERNAL CAPTURE)

Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour			Friday PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Existing Development										
• SouthBay Pavilion (1,013,023 SF)	30,591	396	244	640	1,356	1,471	2,827	1,356	1,471	2,827
Pass-By Reduction[1]	-6,118	-40	-24	-64	-271	-294	-565	-271	-294	-565
SouthBay Pavilions Existing Traffic Generation Potential	**24,473**	**356**	**220**	**576**	**1,085**	**1,177**	**2,262**	**1,085**	**1,177**	**2,262**
Proposed Project										
• Cinemark (55,482 SF/14 Screens/2,474 Seats)	4,354	12	13	25	71	127	198	148	99	247
• SouthBay Pavilion (971,590 SF)	29,771	386	238	624	1,319	1,430	2,749	1,319	1,430	2,749
Internal Capture	-2,526	-8	-8	-16	-50	-28	-78	-40	-60	-100
Pass-By Reduction[1]	-5,702	-38	-24	-62	-259	-283	-542	-260	-280	-540
The SouthBay Pavilion Total Traffic Generation Potential	**25,897**	**352**	**219**	**571**	**1,092**	**1,235**	**2,327**	**1,157**	**1,199**	**2,356**
SouthBay Pavilion Net Additional Traffic Generation Potential With Credit for Internal Capture and Pass-By	**1,424**	**-4**	**-1**	**-5**	**7**	**58**	**65**	**72**	**22**	**94**

[1] Pass-by trips are trips made as intermediate stops on the way from an origin to a primary trip destination. Pass-by trips are attracted from traffic passing the site on adjacent streets (i.e. Del Amo Boulevard and Avalon Boulevard), which contain direct access to the generator. The *Trip Generation Manual*, 9th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012), *Volume 1: User's Guide and Handbook* recommends a pass-by reduction factor of 20% for the PM peak hour. The PM peak hour pass-by percentage (T) was calculated based on the following equation: Ln (T) = -0.29Ln (X) + 5.00, where X = gross leasable area. The same factor was used to estimate the daily and Friday PM peak hour pass-by percentage. The AM peak hour pass-by percentage was estimated to be 10%.

South Bay Pavilion Existing Development

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Regional Shopping Center	41.43	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Southern California Edison
Climate Zone	9	**Precipitation Freq (Days)**	31		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - No construciton, removing and replacing a use.

Vehicle Trips - Table 5-2, 4,354 ADT-3,698 net ADT=656 net trips/41,433sf of proposed x 1,000sf=15.83 trips/1,000sf

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					
2011	192.46	20.57	12.84	0.02	0.88	1.40	2.13	0.42	1.40	1.67	0.00	2,279.88	0.00	0.25	0.00	2,285.10
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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					
2011	192.46	20.57	12.84	0.02	0.76	1.40	2.01	0.42	1.40	1.67	0.00	2,279.88	0.00	0.25	0.00	2,285.10
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.08	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		22.70		0.00	0.00	22.84
Mobile	2.51	5.45	22.96	0.04	3.81	0.23	4.03	0.05	0.20	0.25		3,648.11		0.15		3,651.15
Total	**3.59**	**5.47**	**22.98**	**0.04**	**3.81**	**0.23**	**4.03**	**0.05**	**0.20**	**0.25**		**3,670.81**		**0.15**	**0.00**	**3,673.99**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.08	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		22.70		0.00	0.00	22.84
Mobile	2.51	5.45	22.96	0.04	3.81	0.23	4.03	0.05	0.20	0.25		3,648.11		0.15		3,651.15
Total	**3.59**	**5.47**	**22.98**	**0.04**	**3.81**	**0.23**	**4.03**	**0.05**	**0.20**	**0.25**		**3,670.81**		**0.15**	**0.00**	**3,673.99**

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Demolition - 2011

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	2.34	15.85	9.86	0.02		1.25	1.25		1.25	1.25		1,476.12		0.21		1,480.54
Total	**2.34**	**15.85**	**9.86**	**0.02**		**1.25**	**1.25**		**1.25**	**1.25**		**1,476.12**		**0.21**		**1,480.54**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.07	0.77	0.00	0.13	0.00	0.13	0.00	0.00	0.01		111.78		0.01		111.93
Total	**0.07**	**0.07**	**0.77**	**0.00**	**0.13**	**0.00**	**0.13**	**0.00**	**0.00**	**0.01**		**111.78**		**0.01**		**111.93**

3.2 Demolition - 2011

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	2.34	15.85	9.86	0.02		1.25	1.25		1.25	1.25	0.00	1,476.12		0.21		1,480.54
Total	**2.34**	**15.85**	**9.86**	**0.02**		**1.25**	**1.25**		**1.25**	**1.25**	**0.00**	**1,476.12**		**0.21**		**1,480.54**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.07	0.77	0.00	0.00	0.00	0.01	0.00	0.00	0.01		111.78		0.01		111.93
Total	**0.07**	**0.07**	**0.77**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.01**		**111.78**		**0.01**		**111.93**

3.3 Site Preparation - 2011

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					0.53	0.00	0.53	0.00	0.00	0.00						0.00
Off-Road	1.98	14.38	8.76	0.01		0.98	0.98		0.98	0.98		1,402.65		0.18		1,406.38
Total	**1.98**	**14.38**	**8.76**	**0.01**	**0.53**	**0.98**	**1.51**	**0.00**	**0.98**	**0.98**		**1,402.65**		**0.18**		**1,406.38**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.38	0.00	0.07	0.00	0.07	0.00	0.00	0.00		55.89		0.00		55.96
Total	**0.03**	**0.03**	**0.38**	**0.00**	**0.07**	**0.00**	**0.07**	**0.00**	**0.00**	**0.00**		**55.89**		**0.00**		**55.96**

3.3 Site Preparation - 2011

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					0.53	0.00	0.53	0.00	0.00	0.00						0.00
Off-Road	1.98	14.38	8.76	0.01		0.98	0.98		0.98	0.98	0.00	1,402.65		0.18		1,406.38
Total	**1.98**	**14.38**	**8.76**	**0.01**	**0.53**	**0.98**	**1.51**	**0.00**	**0.98**	**0.98**	**0.00**	**1,402.65**		**0.18**		**1,406.38**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00		55.89		0.00		55.96
Total	**0.03**	**0.03**	**0.38**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**55.89**		**0.00**		**55.96**

