AIR QUALITY TECHNICAL REPORT
LILAC HILLS RANCH
SAN DIEGO COUNTY, CALIFORNIA

SPECIFIC PLAN
GENERAL PLAN AMENDMENT
REZONE
EIR
TENTATIVE MAP (MASTER)
TENTATIVE MAP (PHASE 1 IMPLEMENTING TM)
MAJOR USE PERMIT

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KIVA PROJECT: 09-0112513
SP 3810-12-001
GPA 3800-12-001
REZ 3600-12-003
TM 5571 ~~RPL3~~RPL4 and 5572 ~~RPL3~~RPL4
MUP 3300-12-005

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Executive Summary

The proposed 608-acre Lilac Hills Ranch project site is located within the Valley Center and Bonsall Community Planning areas of the unincorporated County of San Diego with State Route 76 to the north, Valley Center proper to the east, the City of Escondido to the south, and Interstate 15 and Old Highway 395 to the west. Project access would be ~~is~~ provided at West Lilac Road, which turns into Main Street within the project site. Additional access would be provided by a ~~legal physical~~ connection to West Lilac Road via Covey Lane, and gated access would provide emergency access south of the project site to Circle R Drive via Mountain Ridge Road. An additional emergency vehicle access road would be provided via Street "B" via Rodriguez Road.

The project would consist of a mix of residential, commercial, and institutional uses, along with parks and open space. Specifically, the project would include: 90,000 square feet of commercial, office, and retail uses, including a 50-room country inn; 903 traditional single-family detached houses; 164 single-family attached houses~~,~~; 211 residential units within the commercial mixed-use areas; ~~and~~ 468 age-restricted residential houses within a senior citizen's neighborhood; necessary facilities and amenities to serve the senior population (including a senior community center, ~~a~~and 200-bed group residential and group care facility); options for civic facilities ~~(~~, including a fire~~);~~ station and a school site (K-8~~),~~); and public and private neighborhood parks, a private recreational facility, and other recreational amenities. ~~Also planned within the project site are a Recycling Facility (RF), a Water Reclamation Facility (WRF), and other supporting infrastructure.~~ The mixed-use, commercial, and civic uses, with parks, form a Town Center and two Neighborhood Centers, to which residents can walk for various social and commercial needs.

Also planned within the project site are a Recycling Facility (RF), a Water Reclamation Facility (WRF), and other supporting infrastructure. Open space is proposed to retain some of the existing citrus and avocado groves and add additional agricultural open space along with ~~103.6~~104.1 acres of sensitive resources including biological/wetland habitat.

The project is located within the San Diego Air Basin, one of 15 air basins that geographically divide the state of California. The San Diego Air Basin is currently classified as a federal non-attainment area for ozone and a state non-attainment area for particulate matter less than 10 microns (PM_{10}), particulate matter less than 2.5 microns ($PM_{2.5}$), and ozone.

~~Construction activities are anticipated to occur over an approximately 10-year period.~~ Air emissions were calculated using the California Emissions Estimator Model (CalEEMod) computer program (SCAQMD 2011). The CalEEMod program is a tool used to estimate air emissions resulting from land development projects in the state of California. The

model generates emissions from two basics sources: construction sources and operational sources (e.g., area, energy, mobile, waste, and water). The implementation of applicable regulatory control measures and the associated emissions reductions during construction, as required by law, for dust and reactive organic gases were included in this analysis.

Results from the air quality assessment for the project indicate that emissions due to construction are projected to be less than significant for each criteria pollutant~~. It should be noted that construction equipment includes Tier I to III equipment in order to lessen the levels of criteria pollutants~~ with the incorporation of project design considerations and mitigation measures. The construction-related mitigation measures include: AQ-MM-2 — dust control measures; AQ-MM-3 — blasting NO_x control; AQ-MM-4 — rock crushing emissions control; and AQ-MM-5 — blasting PM_{10} and $PM_{2.5}$ control.

Emissions due to operation of the project, however, would be unavoidably significant despite project design considerations and mitigation measures. The operational-related mitigation measures include: AQ-MM-1 – a revised housing forecast; ~~AQ-MM-2 – dust control measures; AQ-MM-3 – blasting NO_x control; AQ-MM-4 – rock crushing emissions control; AQ-MM-5 – blasting PM_{10} and $PM_{2.5}$ control;~~ AQ-MM-6 – Green Cleaning Product education program; and AQ-MM-7 – alternate transportation programs. Trip ~~generated~~generation/mobile source-related project impacts can be avoided somewhat, as described in Chapter ~~Section~~ 3.0, but not below levels of significance~~ for reactive organic gases, carbon monoxide, and particulates~~.

The project also would result in a cumulatively considerable net increase of criteria pollutants. The project's cumulative impacts would be unavoidably significant even with incorporation of the project design considerations and mitigation measures identified in this report.

1.0 Introduction

1.1 Purpose of the Report

The purpose of this analysis is to characterize existing air quality conditions at the project site and in the region, identify applicable rules and regulations, analyze impacts to air quality from construction and operation of the project, and identify feasible measures to mitigate or minimize pollutant emissions associated with the project. This report was prepared in accordance with the County-recommended *Guidelines for Determining Significance and Report Format and Content Requirements, Air Quality* (County's Air Quality Guidelines) (County of San Diego 2007).

1.2 Project Description

The project would consist of a mix of residential, commercial, and institutional uses, along with parks and open space. Specifically, the project would include 90,000 square feet of commercial, office and retail uses, including a 50-room country inn; 903 traditional single-family detached residences; 164 single-family attached residences; 211 residential units within commercial mixed-use areas; ~~and~~ 468 age-restricted residences within a senior citizen's neighborhood; necessary facilities and amenities to serve the senior population (including a senior community center, ~~a~~and 200-bed group residential and group care facility); options for civic facilities~~ (~~, including a fire~~) ;~~ station and a school site (K-8~~),~~); and public and private neighborhood parks, a private recreational facility, and other recreational amenities. The mixed-use, commercial, and civic uses, with parks, form a Town Center and two Neighborhood Centers, to which residents can walk for various social and commercial needs. ~~Also planned within the project site are a RF, a WRF, and other supporting infrastructure. Open space is proposed to retain some of the existing citrus and avocado groves, allows 103.6 acres of sensitive biological/wetland habitat.~~

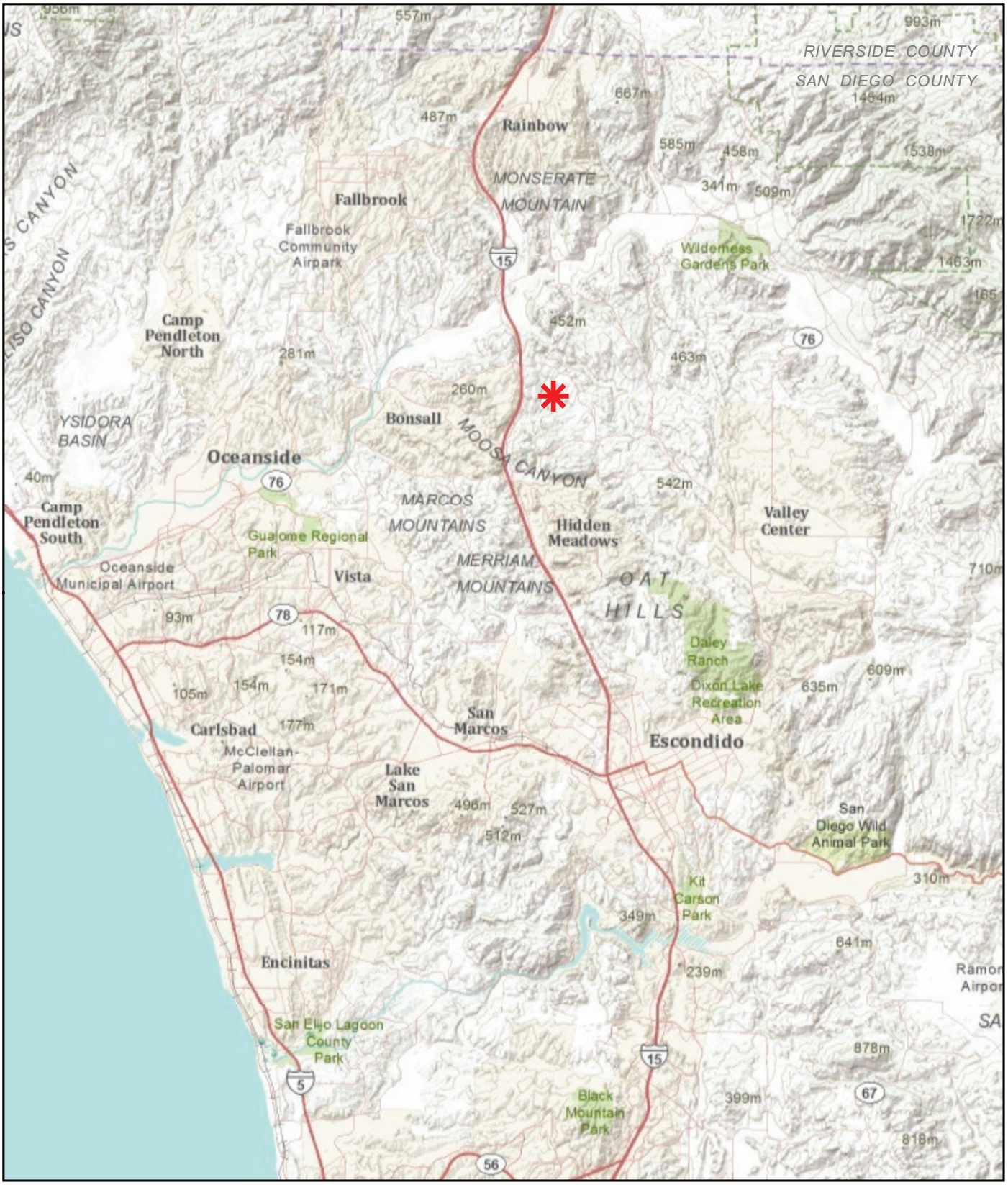
As defined in the Lilac Hills Ranch Specific Plan, the residential component of the project consists of 1,746 units with an overall density less than 2.9 dwelling units per acre.

Also planned within the project site are a RF, a WRF, and other supporting infrastructure. Open space is proposed to retain some of the existing citrus and avocado groves, and allows 104.1 acres of sensitive resources including biological/wetland habitat.

The project application includes a Specific Plan (SP12-001), a General Plan Amendment (GPA 12-001), a Rezone (REZ 12-003), a Master Tentative Map (TM 5571 RPL ~~3~~4), an implementing Tentative Map for Phase 1 (TM 5572 RPL ~~3~~4), one~~two~~ site plan~~s~~ (~~S12-017 for "D" Designator and "V" for setbacks, and~~ S12-018 for Parks), and a MUP for the WRF (MUP 12-005). The project would be implemented in five phases. Additional discretionary permits may be needed to implement latter phases, as identified in the Specific Plan.

1.2.1 Project Location

The project site is located in the unincorporated portion of San Diego County in the westernmost portion of the Valley Center Community Plan Area and easternmost portion of the Bonsall Community Plan Area, and adjacent to I-15 and Old Highway 395, as illustrated on Figures 1 and 2. From the northwest project corner, West Lilac Road serves as the northern boundary of the project site, while Rodriguez Road serves generally as the project boundary to the south and east. From the southwest project corner, the western boundary of the project runs along Old Highway 395/Shirey Road



Project Location

FIGURE 1

Regional Location

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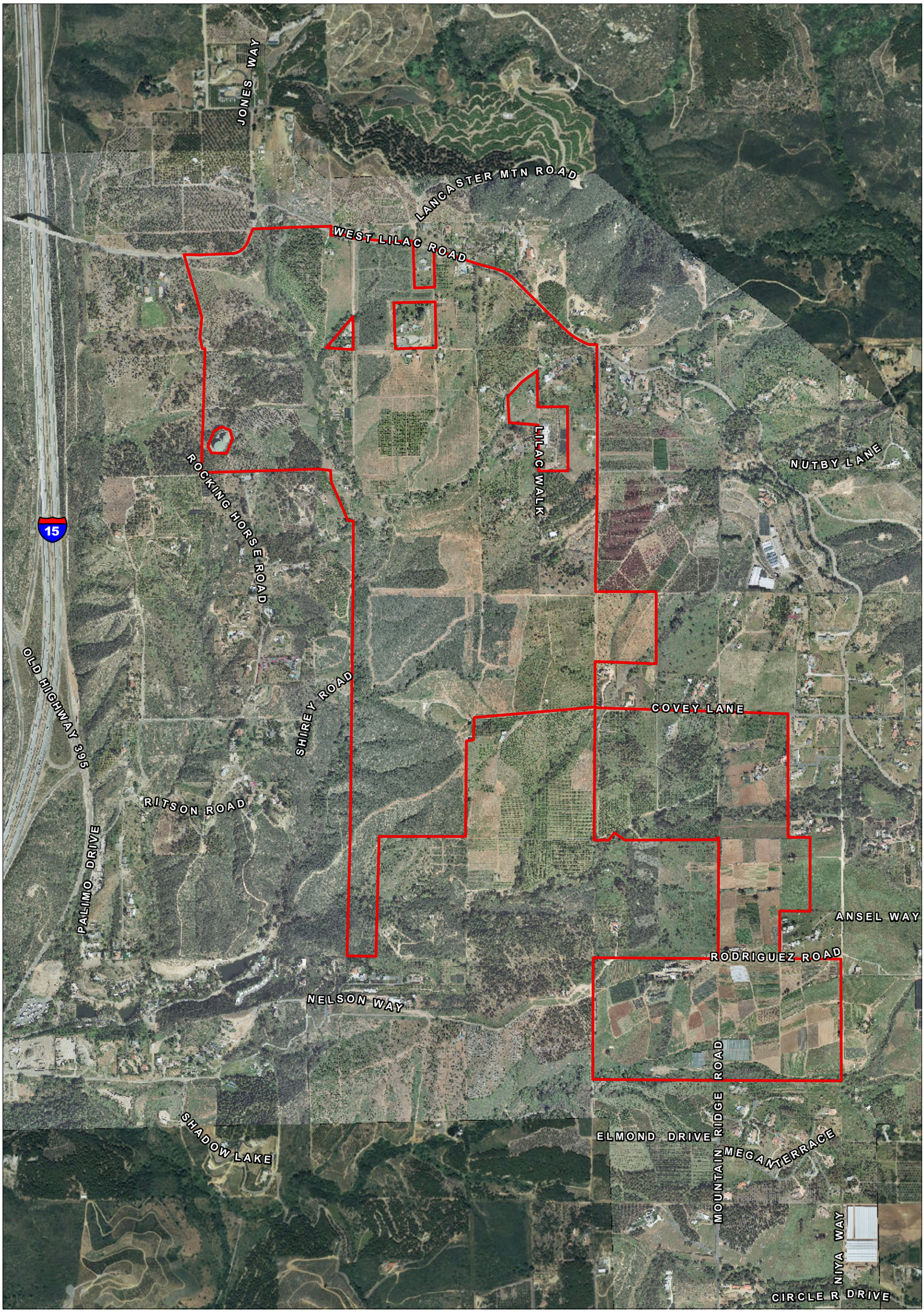

Project Boundary

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FIGURE 2

Project Location on an Aerial Photograph

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and extends to Standell Lane. From there, the project site extends back to Shirey Road, which serves as the northwestern project boundary.