3.4 Grading - 2011

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					0.75	0.00	0.75	0.41	0.00	0.41						0.00
Off-Road	2.34	15.85	9.86	0.02		1.25	1.25		1.25	1.25		1,476.12		0.21		1,480.54
Total	**2.34**	**15.85**	**9.86**	**0.02**	**0.75**	**1.25**	**2.00**	**0.41**	**1.25**	**1.66**		**1,476.12**		**0.21**		**1,480.54**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.07	0.77	0.00	0.13	0.00	0.13	0.00	0.00	0.01		111.78		0.01		111.93
Total	**0.07**	**0.07**	**0.77**	**0.00**	**0.13**	**0.00**	**0.13**	**0.00**	**0.00**	**0.01**		**111.78**		**0.01**		**111.93**

3.4 Grading - 2011

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					0.75	0.00	0.75	0.41	0.00	0.41						0.00
Off-Road	2.34	15.85	9.86	0.02		1.25	1.25		1.25	1.25	0.00	1,476.12		0.21		1,480.54
Total	**2.34**	**15.85**	**9.86**	**0.02**	**0.75**	**1.25**	**2.00**	**0.41**	**1.25**	**1.66**	**0.00**	**1,476.12**		**0.21**		**1,480.54**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.07	0.77	0.00	0.00	0.00	0.01	0.00	0.00	0.01		111.78		0.01		111.93
Total	**0.07**	**0.07**	**0.77**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.01**		**111.78**		**0.01**		**111.93**

3.5 Building Construction - 2011

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	2.60	19.11	10.99	0.02		1.30	1.30		1.30	1.30		1,945.40		0.23		1,950.29
Total	**2.60**	**19.11**	**10.99**	**0.02**		**1.30**	**1.30**		**1.30**	**1.30**		**1,945.40**		**0.23**		**1,950.29**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.13	1.37	0.86	0.00	0.06	0.05	0.11	0.00	0.04	0.05		189.17		0.01		189.30
Worker	0.09	0.09	1.00	0.00	0.17	0.01	0.18	0.00	0.01	0.01		145.31		0.01		145.51
Total	**0.22**	**1.46**	**1.86**	**0.00**	**0.23**	**0.06**	**0.29**	**0.00**	**0.05**	**0.06**		**334.48**		**0.02**		**334.81**

3.5 Building Construction - 2011

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	2.60	19.11	10.99	0.02		1.30	1.30		1.30	1.30	0.00	1,945.40		0.23		1,950.29
Total	**2.60**	**19.11**	**10.99**	**0.02**		**1.30**	**1.30**		**1.30**	**1.30**	**0.00**	**1,945.40**		**0.23**		**1,950.29**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.13	1.37	0.86	0.00	0.00	0.05	0.05	0.00	0.04	0.05		189.17		0.01		189.30
Worker	0.09	0.09	1.00	0.00	0.01	0.01	0.01	0.00	0.01	0.01		145.31		0.01		145.51
Total	**0.22**	**1.46**	**1.86**	**0.00**	**0.01**	**0.06**	**0.06**	**0.00**	**0.05**	**0.06**		**334.48**		**0.02**		**334.81**

3.6 Paving - 2011

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	2.63	16.21	9.93	0.02		1.39	1.39		1.39	1.39		1,408.52		0.24		1,413.47
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.63**	**16.21**	**9.93**	**0.02**		**1.39**	**1.39**		**1.39**	**1.39**		**1,408.52**		**0.24**		**1,413.47**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.12	0.12	1.38	0.00	0.23	0.01	0.24	0.00	0.01	0.01		201.20		0.01		201.47
Total	**0.12**	**0.12**	**1.38**	**0.00**	**0.23**	**0.01**	**0.24**	**0.00**	**0.01**	**0.01**		**201.20**		**0.01**		**201.47**

3.6 Paving - 2011

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	2.63	16.21	9.93	0.02		1.39	1.39		1.39	1.39	0.00	1,408.52		0.24		1,413.47
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.63**	**16.21**	**9.93**	**0.02**		**1.39**	**1.39**		**1.39**	**1.39**	**0.00**	**1,408.52**		**0.24**		**1,413.47**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.12	0.12	1.38	0.00	0.01	0.01	0.02	0.00	0.01	0.01		201.20		0.01		201.47
Total	**0.12**	**0.12**	**1.38**	**0.00**	**0.01**	**0.01**	**0.02**	**0.00**	**0.01**	**0.01**		**201.20**		**0.01**		**201.47**

3.7 Architectural Coating - 2011

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	191.88					0.00	0.00		0.00	0.00						0.00
Off-Road	0.56	3.37	1.98	0.00		0.31	0.31		0.31	0.31		281.19		0.05		282.25
Total	**192.44**	**3.37**	**1.98**	**0.00**		**0.31**	**0.31**		**0.31**	**0.31**		**281.19**		**0.05**		**282.25**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.02	0.02	0.23	0.00	0.04	0.00	0.04	0.00	0.00	0.00		33.53		0.00		33.58
Total	**0.02**	**0.02**	**0.23**	**0.00**	**0.04**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**		**33.53**		**0.00**		**33.58**

3.7 Architectural Coating - 2011

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	191.88					0.00	0.00		0.00	0.00						0.00
Off-Road	0.56	3.37	1.98	0.00		0.31	0.31		0.31	0.31	0.00	281.19		0.05		282.25
Total	**192.44**	**3.37**	**1.98**	**0.00**		**0.31**	**0.31**		**0.31**	**0.31**	**0.00**	**281.19**		**0.05**		**282.25**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.02	0.02	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00		33.53		0.00		33.58
Total	**0.02**	**0.02**	**0.23**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**33.53**		**0.00**		**33.58**

4.0 Mobile Detail

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	2.51	5.45	22.96	0.04	3.81	0.23	4.03	0.05	0.20	0.25		3,648.11		0.15		3,651.15
Unmitigated	2.51	5.45	22.96	0.04	3.81	0.23	4.03	0.05	0.20	0.25		3,648.11		0.15		3,651.15
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	655.84	655.84	655.84	1,149,882	1,149,882
Total	655.84	655.84	655.84	1,149,882	1,149,882

4.3 Trip Type Information

	Miles			Trip %		
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
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		22.70		0.00	0.00	22.84
NaturalGas Unmitigated	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		22.70		0.00	0.00	22.84
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	lb/day										lb/day					
Regional Shopping Center	192.976	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		22.70		0.00	0.00	22.84
Total		**0.00**	**0.02**	**0.02**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**22.70**		**0.00**	**0.00**	**22.84**

5.2 Energy by Land Use - NaturalGas

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	lb/day										lb/day					
Regional Shopping Center	0.192976	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00		22.70		0.00	0.00	22.84
Total		**0.00**	**0.02**	**0.02**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**22.70**		**0.00**	**0.00**	**22.84**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.08	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	1.08	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.26					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.82					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**1.08**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.26					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.82					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**1.08**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

South Bay Pavilion Existing Development

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Regional Shopping Center	41.43	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Southern California Edison
Climate Zone	9	**Precipitation Freq (Days)**	31		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase - No construciton, removing and replacing a use.