1.2.2 Project's Component Parts

1.2.2.1 Plan Amendments

In order to develop the proposed project, a number of land use changes to the General Plan, the Valley Center Community Plan, and Bonsall Community Plan are required. These include an amendment to the Regional Land Use Element Map, an amendment to the Valley Center Community Plan, an amendment to the Bonsall Community Plan, an amendment to the Regional Mobility Element, a rezone, adoption of the Lilac Hills Ranch Specific Plan, two tentative maps, two site plans, and a major use permit.

1.2.2.2 Rezone

The majority of the project site, which lies within the Valley Center Community Plan Area, is zoned "Limited Agriculture"; the portion of the site, which lies within the Bonsall Community Plan Area, is zoned "Rural Residential". The project includes a Rezone (R12-003), as illustrated in Figure 3, which would replace the existing Rural Residential and Limited Agriculture Use Regulations with two new Use Regulations:

1. Outside of the Town Center and two Neighborhood Centers, the project site would be rezoned with the Urban Residential (RU) Use Regulation.

2. The Town Center would be rezoned ~~as~~with the General Commercial–Residential C34 Use Regulation, as would be the two Neighborhood Centers south of the Town Center and the RF.

1.2.2.3 Specific Plan

This Specific Plan (SP12-001) provides the guidelines for implementation of the project, including future approvals and improvement plans, and establishes permitted land uses, densities, maximum number of residential units, required public facilities, and phasing and implementation mechanisms, and demonstrates compliance with applicable County policies. In addition to establishing regulations and zoning for the proposed planning areas, the Specific Plan also sets forth guidelines for the character and design of the project site, including architectural and landscape design guidelines.

Map Source: Vance and Associates, 2014

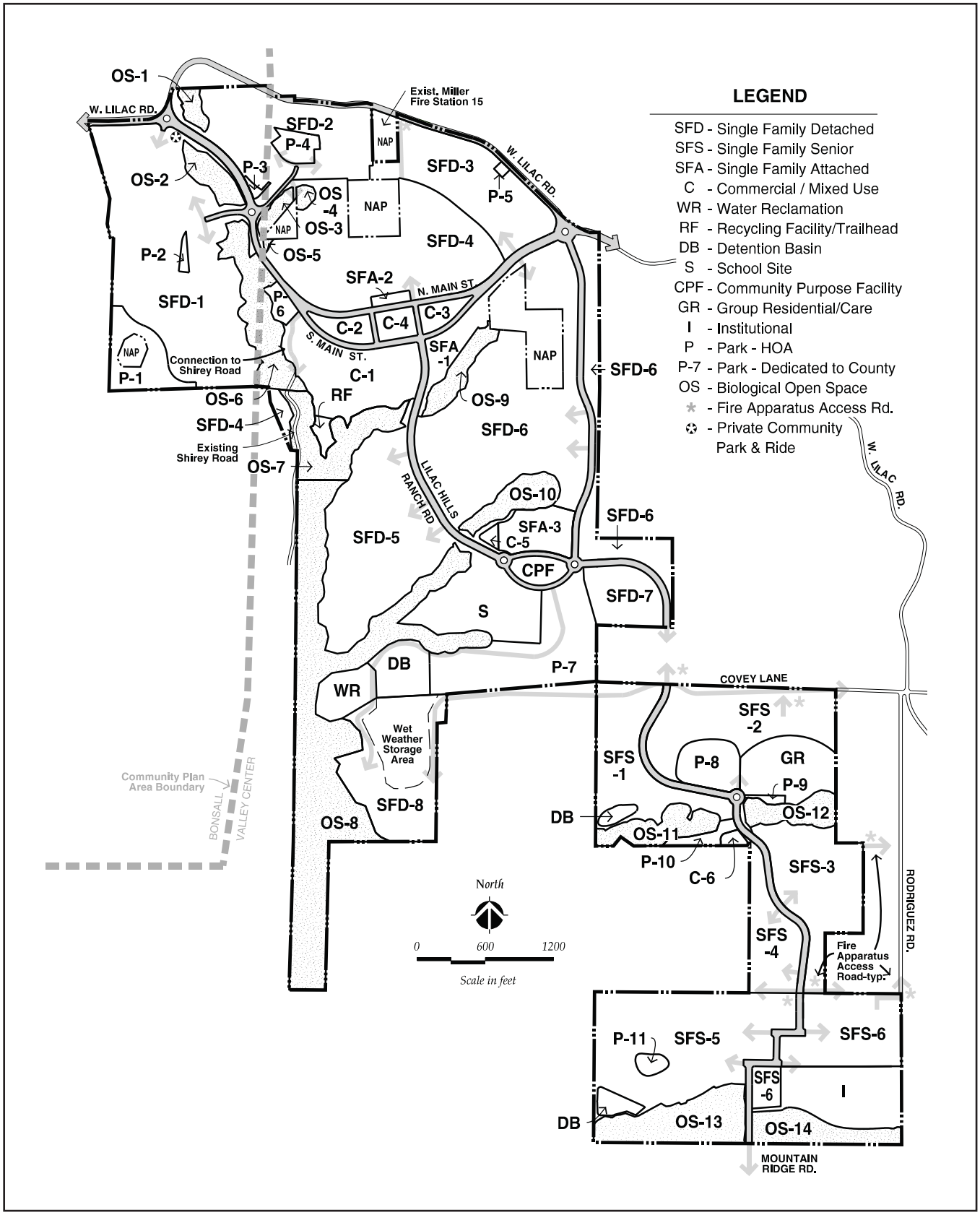

FIGURE 3

Specific Plan Map

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a. Specific Plan Planning Areas

The project would be implemented in five phases~~. Phasing is~~, as discussed ~~in detail~~ below. Table 1 provides a summary of the planning areas by category and their associated zoning.

TABLE 1
PLANNING AREA SUMMARY

Land Use	Planning Areas	Gross Acreage	Dwelling Units/ Square Feet (s.f.)
Single-family Detached	SFD	~~158.8~~156.9	903
Single-family Senior	SFS	~~75~~76.9	468
Single-family Attached	SFA	7.9	164
Group Residential/Group Care	GR	6.5	N/A
Commercial and Mixed-Use	C	15.3	211/ (90,000 s.f.)
K-8 School Site	S	12.0	N/A
Institutional Use	I	10.~~7~~0	N/A
Parks - Dedicated to County	P10	~~12.0~~13.5	N/A
Parks - HOA	P	~~11.8~~10.1	N/A
Community Purpose Facility ~~Private Recreation~~	~~PR~~CPF	2.0	N/A
Biological Open Space	OS	~~103.6~~104.1	N/A
Common Areas/Agricultural Buffers	--	20.~~2~~3	N/A
Manufactured Slopes	--	~~67.5~~68.2	N/A
Circulating and Non-Circulating Roads	--	83.3	N/A
Water Reclamation Facility	WRF	2.4	N/A
Recycling Facility/Trail Head/Staging Area	RF	0.6	N/A
Detention Basins	DB	7.9~~.4~~	N/A
Wet Weather Storage	WWS	8.1	N/A
TOTAL		**608**	**1,746**

The Specific Plan map (Figure 4) shows the community divided into multiple planning areas with types of land uses ranging from single-family residential to biological open space. The phasing map (see Figure 3) shows how the community has been divided into five phases with Phase 1 at the northeast corner and Phase 5 in the southeast corner of the community.

Phase 1 encompasses 121.5 acres and would be located in the northern portion of the project site, adjacent to West Lilac Road. This area would include ~~351~~352 single-family detached units, along with ~~3.2~~4.5 acres of public pocket park(s).

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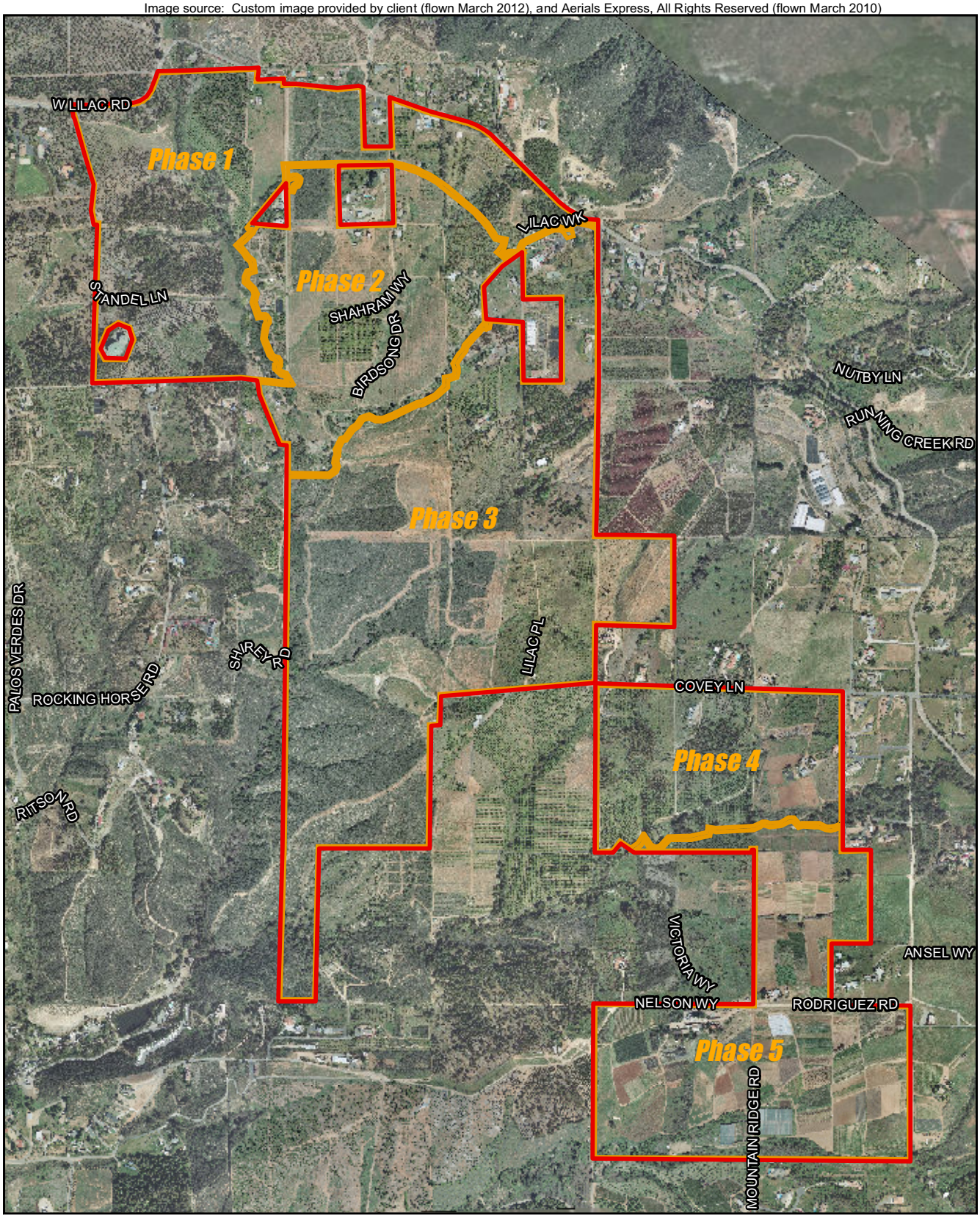

0 Feet 1,200

Project Boundary

Phase Boundaries

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FIGURE 4

Project Phases

Phase 2 would be located just south of Phase 1, is the only Phase which is entirely surrounded by the other phases of the project (Phases 1 and 3), and is not adjacent to any existing homes or parcels. The 89.6-acre area would include the location of the Town Center and a maximum of approximately 196 single-family detached units, 59 single-family attached units, and 211 mixed-use residential units; 80,000 square feet of commercial space; and ~~2~~0.8 acres of park, ~~including~~and a 2.0-acre Village Green. The RF would also be located within this phase, south of the Town Center.

Phase 3 encompasses 223 acres and would be located directly south of Phase 2. This phase would include the construction of a maximum of 355 single-family detached and 105 single-family attached dwelling units and 7,500 square feet of commercial space. Also located within Phase 3 ~~are the school site, the~~would be a 2.0-acre Community Purpose Facility area composed of a fire station and private recreational center not to exceed 40,000 square feet, combined. The WRF, a detention basin, and a ~~12~~13.5-acre public park~~, private recreation, and other civic facilities.~~ are also included with Phase 3.