Vehicle Trips - Table 5-2, 4,354 ADT-3,698 net ADT=656 net trips/41,433sf of proposed x 1,000sf=15.83 trips/1,000sf

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2011	0.64	1.18	0.74	0.00	0.01	0.08	0.09	0.00	0.08	0.08	0.00	116.58	116.58	0.01	0.00	116.86
Total	**0.64**	**1.18**	**0.74**	**0.00**	**0.01**	**0.08**	**0.09**	**0.00**	**0.08**	**0.08**	**0.00**	**116.58**	**116.58**	**0.01**	**0.00**	**116.86**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2011	0.64	1.18	0.74	0.00	0.00	0.08	0.08	0.00	0.08	0.08	0.00	116.58	116.58	0.01	0.00	116.86
Total	**0.64**	**1.18**	**0.74**	**0.00**	**0.00**	**0.08**	**0.08**	**0.00**	**0.08**	**0.08**	**0.00**	**116.58**	**116.58**	**0.01**	**0.00**	**116.86**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.20	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	186.58	186.58	0.01	0.00	187.75
Mobile	0.45	1.01	4.25	0.01	0.62	0.04	0.67	0.01	0.04	0.05	0.00	573.53	573.53	0.02	0.00	574.05
Waste						0.00	0.00		0.00	0.00	8.83	0.00	8.83	0.52	0.00	19.79
Water						0.00	0.00		0.00	0.00	0.00	17.74	17.74	0.09	0.00	20.53
Total	**0.65**	**1.01**	**4.25**	**0.01**	**0.62**	**0.04**	**0.67**	**0.01**	**0.04**	**0.05**	**8.83**	**777.85**	**786.68**	**0.64**	**0.00**	**802.12**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.20	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	186.58	186.58	0.01	0.00	187.75
Mobile	0.45	1.01	4.25	0.01	0.62	0.04	0.67	0.01	0.04	0.05	0.00	573.53	573.53	0.02	0.00	574.05
Waste						0.00	0.00		0.00	0.00	8.83	0.00	8.83	0.52	0.00	19.79
Water						0.00	0.00		0.00	0.00	0.00	17.74	17.74	0.09	0.00	20.53
Total	**0.65**	**1.01**	**4.25**	**0.01**	**0.62**	**0.04**	**0.67**	**0.01**	**0.04**	**0.05**	**8.83**	**777.85**	**786.68**	**0.64**	**0.00**	**802.12**

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Demolition - 2011

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.08	0.05	0.00		0.01	0.01		0.01	0.01	0.00	6.69	6.69	0.00	0.00	6.71
Total	**0.01**	**0.08**	**0.05**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**6.69**	**6.69**	**0.00**	**0.00**	**6.71**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.48
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.48**	**0.48**	**0.00**	**0.00**	**0.48**

3.2 Demolition - 2011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.08	0.05	0.00		0.01	0.01		0.01	0.01	0.00	6.69	6.69	0.00	0.00	6.71
Total	**0.01**	**0.08**	**0.05**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**6.69**	**6.69**	**0.00**	**0.00**	**6.71**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.48
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.48**	**0.48**	**0.00**	**0.00**	**0.48**

3.3 Site Preparation - 2011

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.64	0.64	0.00	0.00	0.64
Total	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.64**	**0.64**	**0.00**	**0.00**	**0.64**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.02
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.02**	**0.00**	**0.00**	**0.02**

3.3 Site Preparation - 2011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.64	0.64	0.00	0.00	0.64
Total	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.64**	**0.64**	**0.00**	**0.00**	**0.64**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.02
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.02**	**0.00**	**0.00**	**0.02**

3.4 Grading - 2011

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.34	1.34	0.00	0.00	1.34
Total	**0.00**	**0.02**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.34**	**1.34**	**0.00**	**0.00**	**1.34**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.10
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.10**	**0.10**	**0.00**	**0.00**	**0.10**

3.4 Grading - 2011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.34	1.34	0.00	0.00	1.34
Total	**0.00**	**0.02**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.34**	**1.34**	**0.00**	**0.00**	**1.34**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.10
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.10**	**0.10**	**0.00**	**0.00**	**0.10**

3.5 Building Construction - 2011

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.13	0.96	0.55	0.00		0.07	0.07		0.07	0.07	0.00	88.22	88.22	0.01	0.00	88.44
Total	**0.13**	**0.96**	**0.55**	**0.00**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**88.22**	**88.22**	**0.01**	**0.00**	**88.44**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.07	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	8.56	8.56	0.00	0.00	8.56
Worker	0.00	0.00	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	6.21	6.21	0.00	0.00	6.22
Total	**0.01**	**0.07**	**0.10**	**0.00**	**0.01**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**14.77**	**14.77**	**0.00**	**0.00**	**14.78**

3.5 Building Construction - 2011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.13	0.96	0.55	0.00		0.07	0.07		0.07	0.07	0.00	88.22	88.22	0.01	0.00	88.44
Total	**0.13**	**0.96**	**0.55**	**0.00**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**88.22**	**88.22**	**0.01**	**0.00**	**88.44**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.56	8.56	0.00	0.00	8.56
Worker	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.21	6.21	0.00	0.00	6.22
Total	**0.01**	**0.07**	**0.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**14.77**	**14.77**	**0.00**	**0.00**	**14.78**