Phase 4 would be located southeast of Phase 3. A total of 171 age-restricted/single-family detached homes and 2,500 square feet of commercial uses are proposed on 61.5 acres. Primary access to Phase 4 would be via Lilac Hills Ranch Road from Phase 3. Covey Lane would provide alternative access, and secondary emergency access would be provided via Street “B”, connecting to Rodriguez Road on the east. Also proposed within Phase 4 are a 3.3-acre senior center, a private park, a 200-unit Group Residential/Group Care facility (these units are permitted to have small private kitchens in addition to the facility group kitchen), a half-acre pocket park, and a detention basin.

Phase 5 would be located directly south of Phase 4. Phase 5 would include 297 age-restricted/single-family senior detached homes, 2,500 square feet of commercial space, and 10.~~7~~0 acres for a religious/institutional use. Also included in Phase 5 is a detention basin. Primary access would be from a connection to Lilac Hills Ranch Road constructed in Phase 4 to the north, and a secondary fire apparatus access road would be provided via Rodriguez Road to the east and Mountain Ridge Road to the south for the Institutional parcel. Mountain Ridge Road is planned to be a gated road that will be accessible only by a portion of Phase 5 residence and opened during emergencies to facilitate evacuation of residents in the area during an emergency.

b. Construction

Infrastructure

Required roadway improvements and storm drains would be constructed in phases to ensure that improvements are in place at the time of need. The Specific Plan and Traffic Impact Study prepared for the project detail when roadway improvements occur in relation to residential occupancies of the phases. Water and wastewater facilities, along with dry utilities, would be phased as the residential units are occupied.

On-Site

The project would require on-site grading and improvements, including fuel modification zones, on 505.3 acres of the site, as depicted on the conceptual grading plan. Both cuts and fills are proposed within each grading area. Fill material would be transferred between the areas as required.

All grading would be balanced on-site. The maximum (worst case) grading/construction conditions ~~would assume that~~ are based on~~no more than~~ a 10~~–20~~ acre areas~~s~~ per day per phase would be actively graded[1]. ~~It is assumed blasting~~ Blasting would occur by phase and would occur at various times during each phase as the grading reaches an appropriate depth. Rock crushing would be required and would occur on-site, as needed, for continuous periods of less than 30 days.

Grading would be balanced with an estimated 4.07 million cubic yards (cy) of cut and fill (less than 2,300 cy per home), without the need for export or import of soil. The majority of cut and fill slopes would be approximately 10 feet, and approximately 85 percent of all cubic yardage moved would be less than 20 feet deep. The grading plan also includes three hydromodification basins, located throughout the project site.

On-site grading quantities by phase are shown in Table 2, below. A detailed grading plan has been prepared for only Phase 1, in conjunction with the Tentative Map. Grading plans also would be required in conjunction with Tentative Maps for future phases.

TABLE 2
GRADING QUANTITIES BY PHASE (cy)

Phase	Cut	Fill	Net
1	715,000	860,000	(145,000)
2	635,000	830,000	(195,000)
3	1,815,000	1,260,000	555,000
4	295,000	420,000	(125,000)
5	610,000	700,000	(90,000)
TOTAL	4,070,000	4,070,000	-

cy = cubic yards

[1]This is based on a 50,000 cubic yard a day cut, transport, and spread. (50,000 cy/27=X/10 ft=Y/43,560 sq ft =Z acres * 3 activities = ~10 acres, then assume a max of two crews working on site for 20).

c. Off-site Roadway Improvements

The project would ~~be required to make improvements to~~improve the following off-site roadways:

- West Lilac Road
- Gopher Canyon Road/I-15 Northbound Ramps
- Gopher Canyon Road/I-15 Southbound Ramps
- Mountain Ridge Road to Circle R Drive
- Covey Lane to West Lilac Road
- Street "B" to Rodriguez Road
- Rodriguez Road from the project site to Covey Lane

d. Blasting

Blasting would be required for several areas within the project site. Deep blasting (greater than 50 feet in depth) would occur in one location within the project site, near the detention basin in Phase 3. Blasting in this location is anticipated to remove 1,500 cy of material. Moderate depth blasting (30–40 feet below existing grade) would occur in several areas across the site and occur within each phase. Blasting in these locations is anticipated to remove 24,000 cy of material. Shallow blasting would occur in two locations (Phases 1 and 4) and would remove approximately 28,000 cy of material. In total, between 1 to 2 percent of the total volume of material (a total of approximately 81,400 cy) to be moved would be the result of blasting.

e. Construction Vehicles and Equipment

A variety of equipment would be used during the construction of the project. All equipment would be Tier III, operational for eight hours per day. The maximum equipment that would be operational ~~would include~~at any one particular time includes: 1 concrete/industrial saw, 4 tractors/loaders/backhoes, 6 crawler tractors, 5 rubber-tired loaders, 2 bore/drill rigs, 1 grader, 8 scrapers, 1 crane, 3 forklifts, 2 generator sets, 1 welder, 2 pavers, 2 paving equipment, 2 rollers, and 2 air compressors.

Blasting operations would require three to four drill rigs working per day. To accomplish 81,400 cy of cut, blasting would occur over approximately 9 days during the entire build-out of the project (assuming each blast can generate approximately 10,000 cy per blast). One or two hoe rams would be working on-site for the majority of grading, along with a mobile rock crusher. The mobile rock crusher would be utilized a total of 2 to 3 months maximum, spread out over 6 to 12 months (may move in and out as needed), per phase.

Construction vehicles would access the project site via I-15, Old Highway 395, and West Lilac Road. Construction staging areas would be located within areas proposed for grading within the project site. The grading equipment to be used for the project would

be brought to the site at the beginning of the grading period and would remain on-site until the completion of the grading period (e.g., equipment would not be hauled to and from the site daily). A traffic control plan, approved prior to grading, would be prepared to minimize traffic impacts to surrounding communities.

1.2.3 Operation

The project is described in detail in subchapter ~~section~~ 1.2.2. It is anticipated that various individual phases will be operational at different points along the project timeline. Construction of each individual phase is planned to be geographically distributed to cause less impact on the operations of the previous phase(s). The proposed operational dates are listed in Table 3 for each development phase:

TABLE 3
PHASES 1 THROUGH 5 OPERATIONAL START DATES

Phase	Start Date
Phase 1	January 2016
Phase 4	October 2016
Phase 2	July 2017
Phase 5	April 2018
Phase 3	January 2022

In the northernmost area of the project, Phase 1 would be developed first. It is anticipated this would be followed by the development of Phase 4 in the southern portion of the project. Phase 2 would follow immediately after and would be located to the southeast of Phase 1. The next phase would be Phase 5, which is located at southernmost end of the project. The last phase to enter operation would be the largest and the longest to construct, Phase 3, which would be located in the central area of the project site. Operational emissions associated with full build-out, in January of 2022, were used to evaluate the long-term air quality impacts in this analysis.

2.0 Existing Conditions

2.1 Existing Setting

The project is located in the County within the San Diego Air Basin (SDAB) and approximately 15 miles east of the Pacific Ocean. The eastern portion of the SDAB is surrounded by mountains to the north, east, and south. These mountains tend to restrict airflow and concentrate pollutants in the valleys and low-lying areas. The project site is generally characterized by relatively flat, ~~marginal~~ agricultural lands and gently rolling knolls, with steeper hillsides and ridges running north and south along the western edge.

Existing land uses in the surrounding area include residential dwellings that range from urban to semi-rural densities, along with agricultural uses and vacant lands.

2.2 Climate & Meteorology

The project area, like the rest of County's inland valley areas, has a Mediterranean climate characterized by warm, dry summers and mild, wet winters. The mean annual temperature for the project area is 74 degrees Fahrenheit (°F). The average annual precipitation is 13 inches, falling primarily from November to April. Winter low temperatures in the project area average about 44 °F, and summer high temperatures average about 81 °F (U.S. Department of Commerce 2006).

The dominant meteorological feature affecting the region is the Pacific High Pressure Zone, which produces the prevailing westerly to northwesterly winds. These winds tend to blow pollutants away from the coast toward the inland areas. Consequently, air quality near the coast is generally better than that occurring at the base of the coastal mountain range.

Fluctuations in the strength and pattern of winds from the Pacific High Pressure Zone interacting with the daily local cycle produce periodic temperature inversions that influence the dispersal or containment of air pollutants in the SDAB. Beneath the inversion layer, pollutants become "trapped" as their ability to disperse diminishes. The mixing depth is the area under the inversion layer. Generally, the morning inversion layer is lower than the afternoon inversion layer. The greater the change between the morning and afternoon mixing depths, the greater the ability of the atmosphere to disperse pollutants.

Throughout the year the height of the temperature inversion in the afternoon varies between approximately 1,500 and 2,500 feet above mean sea level (MSL). In winter, the morning inversion layer is about 800 feet above MSL. In summer, the morning inversion layer is about 1,100 feet above MSL. Therefore, air quality tends to be better in winter than in summer. The project is situated at an elevation of approximately 650 feet above MSL (the site ranges from 300 feet to over 550 feet at the northern end).

The prevailing westerly wind pattern is sometimes interrupted by regional "Santa Ana" conditions. A Santa Ana occurs when a strong high pressure develops over the Nevada–Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds over the mountains and out to sea.

Strong Santa Ana winds tend to blow pollutants out over the ocean, producing clear days. However, at the onset or during breakdown of these conditions, or if the Santa Ana is weak, local air quality may be adversely affected. In these cases, emissions from the South Coast Air Basin to the north are blown out over the ocean, and low pressure over

Baja California draws this pollutant-laden air mass southward. As the high pressure weakens, prevailing northwesterly winds reassert themselves and send this cloud of contamination ashore in the SDAB.

When this event does occur, the combination of transported and locally produced contaminants produce the worst air quality measurements recorded in the basin.

2.3 Regulatory Setting

2.3.1 Federal Regulations

Ambient Air Quality Standards (AAQS) represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. The federal Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 U.S.C. 7401] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the Clean Air Act [42 U.S.C. 7409], the U.S. Environmental Protection Agency (EPA) developed primary and secondary national ambient air quality standards (NAAQS).

Six pollutants of primary concern were designated: ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), lead (Pb), and particulate matter (PM_{10} and $PM_{2.5}$). The primary NAAQS "…"in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health…." and the secondary standards "…protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air" [42 U.S.C. 7409(b)(2)]. The primary NAAQS were established, with a margin of safety, considering long-term exposure for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties). The NAAQS are presented in Table 4 (EPA 2011).

The SDAB is a federal non-attainment area for the ozone NAAQS.

TABLE 4
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		–		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m^3		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-dispersive Infrared Photometry	35 ppm (40 mg/m^3)	–	Non-dispersive Infrared Photometry
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	
Nitrogen Dioxide (NO_2)[8]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemi-luminescence	100 ppb (188 µg/m^3)	–	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		53 ppb (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[9]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3 Hour	–		–	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[9]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[9]	–	

TABLE 4
AMBIENT AIR QUALITY STANDARDS
(CONT.)

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Lead[10,11]	30 Day Average	1.5 µg/m^3	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m^3 (for certain areas)[11]	Same as Primary Standard	
	Rolling 3-Month Average	–		0.15 µg/m^3		
Visibility Reducing Particles[12]	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	No Federal Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chroma-tography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chroma-tography			

SOURCE: CARB 2012a.

ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter; – = not applicable.

[1]California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2]National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

[3]Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4]Any equivalent measurement method which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

[5]National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6]National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7]Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

[8]To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.

TABLE 4
AMBIENT AIR QUALITY STANDARDS
(CONT.)

[9]On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[10]The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[11]The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[12]In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

2.3.2 State Regulations

2.3.2.1 Criteria Pollutants

The EPA allows states the option to develop different (stricter) standards. The State of California has developed the California Ambient Air Quality Standards (CAAQS) and generally has set more stringent limits on the six criteria pollutants (see Table 4). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride (see Table 4). The California Clean Air Act (CAA), also known as the Sher Bill or Assembly Bill (AB 2595), was signed into law on September 30, 1988, and became effective on January 1, 1989.

The California CAA requires that regional air districts implement regulations to reduce emissions from mobile sources through the adoption and enforcement of transportation control measures. The California CAA also requires the ~~that a~~regional air district ~~must~~to:

- Demonstrate the overall effectiveness of the air quality program;
- Reduce non-attainment pollutants at a rate of five percent per year or include all feasible measures and expeditious adoption schedule;
- Ensure no net increase in emissions from new or modified stationary sources;
- Reduce population exposure to severe non-attainment pollutants according to a prescribed schedule;
- Include any other feasible controls that can be implemented or for which implementation can begin within 10 years of adoption of the most recent air quality plan; and
- Rank control measures by cost-effectiveness.

The SDAB is a non-attainment area for the ~~State~~ ozone~~ standards, the State~~, PM_{10} ~~standard~~, and ~~the State~~ $PM_{2.5}$ ~~standard~~CAAQS.

2.3.2.2 Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. In 1983 the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: Health and Safety Code Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase~~ of the process~~.

The California Air Toxics Program establishes the process for the identification and control of ~~toxic air contaminants~~TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics Hot Spots Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics Hot Spots Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, California Senate Bill (SB) 25 - Chapter 731, Escutia (State of California 1999), focuses on children's exposure to air pollutants. The Act requires California Air Resources Board (CARB) to review its air quality standards from a children's health perspective, evaluate the statewide air monitoring network, and develop any additional air toxic control measures needed to protect children's health.

Locally, toxic air pollutants are regulated through the ~~SDAPCD's~~San Diego Air Pollution Control District's (SDAPCD) Regulation XII.

Of particular concern statewide are diesel-exhaust particulate matter (DPM) emissions. DPM was established as a TAC in 1998 and is estimated to represent a majority of the cancer risk from TACs statewide (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB and are listed as carcinogens either under the State's Proposition 65 or under the federal Hazardous Air Pollutants program. Diesel emissions generated within the County and surrounding areas pose a potential hazard to residents and visitors.

~~Following~~Since the identification of ~~diesel particulate matter~~DPM as ~~an air~~a TAC in 1998, CARB has worked on developing strategies and regulations aimed at reducing the risk from diesel particulate matter. The overall strategy for achieving these reductions is found in the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles* (State of California 2000). A stated goal of the plan is to reduce the cancer risk statewide arising from exposure to diesel particulate matter 85 percent by 2020.

A number of additional programs and strategies to reduce ~~diesel particulate matter~~DPM, such as those listed below, also have been implemented or are in the process of being developed ~~include~~ (State of California 2007):

- **The Carl Moyer Program**: This program, administered by the CARB, was initially approved in February 1999 and provides incentive grants to cover an incremental portion of the cost of upgrading to cleaner-than-required engines,

equipment and other sources of pollution providing early or extra emission reductions. Eligible projects include cleaner on-road, off-road, marine, locomotive, and agricultural sources. The program guidelines are revised regularly (most recently in April 2011).

- **On-road Heavy-duty Diesel Engine Reduced Emission Standards**: This rule reduces emission standards for 2007 and subsequent model year heavy-duty diesel engines (66 FR 5002, January 18, 2001).

- **On-road Heavy-duty Diesel Engine In-use Compliance Program**: This program requires in-use compliance testing to ensure that existing vehicles/engines meet applicable emission standards throughout their useful life.

~~Other programs include:~~

- **Off-road Mobile Sources Emission Reduction Program**: The goal of this program is to develop regulations to control emissions from diesel, gasoline, and alternative-fueled off-road mobile engines. These sources include a range of equipment, from lawn mowers to construction equipment to locomotives.

- ~~**Heavy-Duty Vehicle Inspection Program**: The Heavy-duty Vehicle Inspection and Periodic Smoke Inspection Programs were established to control excessive smoke emissions and tampering from heavy-duty diesel trucks and buses.~~

- **Heavy-duty Vehicle Inspection Program:** The Heavy-duty Vehicle Inspection Program was adopted into law in 1988 (SB 1997), with the regulations (13 California Code of Regulations [CCR] 2180–2189) governing this program last amended in 2007. The program requires heavy-duty trucks and buses to be inspected for excessive smoke and tampering, and engine certification label compliance. Any heavy-duty vehicle traveling in California, including vehicles registered in other states and foreign countries, may be tested. Tests are performed by CARB inspection teams at border crossings, California Highway Patrol weigh stations, fleet facilities, and randomly selected roadside locations.

- **Periodic Smoke Inspection Program:** The Periodic Smoke Inspection Program was adopted into law in 1990 (SB 2330), with the regulations (13 CCR 2190–2194) governing this program last amended in 2007. The program requires that diesel and bus fleet owners conduct annual smoke opacity inspections of their vehicles and repair those with excessive smoke emissions to ensure compliance.

- **Lower-emission School Bus Program**: Under this program, and in coordination with the California Energy Commission and local air districts, CARB developed guidelines to provide criteria for the purchase of new school buses and the retrofit of existing school buses to reduce particulate matter emissions. In

addition, Proposition 1B, which was approved by the voters on November 7th, 2006, enacts the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006. This bond act authorizes $200 million for replacing and retrofitting school buses.

- **School Bus Idling Airborne Toxic Control Measure**: Beginning in July 2003, the CARB approved an airborne toxic control measure (ATCM) that limits school bus idling and idling at or near schools. The ATCM to limit idling is intended to reduce diesel exhaust particulate matter and other TACs and air pollutants from heavy-duty motor vehicle exhaust. The ATCM requires a driver of a school bus or vehicle, transit bus, or other commercial motor vehicle to manually turn off the bus or vehicle engine upon arriving at a school and to restart no more than 30 seconds before departing. A driver of a school bus or vehicle is subject to the same requirement when operating within 100 feet of a school and is prohibited from idling more than five minutes at each stop beyond schools, such as parking or maintenance facilities, school bus stops, or school activity destinations. A driver of a transit bus or other commercial motor vehicle is prohibited from idling more than five minutes at each stop within 100 feet of a school. Idling necessary for health, safety, or operational concerns is exempt from these restrictions.

In April 2005, CARB published *Air Quality and Land Use Handbook: A Community Health Perspective* (State of California 2005). The handbook makes recommendations directed at protecting sensitive land uses from air pollutant emissions while balancing a myriad of other land use issues (e.g., housing, transportation needs, economics, etc.). It notes that the handbook is not regulatory or binding on local agencies and recognizes that application takes a qualitative approach. As reflected in the CARB Handbook, there is currently no adopted standard for the significance of health effects from mobile sources. Therefore, the CARB has provided guidelines for the siting of land uses near heavily traveled roadways. Of pertinence to this study, the CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 or more vehicles/day should be avoided when possible.

As an ongoing process, CARB will continue to establish new programs and regulations for the control of diesel particulate and other air-toxics emissions as appropriate. The continued development and implementation of these programs and policies will ensure that the public exposure to diesel particulate matter will continue to decline.

As discussed below, the SDAPCD implements rules and regulations for the control of toxic air contaminants through permitting of stationary and portable sources of air pollutants.

~~Numerous activities have also occurred at the federal level, including:~~

- ~~In 2006, the EPA adopted low-sulfur fuel standards that are anticipated to significantly reduce diesel emissions.~~

- ~~In January 2011, President Obama signed the Diesel Emission Reduction Act (DERA) of 2010 (House Bill [HR] 5809), which reauthorizes DERA for another five years. DERA was originally created in 2005 and provides grants to state, local, and tribal governments for programs to reduce emissions from existing diesel engines. This legislation authorizes $100 million annually for five years, for a total of $500 million, although the actual annual amount will depend on each year's funding appropriation. According to EPA, every $1 spent on DERA upgrades has resulted in $13 worth of health and environmental benefits (West Coast Collaborative 2011).~~

2.3.3 State Implementation Plan

The State Implementation Plan (SIP) is a collection of documents that set forth the State's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, State regulations, and federal controls. The CARB is the lead agency for all purposes related to the SIP under State law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. The CARB then forwards SIP revisions to the EPA for approval and publication in the *Federal Register*. All of the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

The SDAPCD is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The ~~CARB~~ SIP plans for San Diego County to specifically include the Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County (2012), which is pending EPA approval, and the 2004 Revision to the California State Implementation Plan for Carbon Monoxide – Updated Maintenance Plan for Ten Federal Planning Areas. The SDAPCD adopts rules, regulations, and programs to attain state and federal air quality standards, and appropriates money (including permit fees) to achieve these objectives.

2.3.4 California Environmental Quality Act

Section 15125(d) of the California Environmental Quality Act (CEQA) Guidelines requires discussion of any inconsistencies between the project and applicable general plans and regional plans, including the applicable air quality attainment or maintenance plan (or SIP).

2.3.5 Regional Air Quality Strategy

~~The SDAPCD is the agency that regulates air quality in the SDAB.~~ The SDAPCD prepared the 1991/1992 Regional Air Quality Strategy (RAQS) in response to the requirements set forth in AB 2595. The draft was adopted, with amendments, on June 30, 1992 (County of San Diego 1992). Attached, as part of the RAQS, are the transportation control measures (TCMs) for the air quality plan prepared by the San Diego Association of Governments (SANDAG) in accordance with AB 2595 and adopted by SANDAG on March 27, 1992, as Resolution Number 92-49 and Addendum. The required triennial updates of the RAQS and corresponding TCMs were adopted in 1995, 1998, 2001, 2004, and 2009. The RAQS and TCMs set forth the steps needed to accomplish attainment of CAAQS. The SDAPCD has also established rules and regulations to minimize air emissions in the SDAB. Specific rules applicable to the project include the following: Rule 50 (Visible Emissions), Rule 51 (nuisance), Rule 52 (particulate matter), Rule 54 (dust and fumes), Rule 55 (Fugitive Dust Control), and Rule 67 (architectural coatings), all of which will be adhered to as required by the SDAPCD.

2.4 Background Air Quality

~~The project is within the SDAB.~~ Air quality at a particular location is a function of the kinds and amounts of pollutants being emitted into the air locally and throughout the basin, and the dispersal rates of pollutants within the region. The major factors affecting pollutant dispersion are wind speed and direction, the vertical dispersion of pollutants (which is affected by inversions), and the local topography.

Air quality is commonly expressed as the number of days in which air pollution levels exceed ~~state standards set by the CARB or federal standards set by the EPA.~~the NAAQS or CAAQS. The SDAPCD maintains 11 air-quality monitoring stations located throughout the greater San Diego metropolitan region. Air pollutant concentrations and meteorological information are continuously recorded at these 11 stations. Measurements are then used by scientists to help forecast daily air pollution levels.

The Camp Pendleton monitoring station, located 15 miles southwest of the project area;~~,~~ the Escondido–East Valley Parkway monitoring station, located 10 miles southeast of the project area;~~,~~ and the Del Mar–Mira Costa College monitoring station, located 22 miles southwest of the project area, are the nearest stations to the project site~~area~~. The Camp Pendleton monitoring station measures ozone NO_2, ~~PM_{10},~~ and $PM_{2.5}$. The Escondido–East Valley Parkway monitoring station measures ozone, CO, NO_2, PM_{10}, and $PM_{2.5}$. The Del Mar–Mira Costa College monitoring station measures ozone.

Table 5 summarizes, from all air monitoring locations within the SDAB, the number of days per year during which state and federal standards were exceeded in the SDAB during the years 2007 to 2011. Table 6 provides a summary of measurements,

TABLE 5
AMBIENT AIR QUALITY SUMMARY—SAN DIEGO AIR BASIN

Pollutant	Average Time	California Ambient Air Quality Standards[a]	Attainment Status	National Ambient Air Quality Standards[b]	Attainment Status[c]	Maximum Concentration					Number of Days Exceeding State Standard					Number of Days Exceeding National Standard				
						2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
O_3	1 hour	0.09 ppm	N	N/A	N/A	0.134	0.139	0.119	0.107	0.114	21	18	8	7	5	1	2	0	0	0
O_3	8 hours	0.07ppm	N	0.08 ppm (1997)	N	0.092	0.110	0.098	0.088	0.093	50	69	47	21	33	7	11	4	1	3
O_3	8 hours	---	---	0.075 ppm (2008)	N	0.092	0.109	0.097	0.088	0.093	---	---	---	--	--	27	35	24	14	10
CO	1 hour	20 ppm	A	35 ppm	A	8.7	4.6	Na	Na	Na	0	0	Na	Na	Na	0	0	Na	Na	Na
CO	8 hours	9 ppm	A	9 ppm	A	5.18	3.51	3.54	2.46	2.44	0	0	0	0	0	0	0	0	0	0
NO_2	1 hour	0.18 ppm	A	N/A	N/A	0.101	0.123	0.091	0.091	0.1	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A
NO_2	Annual	0.030 ppm	N/A	0.053 ppm	A	0.015	0.015	0.016	0.013	0.013	N/A	N/A	N/A	N/A	N/A	NX	NX	NX	NX	NX
SO_2	1 hour	25 pphm	A	N/A	N/A	2.7	1.9	Na	Na	Na	0	0	Na	Na	Na	N/A	N/A	N/A	N/A	N/A
SO_2	3 hour	---	N/A	50 pphm[d]	A	1.7	1.4	Na	Na	Na	N/A	N/A	N/A	N/A	N/A	0	0	Na	Na	Na
SO_2	24 hours	4 pphm	A	14 pphm	A	0.9	0.7	Na	Na	Na	0	0	Na	Na	Na	0	0	Na	Na	Na
SO_2	Annual	N/A	N/A	3 pphm	A	0.3	0.2	Na	Na	Na	N/A	N/A	N/A	N/A	N/A	NX	NX	Na	Na	Na
PM_{10}	24 hours	50 $\mu g/m^3$	N	150 $\mu g/m^3$	U	394	158	126	108	125	27/ 158.6*	30/ 163.4*	25/ 146.4*	22/ 136*	23/ 138.5*	1/ 6.1*	1/ Na*	0/ Na*	0/0*	0/0*
PM_{10}	Annual	20 $\mu g/m^3$	N	N/A	N/A	58.4	56.1	53.9	47	46.2	EX	EX	EX	EX	EX	N/A	N/A	N/A	N/A	N/A
$PM_{2.5}$	24 hours	N/A	N/A	35 $\mu g/m^3$	A	151	44	78.4	52.2	35.5	N/A	N/A	N/A	N/A	N/A	17/ 11.4	5/ 3.5	4/ 3.4	2/2	3/3
$PM_{2.5}$	Annual	12 $\mu g/m^3$	N	15 $\mu g/m^3$	A	13.3	14.9	12.2	10.8	10.9	EX	EX	EX	EX	EX	NX	NX	NX	NX	NX

SOURCE: California Air Resources Board 2012.

*Measured Days/Calculated Days—Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. Particulate measurements are collected every six days. The number of days above the standard is not necessarily the number of violations of the standard for the year.

[a]California standards for ozone, carbon monoxide (except at Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, and PM_{10} are values that are not to be exceeded. Some measurements gathered for pollutants with air quality standards that are based upon 1-hour, 8-hour, or 24-hour averages, may be excluded if the CARB determines they would occur less than once per year on average.

[b]National standards other than for ozone and particulates, and those based on annual averages or annual arithmetic means are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent 3-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one.

[c]A = attainment; N = non-attainment; U = Unclassifiable

N/A = not applicable; Na = data not available; NX = annual average not exceeded; EX = annual average exceeded.

ppm = parts per million, pphm = parts per hundred million, $\mu g/m^3$ = micrograms per cubic meter.