3.6 Paving - 2011

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.04	0.02	0.00		0.00	0.00		0.00	0.00	0.00	3.19	3.19	0.00	0.00	3.20
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.01**	**0.04**	**0.02**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**3.19**	**3.19**	**0.00**	**0.00**	**3.20**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.43	0.00	0.00	0.43
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.43**	**0.43**	**0.00**	**0.00**	**0.43**

3.6 Paving - 2011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.04	0.02	0.00		0.00	0.00		0.00	0.00	0.00	3.19	3.19	0.00	0.00	3.20
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.01**	**0.04**	**0.02**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**3.19**	**3.19**	**0.00**	**0.00**	**3.20**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.43	0.00	0.00	0.43
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.43**	**0.43**	**0.00**	**0.00**	**0.43**

3.7 Architectural Coating - 2011

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.48					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.64	0.64	0.00	0.00	0.64
Total	**0.48**	**0.01**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.64**	**0.64**	**0.00**	**0.00**	**0.64**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.07
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.07**	**0.07**	**0.00**	**0.00**	**0.07**

3.7 Architectural Coating - 2011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.48					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.64	0.64	0.00	0.00	0.64
Total	**0.48**	**0.01**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.64**	**0.64**	**0.00**	**0.00**	**0.64**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.07
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.07**	**0.07**	**0.00**	**0.00**	**0.07**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.45	1.01	4.25	0.01	0.62	0.04	0.67	0.01	0.04	0.05	0.00	573.53	573.53	0.02	0.00	574.05
Unmitigated	0.45	1.01	4.25	0.01	0.62	0.04	0.67	0.01	0.04	0.05	0.00	573.53	573.53	0.02	0.00	574.05
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	655.84	655.84	655.84	1,149,882	1,149,882
Total	655.84	655.84	655.84	1,149,882	1,149,882

4.3 Trip Type Information

	Miles			Trip %		
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
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	182.82	182.82	0.01	0.00	183.97
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	182.82	182.82	0.01	0.00	183.97
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.76	3.76	0.00	0.00	3.78
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.76	3.76	0.00	0.00	3.78
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	tons/yr										MT/yr					
Regional Shopping Center	70436.1	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.76	3.76	0.00	0.00	3.78
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**3.76**	**3.76**	**0.00**	**0.00**	**3.78**

5.2 Energy by Land Use - NaturalGas

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	tons/yr										MT/yr					
Regional Shopping Center	70436.1	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.76	3.76	0.00	0.00	3.78
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**3.76**	**3.76**	**0.00**	**0.00**	**3.78**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Regional Shopping Center	628539					182.82	0.01	0.00	183.97
Total						**182.82**	**0.01**	**0.00**	**183.97**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Regional Shopping Center	628539					182.82	0.01	0.00	183.97
Total						**182.82**	**0.01**	**0.00**	**183.97**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.20	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.20	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.05					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.15					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.20**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.05					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.15					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.20**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					17.74	0.09	0.00	20.53
Unmitigated					17.74	0.09	0.00	20.53
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Regional Shopping Center	3.06882 / 1.88089					17.74	0.09	0.00	20.53
Total						**17.74**	**0.09**	**0.00**	**20.53**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Regional Shopping Center	3.06882 / 1.88089					17.74	0.09	0.00	20.53
Total						**17.74**	**0.09**	**0.00**	**20.53**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					8.83	0.52	0.00	19.79
Unmitigated					8.83	0.52	0.00	19.79
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Regional Shopping Center	43.5					8.83	0.52	0.00	19.79
Total						**8.83**	**0.52**	**0.00**	**19.79**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Regional Shopping Center	43.5					8.83	0.52	0.00	19.79
Total						**8.83**	**0.52**	**0.00**	**19.79**

9.0 Vegetation

Greenhouse Gas Emission Worksheet

N20 Mobile Emissions South Bay Pavillion Movie Theater Project (Existing)

From URBEMIS 2007 Vehicle Fleet Mix Output:

Annual VMT: 1,149,882

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	46.0%	0.04	0.0184	0.04	0.0184
Light Truck < 3750 lbs	10.3%	0.05	0.00515	0.06	0.00618
Light Truck 3751-5750 lbs	23.2%	0.05	0.0116	0.06	0.01392
Med Truck 5751-8500 lbs	12.2%	0.12	0.01464	0.2	0.0244
Lite-Heavy Truck 8501-10,000 lbs	2.1%	0.12	0.00252	0.2	0.0042
Lite-Heavy Truck 10,001-14,000 lbs	0.5%	0.09	0.00045	0.125	0.000625
Med-Heavy Truck 14,001-33,000 lbs	1.0%	0.06	0.0006	0.05	0.0005
Heavy-Heavy Truck 33,001-60,000 lbs	2.9%	0.06	0.00174	0.05	0.00145
Other Bus	0.1%	0.06	0.00006	0.05	0.00005
Urban Bus	0.1%	0.06	0.00006	0.05	0.00005
Motorcycle	1.1%	0.09	0.00099	0.01	0.00011
School Bus	0.1%	0.06	0.00006	0.05	0.00005
Motor Home	0.4%	0.09	0.00036	0.125	0.0005
Total	**100.0%**		**0.05663**		**0.070435**

Total Emissions (metric tons) =
Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4	21	GWP
N2O	310	GWP
1 ton (short, US) =	0.90718474	metric ton

Annual Mobile Emissions:

	Total Emissions		Total CO2e units	
N20 Emissions:	0.0810	metric tons N2O	**25.11**	metric tons CO2e
		Project Total:	***25.11 metric tons CO2e***	

References

* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).
in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.
Assume Model year 2000-present, gasoline fueled.

** Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

*** From URBEMIS 2007 results for mobile sources

South Bay Pavilion New Construction

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Movie Theater (No Matinee)	55.48	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Southern California Edison
Climate Zone	9	**Precipitation Freq (Days)**	31		

1.3 User Entered Comments

Project Characteristics -

Land Use - new theater 55,482 sf

Construction Phase - Construction default schedule moved forward 3 years to begin in 2014

Demolition - square footage of space to be removed=41,433

Grading - Assumed that cut and fill will be balanced on-site

Architectural Coating - use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113

Vehicle Trips - (2,080 [int cap])ADT/55,482sf of proposed theater x 1,000sf=37.49 trips/1,000sf; trip lengths adjusted to 6.1 miles

Area Coating - use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113

Area Mitigation - use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113

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					
2014	77.55	40.54	26.06	0.05	6.61	2.27	8.88	2.90	2.26	4.37	0.00	4,867.80	0.00	0.45	0.00	4,877.32
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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					
2014	77.55	40.54	26.06	0.05	5.80	2.27	7.27	2.90	2.26	4.37	0.00	4,867.80	0.00	0.45	0.00	4,877.32
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.31	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.03	0.28	0.24	0.00		0.00	0.02		0.00	0.02		336.38		0.01	0.01	338.43
Mobile	7.51	15.92	66.94	0.10	10.78	0.65	11.43	0.15	0.56	0.71		10,387.54		0.42		10,396.33
Total	**8.85**	**16.20**	**67.18**	**0.10**	**10.78**	**0.65**	**11.45**	**0.15**	**0.56**	**0.73**		**10,723.92**		**0.43**	**0.01**	**10,734.76**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.31	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.03	0.28	0.24	0.00		0.00	0.02		0.00	0.02		336.38		0.01	0.01	338.43
Mobile	7.51	15.92	66.94	0.10	10.78	0.65	11.43	0.15	0.56	0.71		10,387.54		0.42		10,396.33
Total	**8.85**	**16.20**	**67.18**	**0.10**	**10.78**	**0.65**	**11.45**	**0.15**	**0.56**	**0.73**		**10,723.92**		**0.43**	**0.01**	**10,734.76**

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

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					2.04	0.00	2.04	0.00	0.00	0.00						0.00
Off-Road	4.75	35.99	22.84	0.04		2.08	2.08		2.08	2.08		3,946.47		0.42		3,955.39
Total	**4.75**	**35.99**	**22.84**	**0.04**	**2.04**	**2.08**	**4.12**	**0.00**	**2.08**	**2.08**		**3,946.47**		**0.42**		**3,955.39**

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	0.44	4.48	2.45	0.01	4.40	0.19	4.59	0.01	0.17	0.18		784.30		0.02		784.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.07	0.77	0.00	0.17	0.01	0.18	0.00	0.01	0.01		137.02		0.01		137.18
Total	**0.51**	**4.55**	**3.22**	**0.01**	**4.57**	**0.20**	**4.77**	**0.01**	**0.18**	**0.19**		**921.32**		**0.03**		**921.93**

3.2 Demolition - 2014

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					2.04	0.00	2.04	0.00	0.00	0.00						0.00
Off-Road	4.75	35.99	22.84	0.04		2.08	2.08		2.08	2.08	0.00	3,946.47		0.42		3,955.39
Total	**4.75**	**35.99**	**22.84**	**0.04**	**2.04**	**2.08**	**4.12**	**0.00**	**2.08**	**2.08**	**0.00**	**3,946.47**		**0.42**		**3,955.39**

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	0.44	4.48	2.45	0.01	0.03	0.19	0.22	0.01	0.17	0.18		784.30		0.02		784.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.07	0.77	0.00	0.01	0.01	0.01	0.00	0.01	0.01		137.02		0.01		137.18
Total	**0.51**	**4.55**	**3.22**	**0.01**	**0.04**	**0.20**	**0.23**	**0.01**	**0.18**	**0.19**		**921.32**		**0.03**		**921.93**

3.3 Site Preparation - 2014

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					5.80	0.00	5.80	2.90	0.00	2.90						0.00
Off-Road	3.75	29.67	17.95	0.03		1.47	1.47		1.47	1.47		3,253.39		0.34		3,260.45
Total	**3.75**	**29.67**	**17.95**	**0.03**	**5.80**	**1.47**	**7.27**	**2.90**	**1.47**	**4.37**		**3,253.39**		**0.34**		**3,260.45**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.04	0.04	0.48	0.00	0.10	0.00	0.11	0.00	0.00	0.00		84.32		0.00		84.42
Total	**0.04**	**0.04**	**0.48**	**0.00**	**0.10**	**0.00**	**0.11**	**0.00**	**0.00**	**0.00**		**84.32**		**0.00**		**84.42**

3.3 Site Preparation - 2014

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					5.80	0.00	5.80	2.90	0.00	2.90						0.00
Off-Road	3.75	29.67	17.95	0.03		1.47	1.47		1.47	1.47	0.00	3,253.39		0.34		3,260.45
Total	**3.75**	**29.67**	**17.95**	**0.03**	**5.80**	**1.47**	**7.27**	**2.90**	**1.47**	**4.37**	**0.00**	**3,253.39**		**0.34**		**3,260.45**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.04	0.04	0.48	0.00	0.00	0.00	0.01	0.00	0.00	0.00		84.32		0.00		84.42
Total	**0.04**	**0.04**	**0.48**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**		**84.32**		**0.00**		**84.42**

3.4 Grading - 2014

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					4.91	0.00	4.91	2.48	0.00	2.48						0.00
Off-Road	3.11	24.59	14.80	0.03		1.21	1.21		1.21	1.21		2,689.97		0.28		2,695.82
Total	**3.11**	**24.59**	**14.80**	**0.03**	**4.91**	**1.21**	**6.12**	**2.48**	**1.21**	**3.69**		**2,689.97**		**0.28**		**2,695.82**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.04	0.04	0.48	0.00	0.10	0.00	0.11	0.00	0.00	0.00		84.32		0.00		84.42
Total	**0.04**	**0.04**	**0.48**	**0.00**	**0.10**	**0.00**	**0.11**	**0.00**	**0.00**	**0.00**		**84.32**		**0.00**		**84.42**

3.4 Grading - 2014

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					4.91	0.00	4.91	2.48	0.00	2.48						0.00
Off-Road	3.11	24.59	14.80	0.03		1.21	1.21		1.21	1.21	0.00	2,689.97		0.28		2,695.82
Total	**3.11**	**24.59**	**14.80**	**0.03**	**4.91**	**1.21**	**6.12**	**2.48**	**1.21**	**3.69**	**0.00**	**2,689.97**		**0.28**		**2,695.82**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.04	0.04	0.48	0.00	0.00	0.00	0.01	0.00	0.00	0.00		84.32		0.00		84.42
Total	**0.04**	**0.04**	**0.48**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**		**84.32**		**0.00**		**84.42**