[d]Secondary Standard

TABLE 6
SUMMARY OF AIR QUALITY MEASUREMENTS RECORDED AT THE CAMP PENDLETON, DEL MAR–MIRA COSTA COLLEGE, AND THE ESCONDIDO–EAST VALLEY PARKWAY MONITORING STATIONS

Pollutant/Standard	2007	2008	2009	2010	2011
CAMP PENDLETON					
Ozone					
Days State 1-hour Standard Exceeded (0.09 ppm)	0	1	0	0	0
Days State 8-hour Standard Exceeded (0.07 ppm)	4	3	5	1	2
Days Federal 1-hour Standard Exceeded (0.12 ppm)	0	0	0	0	0
Days 08' Federal 8-hour Standard Exceeded (0.075 ppm)	0	2	1	1	0
Max. 1-hr (ppm)	0.083	0.104	0.090	0.092	0.085
Max 8-hr (ppm)	0.074	0.077	0.077	0.079	0.071
Nitrogen Dioxide					
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0	0	0
Max 1-hr (ppm)	0.068	0.089	0.068	0.081	0.066
Annual Average (ppm)	0.010	0.010	0.010	0.008	0.007
$PM_{2.5}$*					
Measured Days Federal 24-hour Standard Exceeded (35 $\mu g/m^3$)	0	Na	0	0	0
Calculated Days Federal 24-hour Standard Exceeded (35 $\mu g/m^3$)	Na	Na	Na	Na	Na
Max. Daily ($\mu g/m^3$)	Na	34.2	26.9	26.1	30.7
State Annual Average ($\mu g/m^3$)	Na	Na	NA	Na	NA
Federal Annual Average ($\mu g/m^3$)	Na	Na	Na	Na	Na
DEL MAR – MIRA COSTA COLLEGE					
Ozone					
Days State 1-hour Standard Exceeded (0.09 ppm)	1	2	1	0	0
Days State 8-hour Standard Exceeded (0.07 ppm)	4	11	3	2	1
Days Federal 1-hour Standard Exceeded (0.12 ppm)	0	0	0	0	0
Days 08' Federal 8-hour Standard Exceeded (0.075 ppm)	3	3	1	0	0
Max. 1-hr (ppm)	0.110	0.117	0.097	0.085	0.091
Max 8-hr (ppm)	0.079	0.079	0.084	0.072	0.075
ESCONDIDO–EAST VALLEY PARKWAY					
Ozone					
Days State 1-hour Standard Exceeded (0.09 ppm)	0	9	0	2	1
Days State 8-hour Standard Exceeded (0.07 ppm)	5	23	9	2	2
Days Federal 1-hour Standard Exceeded (0.12 ppm)	0	0	0	0	0
Days 08' Federal 8-hour Standard Exceeded (0.075 ppm)	3	13	1	3	2
Max. 1-hr (ppm)	0.094	0.116	0.093	0105	0.098
Max 8-hr (ppm)	0.078	0.099	0.081	0.085	0.089
Nitrogen Dioxide					
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0	0	0
Max 1-hr (ppm)	0.072	0.081	0.073	0.064	0.062
Annual Average (ppm)	0.016	0.018	0.016	0.014	0.013
Carbon Monoxide					
Days State 1-hour Standard Exceeded (20 ppm)	0	0	0	0	0
Days State 8-hour Standard Exceeded (9 ppm)	0	0	0	0	0
Days Federal 1-hour Standard Exceeded (35 ppm)	0	0	0	0	0
Days Federal 8-hour Standard Exceeded (9 ppm)	0	0	0	0	0
Max. 1-hr (ppm)	5.2	5.6	4.4	3.9	3.5
Max. 8-hr (ppm)	3.19	2.81	3.54	2.46	2.30
PM_{10}*					
Measured Days State 24-hour Standard Exceeded (50 $\mu g/m^3$)	2	1	1	0	0
Calculated Days State 24-hour Standard Exceeded (50 $\mu g/m^3$)	11.5	Na	5.6	0	0
Measured Days Federal 24-hour Standard Exceeded (150 $\mu g/m^3$)	0	0	0	0	0
Calculated Days Federal 24-hour Standard Exceeded (150 $\mu g/m^3$)	0	0	0	0	0
Max. Daily ($\mu g/m^3$)	68.0	84.0	74.0	430.	40.0
State Annual Average ($\mu g/m^3$)	26.8	Na	24.6	21.0	18.8
Federal Annual Average ($\mu g/m^3$)	26.7	24.6	24.9	20.9	18.8

TABLE 6
SUMMARY OF AIR QUALITY MEASUREMENTS RECORDED AT THE CAMP PENDLETON, DEL MAR–MIRA COSTA COLLEGE, AND THE ESCONDIDO–EAST VALLEY PARKWAY MONITORING STATIONS

Pollutant/Standard	2007	2008	2009	2010	2011
$PM_{2.5}$*					
Measured Days Federal 24-hour Standard Exceeded (35 $\mu g/m^3$)	11	3	2	2	3
Calculated Days Federal 24-hour Standard Exceeded (35 $\mu g/m^3$)	11.4	Na	2	2	3
Max. Daily ($\mu g/m^3$)	151	44	78.4	52.2	27.4
State Annual Average ($\mu g/m^3$)	13.3	12.4	Na	Na	10.4
Federal Annual Average ($\mu g/m^3$)	13.3	Na	13.4	12.2	12.2

SOURCE: State of California 2012.
Na = Not available.
*Calculated days value. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

separated by air monitoring stations nearest to the project site, of ozone, CO, NO_2, SO_2, PM_{10}, and $PM_{2.5}$. The data was collected at the Camp Pendleton, the Escondido–East Valley Parkway, and the Del Mar–Mira Costa College monitoring stations, for the years 2007 through 2011.

2.4.1 Ozone

Nitrogen oxides and hydrocarbons (reactive organic gases [ROGs]) are known as the chief "precursors" of ozone. These compounds react in the presence of sunlight to produce ozone. ~~Ozone is the primary air pollution problem in the SDAB.~~ Because sunlight plays such an important role in its formation, ozone pollution or smog is mainly a concern during the daytime in summer months.

Ozone is the primary air pollution problem in the SDAB, and the SDAB is currently designated a federal and state non-attainment area for ozone. ~~(~~In order to address adverse health effects due to prolonged exposure, the U.S. EPA phased out the national one-hour ozone standard and replaced it with the more protective eight-hour ozone standard. ~~The SDAB is currently designated a federal and state non-attainment area for ozone.~~The SDAB is currently a non-attainment area for the national eight-hour standard.~~)~~ During the past 20 years, San Diego has experienced a decline in the number of days with unhealthy levels of ozone despite the region's growth in population and vehicle miles traveled (County of San Diego 2010).

About half of smog-forming emissions come from automobiles (County of San Diego2004b). Population growth in San Diego has resulted in a large increase in the number of automobiles expelling ozone-forming pollutants while operating on area roadways. In addition, as described further below, the occasional transport of smog-filled air from Los Angeles ~~only~~ adds to the SDAB's ozone problem. More strict automobile emission controls, including more efficient automobile engines, have played a large role in why ozone levels have steadily decreased.

In the SDAB overall, during the five-year period of 2007 to 2011, the state 1-hour ozone standard of 0.09 parts per million (ppm) was exceeded 21 days in 2007, 18 days in 2008, 8 days in 2009, and 7 days in 2010, and 5 days in 2011.

The 1-hour state standard for ozone of 0.09 ppm was exceeded one time at the Camp Pendleton monitoring station, four times at the Del Mar–Mira Costa College monitoring station, and 13 times at the Escondido–East Valley Parkway monitoring station during the five-year period of 2007 to 2011. ~~In order to address adverse health effects due to prolonged exposure, the U.S. EPA phased out the national one-hour ozone standard and replaced it with the more protective eight-hour ozone standard. The SDAB is currently a non-attainment area for the national eight-hour standard.~~

In the SDAB overall, the stricter 8-hour state standard of 0.07 ppm for ozone was exceeded on 50 days in 2007, 69 days in 2008, 47 days in 2009, 21 days in 2010, and 33 days in 2011. The stricter state 8-hour ozone standard of 0.07 ppm was exceeded 15 times at the Camp Pendleton monitoring station, 21 times at the Del Mar-Mira Costa College monitoring station, and 25 times at the Escondido-East Valley Parkway monitoring station during the 5-year period from 2007 to 2011.

In the SDAB overall, the revised national 8-hour standard of 0.075 ppm was exceeded ~~by~~on 35 days in 2008, 24 days in 2009, and 14 days in 2010 and 10 days in 2011. ~~The stricter 50 days in 2007, 69 days in 2008, 47 days in 2009, and 21 days in 2010, and 33 days in 2011.~~

The revised national 8-hour standard of 0.075 ppm was exceeded four times at the Camp Pendleton monitoring station, seven times at the Del Mar–Mira Costa College monitoring station, and 22 times at the Escondido-East Valley Parkway monitoring station during the 5-year period from 2007 to 2011. ~~The stricter state 8-hour ozone standard of 0.07 ppm was exceeded 15 times at the Camp Pendleton monitoring station, 21 times at the Del Mar–Mira Costa College monitoring station, and 25 times at the Escondido-East Valley Parkway monitoring station during the 5-year period from 2007 to 2011.~~

Not all of the ozone within the SDAB is derived from local sources. Under certain meteorological conditions, such as during Santa Ana wind events, ozone and other pollutants are transported from the South Coast Air Basin (the air basin to the north of the SDAB that includes all of Orange County and the non-desert regions of Los Angeles County, Riverside County and San Bernardino County) and combine with ozone formed from local emissions sources to produce elevated ozone levels in the SDAB. Local agencies can control neither the source nor the transportation of pollutants from outside the SDAB. The SDAPCD's policy, therefore, has been to control local sources effectively enough to reduce locally produced contamination to clean air standards. Through the use of air pollution control measures outlined in the RAQS, the SDAPCD has effectively reduced ozone levels in the SDAB.

Actions that have been taken in the SDAB to reduce ozone concentrations include:

- **TCMs if vehicle travel and emissions exceed attainment demonstration levels.** TCMs are strategies that will reduce transportation-related emissions by reducing vehicle use or improving traffic flow.
- **Enhanced motor vehicle inspection and maintenance program.** The smog check program is overseen by the Bureau of Automotive Repair. The program requires most vehicles to pass a smog test once every two years before registering in the state of California. The smog check program monitors the amount of pollutants automobiles produce. One focus of the program is

identifying “gross polluters” or vehicles that exceed two times the allowable emissions for a particular model. Regular maintenance and tune-ups, changing the oil, and checking tire inflation can improve gas mileage and lower air pollutant emissions. They can also reduce traffic congestion due to preventable breakdowns, further lowering emissions.

- **Air Quality Improvement Program (AQIP).** The AQIP, established by AB 118, is a voluntary incentive program administered by the CARB to fund clean vehicle and equipment projects, research on biofuels production, and the air quality impacts of alternative fuels, and workforce training.

2.4.2 Carbon Monoxide

The SDAB is classified as a state attainment area and as federal maintenance area for carbon monoxide (County of San Diego 1998).

Until 2003, no violations of the ~~state standard for CO~~CO CAAQS had been recorded in the SDAB since 1991, and no violations of the ~~national standard~~NAAQS had been recorded in the SDAB since 1989. The violations that took place in 2003 were likely the result of massive wildfires that occurred throughout the County. No violations of the ~~state or federal CO standards~~CO NAAQS and CAAQS have occurred since 2003. As shown in Table 6, the state and national standards have not been exceeded at the Camp Pendleton monitoring station or the SDAB generally during the five-year period from 2007 to 2011.

Small-scale, localized concentrations of carbon monoxide above the state and national standards have the potential to occur at intersections with stagnation points, such as those that occur at on/off ramps or interchanges connected with major highways and heavily traveled and congested roadways. Localized high concentrations of CO are referred to as “CO hot spots” and are a concern at congested intersections when automobile engines burn fuel less efficiently and their exhaust contains more CO.

2.4.3 PM_{10}

PM_{10} is particulate matter with an aerodynamic diameter of 10 microns or less. Ten microns is about one-seventh of the diameter of a human hair. Particulate matter is a complex mixture of very tiny solid or liquid particles composed of chemicals, soot, and dust. Sources of PM_{10} emissions in the SDAB consist mainly of urban activities, dust suspended by vehicle traffic, and secondary aerosols formed by reactions in the atmosphere.

Under typical conditions (i.e., no wildfires) particles classified under the PM_{10} category are mainly emitted directly from activities that disturb the soil including travel on roads and construction, mining, or agricultural operations. Other sources include windblown

dust, salts, brake dust, and tire wear (County of San Diego 1998). For several reasons hinging on the area's dry climate and coastal location, the SDAB has special difficulty in developing adequate tactics to meet present ~~state particulate standards~~CAAQS.

The SDAB is designated as federal unclassified and State non-attainment for PM_{10}. The measured federal PM_{10} standard was exceeded once in 2007, and once in 2008 in the SDAB. The 2007 exceedance occurred on October 21, 2007, at a time when major wildfires were raging throughout the County. Consequently, this exceedance was likely caused by or ~~were~~was a ~~subsequent~~ result of the wildfires, and ~~would be~~ therefore, beyond the control of the SDAPCD (State of California 2010). As such, ~~these events are~~this exceedance was covered under the ~~U.S.~~ EPA's Natural Events Policy that permits, under certain circumstances, the exclusion of air quality data attributable to uncontrollable natural events (e.g., volcanic activity, wildland fires, and high wind events). The 2008 exceedance did not occur during wildfires and is not covered under this policy.

The stricter state 24-hour standard was ~~exceeded a~~ calculated ~~number of days of~~to be exceeded on 158.6 days in 2007, 163.4 days in 2008, 146.4 days in 2009, 136 days in 2010, and 138.5 days in 2011. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard, had measurements been collected every day. Particulate measurements are collected every six days.

At the Escondido—East Valley Parkway monitoring station, the ~~national~~ 24-hour PM_{10} ~~standard~~NAAQS was not exceeded was not exceeded during the years 2007 through 2011. The stricter ~~state~~ 24-hour ~~standard~~PM_{10} CAAQS was exceeded two days in 2007, one day in 2008, and one day in 2009 (State of California 2012). ~~These exceedances resulted in a calculated number of days that the~~The stricter state ~~standards were~~24-hour standard was exceeded~~:~~ on 11.5 days in 2007 and 5.6 days in 2009. ~~Information~~The estimated number of days that the standard was exceeded in 2008 was not available ~~for the calculated number of days in 2008.~~.

2.4.~~5~~4 $PM_{2.5}$

Airborne, inhalable particles with aerodynamic diameters of 2.5 microns or less ($PM_{2.5}$) have been recognized as an air quality concern requiring regular monitoring. Federal regulations required that $PM_{2.5}$ monitoring begin January 1, 1999 (County of San Diego 1999). The Escondido – East Valley Parkway monitoring station is one of five stations in the SDAB that monitors $PM_{2.5}$. Federal $PM_{2.5}$ standards ~~established in 1997~~ include an annual arithmetic mean of 15 micrograms per cubic meter ($\mu g/m^3$) and a 24-hour concentration of ~~65 $\mu g/m^3$. As discussed above, the 24-hour $PM_{2.5}$ standard has been changed to 35 $\mu g/m^3$. However, this does not apply to the monitoring through~~

~~2007.~~35 mg/m^3. State $PM_{2.5}$ standards established in 2002 are an annual arithmetic mean of 12 mg/m^3.

The SDAB ~~was classified as an attainment area for the previous federal 24-hour $PM_{2.5}$ standard of 65 mg/m^3 and has also~~has been classified as an attainment area for the ~~revised federal~~ 24-hour $PM_{2.5}$ ~~standard~~NAAQS of 35 mg/m^3 (U.S. EPA 2009). The SDAB is a non-attainment area for the state $PM_{2.5}$ standard (State of California 2005).

In the SDAB overall, the ~~new national standard of 35 mg/m^3~~24-hour NAAQS was exceeded a calculated number of days of 11.4 days in 2007, 3.5 days in 2008, 3.4 days in 2009, 2 days in 2010, and 3 days in 2011. Additionally, although the ~~federal~~ annual ~~standard~~NAAQS was not exceeded during the period from 2007 through 2011, the ~~state~~stricter annual ~~standard~~CAAQS was routinely exceeded during this period in the SDAB overall.

The ~~new~~ 24-hour $PM_{2.5}$ ~~standard of 35 mg/m^3~~NAAQS was not exceeded at the Camp Pendleton Street monitoring station during the years 2007 through 2011. The ~~new~~ standard ~~of 35 mg/m^3~~ was exceeded, however, a calculated 11.4 days in 2007, 2 days in 2009, and 2 days in 2010, and 3 days in 2011 at the Escondido-East Valley Parkway monitoring station.

2.4.~~6~~5 Other Criteria Pollutants

The national and state standards for NO_2, SO_2, and lead are being met in the SDAB and the latest pollutant trends suggest that these standards will not be exceeded in the foreseeable future. ~~As discussed above, new standards for these pollutants have been adopted, and new designations for the SDAB will be determined in the future.~~ The SDAB is also in attainment of the state standards for hydrogen sulfides, sulfates, and visibility-reducing particles.

3.0 Significance Criteria & Analysis Methodologies

3.1 California Air Resources Board

For purposes of assessing the significance of air quality impacts, the CARB has established guidelines, as described below.

For long-term emissions, the direct impacts of a project can be measured by the degree to which the project is consistent with regional plans to improve and maintain air quality. The regional plan for San Diego is the 1991/1992 RAQS ~~and~~, as revised by the triennial

updates adopted in 1995, 1998, 2001, 2004, and ~~2004~~2009. The CARB provides criteria for determining whether a project conforms to the RAQS (State of California 1989), which include the following:

1. Is a regional air quality plan being implemented in the project area?
2. Is the project consistent with the growth assumptions in the regional air quality plan?
3. Does the project incorporate all feasible and available air quality control measures?

3.2 County of San Diego

The County has approved *Guidelines for Determining Significance, Air Quality* (March 19, 2007) that ~~encompass~~essentially mirror Appendix G of the ~~2006~~ CEQA Guidelines and are intended to provide consistency in the environmental analysis. ~~The basis for~~Under the ~~determination of significance for Guidelines 1 through 5 is the County's Guidelines for Determination of Significance, Air Quality, adopted July 30, 2007. AG~~County's guidelines, a project will have a significant adverse environmental impact related to air quality if it would:

1. Conflict with or obstruct the implementation of the RAQS and/or applicable portions of the SIP.
2. Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation.
    a. Result in emissions that exceed 250 pounds per day of NOx, or 75 pounds per day of VOCs.
    b. Result in emissions of carbon monoxide of 550 pounds per day, and when totaled with the ambient concentrations will exceed a 1-hour concentration of 20 ppm or an 8-hour average of 9 ppm.
    c. Result in emissions of $PM_{2.5}$ that exceed 55 pounds per day.
    d. Result in emissions of PM_{10} that exceed 100 pounds per day and increase the ambient PM_{10} concentration by 5 5.0 $\mu g/m^3$ or greater at the maximum exposed individual.
    e. Result in emissions of ROG, as a precursor to ~~Ozone~~ozone, that exceed 75 pounds per day.

3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (PM_{10}, $PM_{2.5}$, or exceed quantitative thresholds for ozone precursors: NO_x and ROG~~)~~).

4. Expose sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, day-care centers and project residents) to substantial pollutant concentrations.

    a. Place sensitive receptors near CO hot spots or creates CO hot spots near sensitive receptors.

    b. Result in exposure to TACs resulting in a maximum incremental cancer risk greater than 1 in 1 million without application of best available control technology for toxics or a health hazard index greater than one would be deemed as having a potentially significant impact.

5. Expose considerable number of persons to objectionable odors.

3.3 SDAPCD Emissions Criteria

Emissions resulting from implementation of the project would be due primarily to an increase in traffic associated with the construction and the daily operations of the project. The SDAPCD does not provide specific numerics for determining the significance of mobile source-related impacts. However, the district does specify Air Quality Impact Analysis (AQIA) screening levels for new or modified stationary sources (SDAPCD Rules 20.2 and 20.3). The County's *Guidelines for* ~~Determination of~~*Determining Significance* ~~for~~, *Air Quality* allow the use of the SDAPCD AQIA as CEQA significance thresholds. If these incremental levels are exceeded, the district requires that an AQIA be performed for the project. Although these screening levels do not generally apply to mobile sources, for comparative purposes, these levels are used to evaluate the increased emissions that would be discharged to the SDAB if the project were approved. The AQIA screening levels are shown in Table 7 (~~Note~~note: there is no level specified for ROG in the SDAPCD AQIA screening criteria).

TABLE 7
COUNTY THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS

Pollutant	Total Emissions	
	Lb. per Hour	Lb. per Day
Respirable Particulate Matter (PM_{10})	---	100
Oxides of Nitrogen (NO_x)	25	250
Oxides of Sulfur (SO_x)	25	250
Carbon Monoxide (CO)	100	550
Lead and Lead Compounds	---	3.2
Volatile Organic Compounds (VOCs)*	---	75

*The threshold for VOCs is based on the guidelines of significance for reactive organic gases from Chapter 6 of the CEQA Air Quality Handbook of the South Coast Air Quality Management District (SCAQMD 1993). This standard is appropriate because the meteorological data associated with the project are similar to characteristics of the South Coast Air Basin.

In addition to a comparison with the ~~thresholds~~AQIA screening levels, the project should be evaluated to determine whether it has the potential to produce carbon monoxide hot spots at intersections in the vicinity of the project. A hot spot is a localized area, most often near a congested intersection, where the one-hour or eight-hour carbon monoxide standards are exceeded. Localized carbon monoxide impacts can occur where projects contribute traffic to intersections in areas where the ambient carbon monoxide concentrations are projected to be near or above state or federal standards. However, hot spots almost exclusively occur near intersections with level of service (LOS) E or worse.

3.4 Public Nuisance Law (Odors)

The State of California Health and Safety Code (H&S) Sections 41700 and 41705, and San Diego Air Pollution Control District Rule 51, commonly referred to as public nuisance law, prohibit emissions from any source whatsoever in such quantities of air contaminants or other material, which cause injury, detriment, nuisance, or annoyance to the public health or damage to property. The provisions of these regulations do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals. It is generally accepted that the considerable number of persons requirement in Rule 51 is normally satisfied when 10 different individuals/households have made separate complaints within 90 days. Odor complaints from a “considerable” number of persons or businesses in the area will be considered to be a significant, adverse odor impact.

According to the County of San Diego’s Zoning Ordinance (Section 6318), all commercial and industrial uses shall be so operated as not to emit matter causing unpleasant odors which are perceptible by the average person at or beyond any lot line

of the lot containing said uses Section 6318 limits odor emissions to a ratio of one volume of odorous air to eight or more volumes of clean air.

Every use and operation shall be conducted so that no unreasonable heat, odor, vapor, glare, vibration (displacement), dust, smoke, or other forms of air pollution subject to ~~air pollution control district~~SDAPCD standards shall be discernible at the property line of the parcel upon which the use or operation is located.

Therefore, any unreasonable odor discernible at, on, or beyond the property line of the project will be considered a significant odor impact. This criterion includes the exposure of on-site receptors to objectionable odors, in addition to off-site receptors.

3.5 Analysis Methodologies

CalEEMod, version 2011.1.1, was used to calculate construction and operations air emissions ~~associated with the project~~ for the land uses associated with the project. Material handling emissions were calculated using EPA AP-42 Emissions Factors and equations. Off-site roadway construction activities were modeled using the Road Construction Emissions Model, version 7.1.2, developed by the Sacramento Metropolitan Air Quality Management District (SMAQMD).

3.5.1 Construction Methodology and Assumptions

CalEEMod calculates construction emissions for land use development projects based on various project-specific inputs, including building type, acreage, soil hauling, construction phasing, equipment lists, and worker commutes and materials delivery. Thus, project-generated emissions of criteria air pollutants and ozone precursors were modeled based on information provided in the project description, the Lilac Hills Ranch Specific Plan, and default ~~assumptions~~ settings included in CalEEMod. CalEEMod does not calculate emissions from material movement and handling for balanced site conditions with no off-site hauling; thus, material movement and handling was calculated separately and added to the CalEEMod results to determine total construction emissions. Off-site construction emission estimates were developed with the Road Construction Emissions Model, a model specifically designed for roadway improvement projects.

CalEEMod and the Road Construction Emissions Model calculate ROG emissions rather than VOCs. The CARB defines VOC and ROG similarly as~~,~~ “any compound of carbon excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions, and CARB excludes any stable organic compound, such as methane, from the definition of ROG (State of California 2004). For

the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions and the term ROG is used in this report.

The project applicant has provided approximate timeframes for the five phases of construction activities. As previously shown ~~stated~~ in Table 3, the phases would occur in the following order: Phase 1, Phase 4, Phase 2, Phase 5, and Phase 3. Each phase is estimated to be approximately 1.5 years in length with the exception of Phase 3, which is estimated to be three to four years~~ in length~~. ~~As discussed in Section 2.1.4.2, T~~the highest average cut-and-fill volume for any phase would be 12,353 cy. However, to be conservative, construction emissions were modeled ~~assuming~~ based on a more intense 10-acre area with a daily movement volume of 50,000 cy [2].

Inputs ~~Assumptions~~ used to model construction emissions for each of the phases were based on equipment lists and cut-and-fill ~~calculation~~calculations provided by the project applicant. The construction equipment summarized in Table 8 is anticipated to be used in each phase of the project. Based on the project applicant's information, the majority of construction equipment would be composed of Tier III equipment, as outlined in the Mitigation Measures and Design Considerations in Section 4.2.1.3, and may be replaced with Tier IV equipment in the final phases~~ of construction~~. The emissions calculated in this analysis are based on the Tier levels presented in Table 8. Statewide data sets for ~~Default~~ horsepower, emission factors, and load factors provided as part of ~~by~~ CalEEMod, which were corrected after the run, were used.

[2] Based on grading a 10-acre site with an average blade depth of 3 feet (10 acres = 435,600 ft^2 x 3 ft = 1,306,800 ft^3 = 48,400 cy).

TABLE 8
CONSTRUCTION EQUIPMENT LIST

Construction Stage	Equipment Type	Quantity	Tier
Demolition	Concrete/Industrial Saws	1	II
Demolition	Crawler Tractors	1	III
Demolition	Tractors/Loaders/Backhoes	1	III
Site Preparation	Crawler Tractors	2	III
Site Preparation	Rubber Tired Loaders	3	III
Grading	Bore/Drill Rigs	2	III
Grading	Crawler Tractors	3	III
Grading	Graders	1	III
Grading	Rubber Tired Loaders	2	III
Grading	Scrapers	8	III
Building Construction	Cranes	1	III
Building Construction	Forklifts	3	III
Building Construction	Generator Sets	2	II
Building Construction	Tractors/Loaders/Backhoes	3	III
Building Construction	Welders	1	II
Paving	Pavers	2	III
Paving	Paving Equipment	2	III
Paving	Rollers	2	III
Architectural Coating	Air Compressors	2	I

Blasting operations would also be required for site preparation~~.~~ during all five phases of the project. For modeling purposes it was projected ~~assumed~~ that blasting operations would occur during the grading stage of all ~~each~~ phases ~~of construction~~; however, actual blasting operations would occur independently from grading activities. ~~Assuming that b~~Blasting ~~would occur~~ during grading operations results in a worst-case analysis, as this would also be when the highest emissions during construction occur~~s~~. ~~, blasting operations would occur in all five phases of the project.~~. The explosive material would consist of ammonium nitrate and fuel oil, known as ANFO. It is estimated that each blast would require 10,000 pounds of ~~explosive~~explosives per blast, and there would be a total of 8 blasts for the project. This totals to 80,000 pounds of ANFO for the project.