3.5 Building Construction - 2014

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	4.15	21.74	15.92	0.03		1.46	1.46		1.46	1.46		2,561.58		0.37		2,569.39
Total	**4.15**	**21.74**	**15.92**	**0.03**		**1.46**	**1.46**		**1.46**	**1.46**		**2,561.58**		**0.37**		**2,569.39**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.12	1.34	0.81	0.00	0.08	0.05	0.13	0.00	0.04	0.04		245.11		0.01		245.23
Worker	0.12	0.12	1.37	0.00	0.30	0.01	0.31	0.00	0.01	0.01		242.42		0.01		242.70
Total	**0.24**	**1.46**	**2.18**	**0.00**	**0.38**	**0.06**	**0.44**	**0.00**	**0.05**	**0.05**		**487.53**		**0.02**		**487.93**

3.5 Building Construction - 2014

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	4.15	21.74	15.92	0.03		1.46	1.46		1.46	1.46	0.00	2,561.58		0.37		2,569.39
Total	**4.15**	**21.74**	**15.92**	**0.03**		**1.46**	**1.46**		**1.46**	**1.46**	**0.00**	**2,561.58**		**0.37**		**2,569.39**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.12	1.34	0.81	0.00	0.01	0.05	0.05	0.00	0.04	0.04		245.11		0.01		245.23
Worker	0.12	0.12	1.37	0.00	0.01	0.01	0.02	0.00	0.01	0.01		242.42		0.01		242.70
Total	**0.24**	**1.46**	**2.18**	**0.00**	**0.02**	**0.06**	**0.07**	**0.00**	**0.05**	**0.05**		**487.53**		**0.02**		**487.93**

3.6 Paving - 2014

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	2.80	17.55	11.98	0.02		1.46	1.46		1.46	1.46		1,712.73		0.25		1,718.00
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.80**	**17.55**	**11.98**	**0.02**		**1.46**	**1.46**		**1.46**	**1.46**		**1,712.73**		**0.25**		**1,718.00**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.07	0.77	0.00	0.17	0.01	0.18	0.00	0.01	0.01		137.02		0.01		137.18
Total	**0.07**	**0.07**	**0.77**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**137.02**		**0.01**		**137.18**

3.6 Paving - 2014

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	2.80	17.55	11.98	0.02		1.46	1.46		1.46	1.46	0.00	1,712.73		0.25		1,718.00
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.80**	**17.55**	**11.98**	**0.02**		**1.46**	**1.46**		**1.46**	**1.46**	**0.00**	**1,712.73**		**0.25**		**1,718.00**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.07	0.77	0.00	0.01	0.01	0.01	0.00	0.01	0.01		137.02		0.01		137.18
Total	**0.07**	**0.07**	**0.77**	**0.00**	**0.01**	**0.01**	**0.01**	**0.00**	**0.01**	**0.01**		**137.02**		**0.01**		**137.18**

3.7 Architectural Coating - 2014

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	77.08					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03
Total	**77.53**	**2.77**	**1.92**	**0.00**		**0.24**	**0.24**		**0.24**	**0.24**		**281.19**		**0.04**		**282.03**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.30	0.00	0.07	0.00	0.07	0.00	0.00	0.00		52.70		0.00		52.76
Total	**0.03**	**0.03**	**0.30**	**0.00**	**0.07**	**0.00**	**0.07**	**0.00**	**0.00**	**0.00**		**52.70**		**0.00**		**52.76**

3.7 Architectural Coating - 2014

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	77.08					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24	0.00	281.19		0.04		282.03
Total	**77.53**	**2.77**	**1.92**	**0.00**		**0.24**	**0.24**		**0.24**	**0.24**	**0.00**	**281.19**		**0.04**		**282.03**

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		52.70		0.00		52.76
Total	**0.03**	**0.03**	**0.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**52.70**		**0.00**		**52.76**

4.0 Mobile Detail

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	7.51	15.92	66.94	0.10	10.78	0.65	11.43	0.15	0.56	0.71		10,387.54		0.42		10,396.33
Unmitigated	7.51	15.92	66.94	0.10	10.78	0.65	11.43	0.15	0.56	0.71		10,387.54		0.42		10,396.33
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Movie Theater (No Matinee)	2,079.95	2,079.95	2079.95	3,257,234	3,257,234
Total	2,079.95	2,079.95	2,079.95	3,257,234	3,257,234

4.3 Trip Type Information

	Miles			Trip %		
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
Movie Theater (No Matinee)	6.10	6.10	6.10	1.80	79.20	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.03	0.28	0.24	0.00		0.00	0.02		0.00	0.02		336.38		0.01	0.01	338.43
NaturalGas Unmitigated	0.03	0.28	0.24	0.00		0.00	0.02		0.00	0.02		336.38		0.01	0.01	338.43
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	lb/day										lb/day					
Movie Theater (No Matinee)	2859.22	0.03	0.28	0.24	0.00		0.00	0.02		0.00	0.02		336.38		0.01	0.01	338.43
Total		**0.03**	**0.28**	**0.24**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**		**336.38**		**0.01**	**0.01**	**338.43**

5.2 Energy by Land Use - NaturalGas

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	lb/day										lb/day					
Movie Theater (No Matinee)	2.85922	0.03	0.28	0.24	0.00		0.00	0.02		0.00	0.02		336.38		0.01	0.01	338.43
Total		**0.03**	**0.28**	**0.24**	**0.00**		**0.00**	**0.02**		**0.00**	**0.02**		**336.38**		**0.01**	**0.01**	**338.43**

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	1.31	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	1.31	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.21					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.10					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**1.31**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

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					
Architectural Coating	0.21					0.00	0.00		0.00	0.00						0.00
Consumer Products	1.10					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**1.31**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

South Bay Pavilion New Construction

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Movie Theater (No Matinee)	55.48	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Southern California Edison
Climate Zone	9	**Precipitation Freq (Days)**	31		

1.3 User Entered Comments

Project Characteristics -

Land Use - new theater 55,482 sf

Construction Phase - Construction default schedule moved forward 3 years to begin in 2014

Demolition - square footage of space to be removed=41,433

Grading - Assumed that cut and fill will be balanced on-site

Architectural Coating - use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113

Vehicle Trips - (2,080 [int cap])ADT/55,482sf of proposed theater x 1,000sf=37.49 trips/1,000sf; trip lengths adjusted to 6.1 miles