Project-specific data was input into CalEEMod and the Road Construction Emissions Model to calculate maximum daily emissions associated with construction of each phase of the project. To present a reasonable worst-~~-~~case assessment of the potential impacts, the construction schedule in CalEEMod was developed with overlapping phases, as shown in Table 9. For air quality modeling purposes, it was estimated ~~assumed~~ that construction activities would commence in July 2014 and conclude in December 2021~~, which represents a slightly compressed construction schedule as compared to that proposed.~~. As ~~E~~emission rates for equipment and vehicles would be expected to decrease with time due to continued improvements in equipment technologies and fuel formulations, if the construction of the project begins and ends after these dates, the emission estimates would still be considered acceptable, as the emissions from equipment would be conservative.

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TABLE 9
CONSTRUCTION TIMELINE

Project Phase	Construction Phase	Year/Month																																																	
		2014						2015												2016												2017												2018												2019													
		7*	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	2020	2021
1	Demolition	x**																																																																			
	Site Prepreparation		x	x	x																																																															
	Grading				x		x	x	x	x																																																									
	Building Construction										x	x	x	x	x	x	x		x																																																
	Paving										x	x	x																																																						
	Architechtural Coating													x	x	x	x		x	x																																																
4	Demolition										x																																																								
	Site Prepreparation											x	x	x																																																				
	Grading													x	x	x	x		x	x																																																
	Building Construction																			x	x	x	x	x	x	x	x																																								
	Paving																			x	x	x																																													
	Architechtural Coating																						x	x	x	x	x	x																																								
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	Site Prepreparation																				x	x	x																																											
	Grading																						x	x	x	x	x	x																																							
	Building Construction																												x		x	x	x	x	x	x	x																																
	Paving																												x		x	x																																			
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5	Demolition																												x																																							
	Site Prepreparation																														x	x																																			
	Grading																															x	x	x	x	x	x																														
	Building Construction																																					x	x	x	x		x	x	x	x																						
	Paving																																					x	x	x																											
	Architechtural Coating																																								x		x	x	x	x																		
3	Demolition																															x																																			
	Site Prepreparation																																x	x	x																															
	Grading																																			x	x	x	x	x	x	x	x	x	x	x																			
	Building Construction																																																								x	x	x	x	x	x	x	x	x	x	x	x	x
	Paving																																																								x	x	x										
	Architechtural Coating																																																										x	x	x	x	x	x	x	x	x	x	x

Source: RECON 2012

*Number correspond to months within the year

**Denotes phase activity occuring within the month

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Therefore, the modeled construction scenario represents the highest emission rates for individual pieces of construction equipment and vehicles. A list of modeling inputs for construction ~~assumptions~~ are provided in Attachment 1.

3.5.2 Operational Methodology and Assumptions

The operation of the project would result in emissions from the area and mobile sources. Vehicle trip generation rates are used by CalEEMod to estimate the mobile source operational emissions for each corresponding land use. The CalEEMod defaults for vehicle fleet mix and trip lengths were used in the modeling. The trip generation rates were obtained from the Traffic Impact Study prepared for the project (Chen Ryan ~~2012~~2014), and are listed in Table 10 along with each unit of measurement:

TABLE 10
LAND USE CATEGORY AND TRIP RATES

Land Use	Trip Rates
Apartments Low Rise	4 / DU
City Park	5 / AC
Condo/Townhouse	6 / DU
Congregate Care (Assisted Living)	2.5 / Bed
Elementary School	1.6 / Student
Hotel	9 / room
Office	14 / KSF
Junior High School	1.4 / Student
Place of Worship	30 / AC
Recreation Center	22.88 / KSF
Single-Family Housing	10 / DU
Strip Mall	40 / KSF
Water Reclamation	6 / AC
Recycling Center	6 / AC

SOURCE: Traffic Impact Study, Chen Ryan ~~2012~~2014.
DU = dwelling unit, AC = acre, KSF = thousands of square feet

Area sources associated with the project would include architectural coating, consumer products, ~~hearths~~fireplaces, landscaping, and natural gas use. CalEEMod default~~s~~ ~~were assumed~~settings were used for consumer products, landscaping, and natural gas consumption. Architectural coatings ~~were assumed~~would ~~to~~ comply with SDAPCD Rule 67, which limits the VOC content of paints sold within the County. Inputs for ~~hearths~~fireplaces were modified based on project-specific information. A list of ~~assumptions~~ modeling inputs used in the air emissions modeling is provided in Attachment 1.

For purposes of analyzing construction-related TAC emissions and their impact on sensitive receptors, the total PM_{10} emissions from equipment exhaust for the entire project were summed and divided over the total exposure time, i.e. 8 years, to develop an average daily emission rate. PM_{10} exhaust emissions are used as a surrogate for DPM, and all PM_{10} exhaust emissions are ~~assumed to be~~modeled as DPM. The exhaust emissions were calculated by CalEEMod. As a conservative analysis, ~~it was assumed that~~ construction activities ~~would occur~~ were modeled over a 10-acre area. Thus, the entire 8 years of exposure was modeled using an approximately 10-acre site. This ~~assumption~~ acreage produces a greater potential for impacts, as the emissions are concentrated in a smaller area, thus resulting in a higher concentration for calculating the health risk.

4.0 Project Impact Analysis

4.1 Conformance to the Regional Air Quality Strategy

4.1.1 Guidelines for the Determination of Significance

Project consistency is based on whether the project would conflict with or obstruct implementation of the RAQS and/or applicable portions of the SIP, which would lead to increases in the frequency or severity of existing air quality violations.

4.1.2 Significance of Impacts Prior to Mitigation

The RAQS was developed pursuant to California CAA requirements and identifies feasible emission control measures to provide expeditious progress in the County toward attaining the state ozone standard. The pollutants addressed are ROG and oxides of nitrogen (NO_X), precursors to the photochemical formation of ozone, the primary component of smog. The RAQS does not address CO or particulates; however, the 2007 SIP includes a CO maintenance plan for the region (SDAPCD 2004). The RAQS control measures focus on emission sources under SDAPCD authority, specifically stationary sources and some area-wide sources. The RAQS identifies area-wide sources as mostly residential sources, including water heaters, furnaces, architectural coatings, and consumer products. It is noted that fireplaces are not included. Assumptions for land use development used in the RAQS are taken from local and regional planning documents, including general plan land use designations.

Consistency with the RAQS is determined by analyzing a project with the assumptions in the RAQS. Thus, the emphasis of this criterion is to ~~evaluate if~~compare the emission

forecasts from the project's land uses ~~would be consistent~~ with ~~or less than the~~ emission forecasts based on the land uses for the ~~project site contained~~area included in the RAQS. Forecasts used in the RAQS are developed by the SANDAG~~. SANDAG forecasts are~~ based on local general plans and other related documents that are used to develop population ~~projections~~ and traffic projections.

As discussed above, the County's General Plan specifies the project area as a semi-rural area. The project would require a General Plan Amendment, a Specific Plan, and a Rezone in order to implement the Master and Phase 1 Implementing Tentative Maps, and an MUP. These changes are necessary to accommodate ~~903 single-family detached residences, 164 single-family attached residences, 468 single-family senior residences, 211 multi-family residences within mixed-use areas, 75,000 square feet of commercial use, a school site, a group residential/group care facility, a recycling facility, an on-site WRF, and other project features.~~the project's mix of residential, commercial, and industrial uses.

Given that these uses are not currently permitted under the existing General Plan, the refinement in land uses would exceed and intensify the land uses planned for under the ~~County~~County's General Plan. Therefore, the project is inconsistent with the RAQS,~~.~~ ~~Accordingly,~~ as its implementation ~~of the project~~ would conflict with and exceed the assumptions used to develop the current RAQS. ~~(~~While the project contains smart growth features, which would serve to reduce motor vehicle use, a major goal of the RAQS TCMs, this would not eliminate this inconsistency with RAQS for the SDAB~~.)~~ This inconsistency can only be rectified when ~~SANDAG updates the~~SDAPCD amends RAQS based on ~~the~~updated SANDAG growth projections after the project has been approved. Thus, this impact would be ***significant***.

4.1.3 Mitigation Measures and Design Considerations

Implementation of the project would conflict with the existing San Diego RAQS and applicable SIP because the density and intensity of land uses proposed is not consistent with current land use plans upon which the RAQS ~~are~~is based. This represents a significant impact; therefore, a revised housing forecast will need to be provided to SANDAG to ensure that the next revisions to the RAQS and the SIP accurately reflect the anticipated growth. The following mitigation will address the direct significant impact.

Project Mitigation Measures

The following mitigation measure~~s~~ is ~~are~~ required for the project.

AQ-MM-1: The County shall ~~will~~ provide a revised housing forecast to SANDAG to ensure that any revisions to the population and employment ~~projects~~projections used by SDAPCD in updating the RAQS and the SIP will accurately reflect anticipated growth due to the proposed project.

Implementation: County.

Timing: Prior to next update of the regional housing needs assessment following certification of the final EIR.

Enforcement: County

The provision of this information would assist SANDAG in revising the housing forecasts; however, until the anticipated growth is included in the emission estimates of the RAQS and the SIP, direct and cumulative impacts relative to conformance with the RAQS will remain significant and unavoidable.

4.1.4 Conclusions

The project would conflict with the existing San Diego RAQS and applicable SIP. Impacts would remain ***significant and unavoidable***.

4.2 Conformance to Federal and State Ambient Air Quality Standards

4.2.1 Construction Impacts

4.2.1.1 Guidelines for the Determination of Significance

A project is determined to have a significant direct air quality impact if the project exceeds any of the following thresholds:

- 250 pounds per day (lbs/day) of NO_X or 75 lbs/day of VOC
- CO that exceeds a one-hour concentration of 20 ppm or an eight-hour average of 9 ppm, or 550 lbs/day of CO
- 55 lbs/day of $PM_{2.5}$

- Increases the ambient PM_{10} concentration by 5 µg/m^3 or 100 lbs/day of PM_{10}

4.2.1.2 Significance of Impacts Prior to Mitigation

Construction emissions associated with development of the project were quantified using CalEEMod, AP-42 emission factors, and the Road Construction Emissions Model. Construction emissions were modeled using project-specific construction information when available. Where project-specific information was not available, default ~~assumptions~~ settings contained in CalEEMod were used to estimate construction emissions.

Construction activities would be subject to several control measures per the requirements of the County, SDAPCD rules, and CARB air toxic control measures (ATCM). The following required control measures have been incorporated into the calculations of construction emissions.

- Per the County's *Standard Mitigation and Project Design Consideration Grading, Clearing and Watercourses Ordinance* Section 87.428, the applicant shall implement one or more of the following measures during all grading activities:
  - Water actively disturbed surfaces at least twice daily.
  - Apply non-toxic soil stabilizers to inactive, exposed surfaces when not in use for more than 3 days. Non-toxic soil stabilizers should also be applied to any exposed surfaces immediately (i.e., less than 24 hours) following completion of grading activities if the areas would not be in use for more than 3 days following completion of grading.
  - Remove soil track-out from paved surfaces daily or more frequently as necessary.
  - Minimize the track-out of soil onto paved surfaces by installation of wheel washers.
- Per SDAPCD Rule 67, the applicant shall use regulated coatings for all architectural coating activities.
- Per CARB's ACTM 13 (CCR Chapter 10 Section 2485), the applicant shall not allow idling time to exceed 5 minutes unless more time is required per engine manufacturers' specifications or for safety reasons.

Emissions from construction equipment were quantified by overlapping the on-site construction phases. To determine significance, the worst-case scenarios of the overlapping phases were analyzed.

Additionally, off-site emissions would occur during construction of Phase 1. The off-site impacts consist of road widening activities over a total area of approximately 2.7 acres

and were calculated using the Road Construction Emissions Model. The emissions estimates associated with this activity are included in Table 10.

As all cut and fill would be balanced on-site, the emission of PM_{10} and $PM_{2.5}$ were calculated using AP-42 emission factors for “truck filling”, which generate 0.022050 pounds of PM_{10} per ton of soil. One cubic foot of loose soil weighs approximately 75 pounds, which translates to approximately 1.0125 tons per cubic yard (Engineering Tool Box 2013). Loose soil is assumed, as the soil would be recently excavated and would be relocated within the same site. The values of $PM_{2.5}$ were calculated as a percentage of PM_{10}. $PM_{2.5}$ emissions were estimated as 21 percent of the total PM_{10} emissions for mechanical action (SCAQMD 2006).

The soil movement was calculated ~~with an assumption that~~based on 50,625 tons (50,000 cubic yards) of soil ~~would~~ being moved around on-site during construction. In order to calculate the worse-case scenario, these emissions were added to the grading portion of each phase. Additionally, the reductions from watering active grading areas three times a day and the installation of trackout equipment were included to account for the grading permit requirements.

Blasting emissions are based on a daily explosive charge of 10,000 pounds. It is expected ~~assumed~~ that typical construction activity would halt during the blast, but would continue as normal before and after the blast. Based on EPA AP-42 emission factors, detonating 1 ton of ANFO generates 67 pounds of CO, 17 pounds of NO_X, and 2 pounds of SO_X. Based on the detonation of 5 tons, each individual explosion is estimated to generate 335 pounds of CO, 85 pounds of NO_X, and 10 pounds of SO_X.

The exhaust emissions of off-road equipment calculated by CalEEMod were reduced by 33 percent to account for the load factor overestimations included in CalEEMod per the *Workshops on Information Regarding the Off-Road, Truck and Bus and Drayage Truck Regulations* held by the CARB (State of California 2010).

Table 11 summarizes the worst-case scenarios for each of the overlapping phases during construction. A graphical overlay can be seen in Table 9. The highest emissions for individual pollutants occur during overlapping phases; however, as shown in Table 9, no single combination of phases is highest in all pollutants.