Area Coating - use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113

Area Mitigation - use of low-VOC paint (150 g/L for nonflat coatings) as required by SCAQMD Rule 1113

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.90	2.91	2.20	0.00	0.11	0.19	0.30	0.01	0.19	0.20	0.00	337.15	337.15	0.04	0.00	338.03
Total	**0.90**	**2.91**	**2.20**	**0.00**	**0.11**	**0.19**	**0.30**	**0.01**	**0.19**	**0.20**	**0.00**	**337.15**	**337.15**	**0.04**	**0.00**	**338.03**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.90	2.91	2.20	0.00	0.04	0.19	0.22	0.01	0.19	0.20	0.00	337.15	337.15	0.04	0.00	338.03
Total	**0.90**	**2.91**	**2.20**	**0.00**	**0.04**	**0.19**	**0.22**	**0.01**	**0.19**	**0.20**	**0.00**	**337.15**	**337.15**	**0.04**	**0.00**	**338.03**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.24	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	250.16	250.16	0.01	0.00	251.71
Mobile	1.33	2.95	12.50	0.02	1.77	0.12	1.89	0.03	0.10	0.13	0.00	1,633.32	1,633.32	0.07	0.00	1,634.84
Waste						0.00	0.00		0.00	0.00	64.19	0.00	64.19	3.79	0.00	143.86
Water						0.00	0.00		0.00	0.00	0.00	89.23	89.23	0.68	0.02	109.30
Total	**1.58**	**3.00**	**12.54**	**0.02**	**1.77**	**0.12**	**1.89**	**0.03**	**0.10**	**0.13**	**64.19**	**1,972.71**	**2,036.90**	**4.55**	**0.02**	**2,139.71**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.24	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	250.16	250.16	0.01	0.00	251.71
Mobile	1.33	2.95	12.50	0.02	1.77	0.12	1.89	0.03	0.10	0.13	0.00	1,633.32	1,633.32	0.07	0.00	1,634.84
Waste						0.00	0.00		0.00	0.00	64.19	0.00	64.19	3.79	0.00	143.86
Water						0.00	0.00		0.00	0.00	0.00	89.23	89.23	0.68	0.02	109.30
Total	**1.58**	**3.00**	**12.54**	**0.02**	**1.77**	**0.12**	**1.89**	**0.03**	**0.10**	**0.13**	**64.19**	**1,972.71**	**2,036.90**	**4.55**	**0.02**	**2,139.71**

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.36	0.23	0.00		0.02	0.02		0.02	0.02	0.00	35.79	35.79	0.00	0.00	35.87
Total	**0.05**	**0.36**	**0.23**	**0.00**	**0.02**	**0.02**	**0.04**	**0.00**	**0.02**	**0.02**	**0.00**	**35.79**	**35.79**	**0.00**	**0.00**	**35.87**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.04	0.03	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	7.10	7.10	0.00	0.00	7.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	1.17	0.00	0.00	1.17
Total	**0.00**	**0.04**	**0.04**	**0.00**	**0.04**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**8.27**	**8.27**	**0.00**	**0.00**	**8.27**

3.2 Demolition - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.36	0.23	0.00		0.02	0.02		0.02	0.02	0.00	35.79	35.79	0.00	0.00	35.87
Total	**0.05**	**0.36**	**0.23**	**0.00**	**0.02**	**0.02**	**0.04**	**0.00**	**0.02**	**0.02**	**0.00**	**35.79**	**35.79**	**0.00**	**0.00**	**35.87**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.10	7.10	0.00	0.00	7.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	1.17	0.00	0.00	1.17
Total	**0.00**	**0.04**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**8.27**	**8.27**	**0.00**	**0.00**	**8.27**

3.3 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.95	2.95	0.00	0.00	2.96
Total	**0.00**	**0.03**	**0.02**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**2.95**	**2.95**	**0.00**	**0.00**	**2.96**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.07
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.07**	**0.07**	**0.00**	**0.00**	**0.07**

3.3 Site Preparation - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.95	2.95	0.00	0.00	2.96
Total	**0.00**	**0.03**	**0.02**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**2.95**	**2.95**	**0.00**	**0.00**	**2.96**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.07
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.07**	**0.07**	**0.00**	**0.00**	**0.07**

3.4 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.05	0.03	0.00		0.00	0.00		0.00	0.00	0.00	4.88	4.88	0.00	0.00	4.89
Total	**0.01**	**0.05**	**0.03**	**0.00**	**0.01**	**0.00**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**	**4.88**	**4.88**	**0.00**	**0.00**	**4.89**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.14
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.14**	**0.14**	**0.00**	**0.00**	**0.14**

3.4 Grading - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.05	0.03	0.00		0.00	0.00		0.00	0.00	0.00	4.88	4.88	0.00	0.00	4.89
Total	**0.01**	**0.05**	**0.03**	**0.00**	**0.01**	**0.00**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**	**4.88**	**4.88**	**0.00**	**0.00**	**4.89**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.14
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.14**	**0.14**	**0.00**	**0.00**	**0.14**

3.5 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.41	2.17	1.59	0.00		0.15	0.15		0.15	0.15	0.00	232.32	232.32	0.03	0.00	233.03
Total	**0.41**	**2.17**	**1.59**	**0.00**		**0.15**	**0.15**		**0.15**	**0.15**	**0.00**	**232.32**	**232.32**	**0.03**	**0.00**	**233.03**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.13	0.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	22.17	22.17	0.00	0.00	22.18
Worker	0.01	0.01	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	20.71	20.71	0.00	0.00	20.73
Total	**0.02**	**0.14**	**0.22**	**0.00**	**0.04**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**42.88**	**42.88**	**0.00**	**0.00**	**42.91**

3.5 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.41	2.17	1.59	0.00		0.15	0.15		0.15	0.15	0.00	232.32	232.32	0.03	0.00	233.03
Total	**0.41**	**2.17**	**1.59**	**0.00**		**0.15**	**0.15**		**0.15**	**0.15**	**0.00**	**232.32**	**232.32**	**0.03**	**0.00**	**233.03**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.13	0.09	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	22.17	22.17	0.00	0.00	22.18
Worker	0.01	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.71	20.71	0.00	0.00	20.73
Total	**0.02**	**0.14**	**0.22**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**42.88**	**42.88**	**0.00**	**0.00**	**42.91**

3.6 Paving - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.09	0.06	0.00		0.01	0.01		0.01	0.01	0.00	7.77	7.77	0.00	0.00	7.79
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.01**	**0.09**	**0.06**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**7.77**	**7.77**	**0.00**	**0.00**	**7.79**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.59	0.00	0.00	0.59
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.59**	**0.59**	**0.00**	**0.00**	**0.59**

3.6 Paving - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.09	0.06	0.00		0.01	0.01		0.01	0.01	0.00	7.77	7.77	0.00	0.00	7.79
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.01**	**0.09**	**0.06**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**7.77**	**7.77**	**0.00**	**0.00**	**7.79**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.59	0.00	0.00	0.59
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.59**	**0.59**	**0.00**	**0.00**	**0.59**

3.7 Architectural Coating - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.39					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.28	1.28	0.00	0.00	1.28
Total	**0.39**	**0.01**	**0.01**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**1.28**	**1.28**	**0.00**	**0.00**	**1.28**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.23**	**0.23**	**0.00**	**0.00**	**0.23**

3.7 Architectural Coating - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.39					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.28	1.28	0.00	0.00	1.28
Total	**0.39**	**0.01**	**0.01**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**1.28**	**1.28**	**0.00**	**0.00**	**1.28**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.23**	**0.23**	**0.00**	**0.00**	**0.23**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.33	2.95	12.50	0.02	1.77	0.12	1.89	0.03	0.10	0.13	0.00	1,633.32	1,633.32	0.07	0.00	1,634.84
Unmitigated	1.33	2.95	12.50	0.02	1.77	0.12	1.89	0.03	0.10	0.13	0.00	1,633.32	1,633.32	0.07	0.00	1,634.84
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Movie Theater (No Matinee)	2,079.95	2,079.95	2079.95	3,257,234	3,257,234
Total	2,079.95	2,079.95	2,079.95	3,257,234	3,257,234

4.3 Trip Type Information

	Miles			Trip %		
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
Movie Theater (No Matinee)	6.10	6.10	6.10	1.80	79.20	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	194.46	194.46	0.01	0.00	195.68
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	194.46	194.46	0.01	0.00	195.68
NaturalGas Mitigated	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	55.69	55.69	0.00	0.00	56.03
NaturalGas Unmitigated	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	55.69	55.69	0.00	0.00	56.03
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

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	tons/yr										MT/yr					
Movie Theater (No Matinee)	1.04362e+006	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	55.69	55.69	0.00	0.00	56.03
Total		**0.01**	**0.05**	**0.04**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**55.69**	**55.69**	**0.00**	**0.00**	**56.03**

5.2 Energy by Land Use - NaturalGas

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	tons/yr										MT/yr					
Movie Theater (No Matinee)	1.04362e+006	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	55.69	55.69	0.00	0.00	56.03
Total		**0.01**	**0.05**	**0.04**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**55.69**	**55.69**	**0.00**	**0.00**	**56.03**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Movie Theater (No Matinee)	668558					194.46	0.01	0.00	195.68
Total						**194.46**	**0.01**	**0.00**	**195.68**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Movie Theater (No Matinee)	668558					194.46	0.01	0.00	195.68
Total						**194.46**	**0.01**	**0.00**	**195.68**

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	tons/yr										MT/yr					
Mitigated	0.24	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.24	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.04					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.20					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.24**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	tons/yr										MT/yr					
Architectural Coating	0.04					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.20					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.24**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					89.23	0.68	0.02	109.30
Unmitigated					89.23	0.68	0.02	109.30
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Movie Theater (No Matinee)	22.2808 / 1.42218					89.23	0.68	0.02	109.30
Total						**89.23**	**0.68**	**0.02**	**109.30**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Movie Theater (No Matinee)	22.2808 / 1.42218					89.23	0.68	0.02	109.30
Total						**89.23**	**0.68**	**0.02**	**109.30**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					64.19	3.79	0.00	143.86
Unmitigated					64.19	3.79	0.00	143.86
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Movie Theater (No Matinee)	316.24					64.19	3.79	0.00	143.86
Total						**64.19**	**3.79**	**0.00**	**143.86**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Movie Theater (No Matinee)	316.24					64.19	3.79	0.00	143.86
Total						**64.19**	**3.79**	**0.00**	**143.86**

9.0 Vegetation

Greenhouse Gas Emission Worksheet

N20 Mobile Emissions South Bay Pavillion Movie Theater Project (New Construction)

From URBEMIS 2007 Vehicle Fleet Mix Output:

Annual VMT: 3,257,234

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	46.0%	0.04	0.0184	0.04	0.0184
Light Truck < 3750 lbs	10.3%	0.05	0.00515	0.06	0.00618
Light Truck 3751-5750 lbs	23.2%	0.05	0.0116	0.06	0.01392
Med Truck 5751-8500 lbs	12.2%	0.12	0.01464	0.2	0.0244
Lite-Heavy Truck 8501-10,000 lbs	2.1%	0.12	0.00252	0.2	0.0042
Lite-Heavy Truck 10,001-14,000 lbs	0.5%	0.09	0.00045	0.125	0.000625
Med-Heavy Truck 14,001-33,000 lbs	1.0%	0.06	0.0006	0.05	0.0005
Heavy-Heavy Truck 33,001-60,000 lbs	2.9%	0.06	0.00174	0.05	0.00145
Other Bus	0.1%	0.06	0.00006	0.05	0.00005
Urban Bus	0.1%	0.06	0.00006	0.05	0.00005
Motorcycle	1.1%	0.09	0.00099	0.01	0.00011
School Bus	0.1%	0.06	0.00006	0.05	0.00005
Motor Home	0.4%	0.09	0.00036	0.125	0.0005
Total	**100.0%**		**0.05663**		**0.070435**

Total Emissions (metric tons) =
Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g

Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)

CH4	21	GWP
N2O	310	GWP
1 ton (short, US) =	0.90718474	metric ton

Annual Mobile Emissions:

	Total Emissions		Total CO2e units	
N20 Emissions:	0.2294	metric tons N2O	**71.12**	metric tons CO2e
		Project Total:	***71.12 metric tons CO2e***	

References

* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).
in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.
Assume Model year 2000-present, gasoline fueled.

** Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

*** From URBEMIS 2007 results for mobile sources