TABLE 11
UNMITIGATED CONSTRUCTION EMISSIONS (ON- AND OFF-SITE)
(pounds per day)

Construction Phase[1]	ROG	NO_X	CO	SO_2	PM_{10}[1]	$PM_{2.5}$[1]
Phase 1						
With Blasting	18.3	236.4	411.6	10.2	**469.7**	**103.7**
Without Blasting	18.3	151.43	76.6	0.3	**469.7**	**103.7**
Phase 1 / Phase 4						
With Blasting	39.2	**262.5**	448.7	10.2	**447.8**	**100.6**
Without Blasting	39.2	177.5	113.7	0.2	**447.8**	**100.6**
Phase 4 / Phase 2						
With Blasting	32.4	249.7	454.0	10.3	**449.3**	**99.8**
Without Blasting	32.4	164.7	119.0	0.3	**449.3**	**99.8**
Phase 2 / Phase 5						
With Blasting	50.1	238.3	451.3	10.3	**448.8**	**99.1**
Without Blasting	50.1	153.3	116.3	0.3	**448.8**	**99.1**
Phase 5/ Phase 3						
With Blasting	34.0	240.6	454.7	10.3	**449.6**	**99.2**
Without Blasting	34.0	155.6	119.7	0.3	**449.6**	**99.2**
Maximum Daily Emissions	50.1.	**262.5**	454.7	10.3	**469.7**	**103.7**
SLT	75	250	550	250	100	55
Significant Impact?	No	**Yes**	No	No	**Yes**	**Yes**

ROG =reactive organic gases; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = suspended particulate matter; $PM_{2.5}$ = fine particulate matter; SLT = Screening Level Thresholds
[1] Blasting would occur during the grading phase of all construction phases.
[2] PM emissions include water site 3x/day and a "track-out" gravel bed.
Bold data indicate a threshold has been exceeded.

As shown in Table 11, project construction would exceed the ~~SLT~~Screening Level Thresholds (SLTs) for PM_{10}~~,~~ (all phases), $PM_{2.5}$~~,~~ (all phases), and NO_X~~,~~ (Phase 1/ Phase 4 only), and would therefore result in a ***significant direct impact***. The remaining criteria pollutants would be below the SLT and would not result in significant impacts.

As the ~~County air pollution thresholds~~SLTs are designed to assess the maximum daily emissions of criteria pollutants, the use of explosives with ongoing construction would result in a significant impact relative to NO_X emissions. Therefore, a mitigation measure has been included to restrict construction operations during construction of Phase 4 on the same day as blasting operations. Design considerations included in the modeling include watering the site three times per day, using SDAPCD-compliant paints for the architectural coating, as well as including the construction equipment tier levels shown in Table 8 as part of the project commitments/requirements.

4.2.1.3 Mitigation Measures and Design Considerations

Project Design Considerations

AQ-DC-1 All active grading areas shall be watered three times per day.

AQ-DC-2 All architectural coatings used during construction will be SDAPCD Rule 67 compliant.

AQ-DC-3 Tier III, or higher, construction equipment will be used, with the exception of concrete/industrial saws, generator sets, welders, air compressors, or for construction equipment where Tier III, or higher, is not available.

Project Mitigation Measures

In addition to the standard dust and emission control during grading operations, the following mitigation measures are required for the project:

AQ-MM-2: The following dust control measures will be implemented:

A "trackout" gravel bed shall be installed at every access point used during construction~~ or at~~, including every location off-road equipment transitions to paved surfaces. The gravel bed shall be 25 feet long and the width of the access point/roadway.

Chemical stabilizers shall be applied annually to all unpaved storage/maintenance yards, parking areas, and unpaved roads.

Vehicles speeds will be limited to 15 miles per hour or less and shall be randomly verified by radar enforcement.

Implementation: Project applicant and primary contractor(s) of all project phases.

Timing: Prior to ~~design and implementation of development of on-site uses~~initiation of construction and concurrent with construction activities.

Enforcement: County

AQ-MM-3: The following measure will be implemented to reduce NO_X emission levels during blasting days:

All construction activity shall be halted ~~during~~for the entire day when any blasting operation~~,~~ occurs and only equipment required as part of the blasting operations, e.g. drill rig or equipment used to excavate and remove material, shall operate on the same day

as blasting occurs during the construction of Phase 4~~, given the exceedence of NO_x during this phase~~.

Implementation: Project applicant and primary contractor(s) of all project phases.

~~**Timing:** Prior to design and implementation of development of on-site uses.~~

Timing: Concurrent with construction activities.

Enforcement: County

AQ-MM-4: The following measure will be implemented to reduce PM_{10} and $PM_{2.5}$ emissions levels during rock crushing days:

Any permit conditions for crushing equipment shall be followed. Material shall be pre-watered prior to loading into the crusher as required to comply with permit and opacity emission limits. The crusher's emissions opacity shall be monitored once every 30 days of operation and an opacity limit of 20 percent as ~~average~~averaged over a six-minute period shall be maintained. Water shall be applied to crushed material to prevent dust plumes.

Implementation: Project applicant and primary contractor(s) of all project phases.

~~**Timing:** Prior to design and implementation of development of on-site uses.~~

Timing: Concurrent with construction activities.

Enforcement: County

AQ-MM-5: The following measure will be implemented to reduce PM_{10} and $PM_{2..5}$ emissions levels during blasting:

Blasting activities shall adhere to permitting requirements by the California Division of Industrial Safety ~~or~~and the best management practices for control of fugitive dust from construction and demolition for blasting, such as wet drilling and wetting the surface area prior to blasting.

Implementation: Project applicant and primary contractor(s) of all project phases.

~~**Timing:** Prior to design and implementation of development of on-site uses.~~

Timing: Concurrent with construction activities.

Enforcement: County

4.2.1.4 Conclusions

Construction emissions were calculated taking these project design considerations and mitigation measures into account. The results are summarized in Table 12.

TABLE 12
MITIGATED CONSTRUCTION EMISSIONS (ON- AND OFF-SITE)
(pounds per day)

Construction Phase[1]	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Phase 1	13.6	175.9	425.5	10.2	49.4	14.5
Phase 1 / Phase 4	38.6	177.5	113.7	0.2	27.3	16.2
Phase 4 / Phase 2	33.1	202.4	466.1	10.3	52.5	16.3
Phase 2 / Phase 5	52.1	238.3	474.2	10.3	52.8	16.4
Phase 5 / Phase 3	36.14	203.7	474.0	10.3	53.6	16.5
Maximum Daily Emissions	52.1	238.3	474.2	10.3	53.6	16.5
SLT	75	250	550	250	100	55
Significant Impact?	No	No	No	No	No	No

ROG =reactive organic gases; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = suspended particulate matter; $PM_{2.5}$ = fine particulate matter; SLT = Screening Level Threshold
[1]Blasting would occur during the grading phase of all construction phases.

Implementation of design considerations AQ-DC-1 through AQ-DC-3 and mitigation measures AQ-MM-2 and AQ-MM-3 would reduce construction-related emissions of PM_{10}, $PM_{2.5}$, and NO_X to below the ~~Screening Level Thresholds (~~SLTs~~)~~. The emission reduction benefits of AQ-MM-4 and AQ-MM-5 conservatively were not quantified. Therefore, direct construction emissions would ~~be~~result in a ***less than significant*** impact to regional air quality with mitigation.

4.2.2 Operational Impacts

4.2.2.1 Guidelines for the Determination of Significance

Operational emissions are subject to the same significance thresholds as those described in subchapter ~~Section~~ 4.2.1.1. Operational impacts are determined to have a significant direct air quality impact if the project exceeds the County's ~~SLT~~SLTs.

4.2.2.2 Significance of Impacts Prior to Mitigation

The methodology and assumptions used for calculating operational emissions are described in subchapter ~~Section~~ 3.5.2. Mobile and area source emissions were calculated using CalEEMod for each of the planned uses along with the trip rates (Chen Ryan ~~2013~~2014). As part of the land uses, there is a WRF and an RF, which were each modeled as an industrial use with a trip rate of 6 per acre. The following project design features were included:

- No wood-burning fireplaces will be installed, and all fireplaces were ~~assumed~~ modeled as~~to be~~ natural gas. No fireplaces at all were ~~assumed~~ included in ~~for~~ the 200-person group care facility, while 90 percent of the other residential land uses were ~~assumed~~ modeled ~~to~~ with have no fireplaces.
- The proposed project also includes pedestrian-friendly design and includes traffic reduction measures, such as complete sidewalk coverage within the project, internal trails, and bike lanes.
- All new residential units will have smart meters installed.
- The project includes a planting plan for approximately 35,000 additional trees within the project site to reduce energy consumption through the provision of shade.
- The project is designed to achieve a 25 percent improvement in energy efficiency over the 2008 Title 24 energy efficiency requirements.

The analysis of traffic operations is based on information provided by the project traffic report. The traffic report uses five scenarios to characterize operations: Phase 1 only is Scenario A; Phase 1 and 4 together are Scenario B; Phases 1, 2, and 4 together are Scenario C; Phases 1, 2, 4, and 5 together are Scenario D; and project build-out is Scenario E (Chen Ryan ~~2013~~2014). The total maximum daily operational emissions for Scenarios A through E are summarized in Table 13. Each consecutive phase adds land uses; therefore, the total emissions increase as they are implemented in the order of A to E. Starting at Scenario C, operational emissions would exceed the County's SLT for ROG, CO and PM_{10}. CalEEMod output is contained in Attachment 2.

TABLE 13
UNMITIGATED OPERATIONAL EMISSIONS
(pounds per day)

Operational Scenario/Emissions Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Scenario A Operations						
Mobile Sources	21.45	46.22	216.33	0.39	45.43	2.73
Area Sources[1]	18.8	0.35	29.66	0	0.58	0.58
Total Scenario A	40.25	46.57	245.99	0.39	46.01	3.31
Scenario B Operations						
Mobile Sources	32.23	69.47	325.16	0.59	68.29	4.11
Area Sources[1]	30.25	0.71	61.09	0	0.96	0.95
Total Scenario B	62.48	70.18	386.25	0.59	69.25	5.06
Scenario C Operations						
Mobile Sources	68.14	144	**672.31**	1.2	**138.32**	8.35
Area Sources[1]	54.03	1.16	100.19	0.01	1.73	1.72
Total Scenario C	**122.17**	145.16	**772.5**	1.21	**140.05**	10.07
Scenario D Operations						
Mobile Sources	**81.46**	172.62	**806.18**	1.44	**166.32**	10.04
Area Sources[1]	70.31	1.44	124.93	0.01	2.79	2.76
Total Scenario D	**151.77**	174.06	**931.11**	1.45	**169.11**	12.8
Scenario E "Build-out" Operations						
Mobile Sources	**113.61**	241.44	**1,127.97**	2.02	**233.42**	14.08
Area Sources[1]	**97.32**	1.87	162.78	0.01	3	2.98
Total Scenario E "Build-out"	**210.93**	243.31	**1,290.75**	2.03	**236.42**	17.06
SLT	75	250	550	250	100	55
Significant Impact?	**Yes**	No	**Yes**	No	**Yes**	No

ROG = reactive organic gases; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = suspended particulate matter; $PM_{2.5}$ = fine particulate matter; SLT = Screening Level Threshold
[1]The area sources calculation includes the natural gas energy calculations from CalEEMod.
Bold data indicate a threshold has been exceeded.

As shown in Table 13, ~~starting at Scenario C (Project Phases 1, 2, and 4 together),~~ total operational emissions would exceed the County's ~~SLT~~SLTs for ROG, CO, and PM_{10} during Operational Scenarios C through E. This is generally due to land use intensification and increased vehicle miles traveled associated with the project. As shown in Table 13, the ~~larger~~largest source of emissions would be traffic (mobile sources), and this source alone would exceed the County's SLT for ROG, CO, and PM_{10}. CO primarily affects local air quality, ROG primarily affects regional air quality as it interacts with NO_X to form ozone, and PM_{10} has an effect on a local level as well as regional level. Localized impacts of CO and PM_{10} are assessed in detail in subchapter ~~Section~~ 4.4. However, as PM_{10} and ROG are of regional concern, the emission of these pollutants is considered a **significant direct impact**.

Based on the results of modeling, the primary source of PM_{10} is from tire and break wear from vehicles associated with the project; thus, the only feasible mitigation would be to

reduce trips or trip distances. ROG emissions are generated by mobile sources, as well as consumer products. As with PM_{10}, the ROG emissions associated with mobile sources can only be reduced through fewer trips or shorter trip distances. Thus, to mitigate these impacts, the project will support and encourage ridesharing and alternate forms of transportation through provision of educational materials to future residents. ROG emissions associated with consumer products are difficult to mitigate, as they are driven primarily by consumer purchasing habits; thus, an additional measure has been identified that requires the project applicant and developers of future phases to provide educational materials to future residents on the benefits and availability of low ROG/VOC products.

4.2.2.3 Mitigation Measures and Design Considerations

Project Design Considerations

AQ-DC-4 The proposed project includes pedestrian-friendly design and includes traffic reduction measures, such as complete sidewalk coverage within the project, internal trails, and bike lanes.

AQ-DC-5 All new residential units will have smart meters installed.

AQ-DC-6 The project will plant approximately 35,000 additional trees within the project site to reduce energy consumption through the provision of shade.

AQ-DC-7 The project is designed to achieve a 30 percent improvement in energy efficiency over the 2008 Title 24 energy efficiency requirements.

AQ-DC-8 No wood-burning fireplaces will be installed; rather, all fireplaces will be natural gas. No fireplaces will be located at the 200-person group care facility, and 90 percent of the other residential land uses will have no fireplaces.

Project Mitigation Measures

As shown in Table 13, starting at Operational Scenario C, operational emissions would exceed the County's SLT for ROG, CO, and PM_{10}. Therefore, to reduce emissions, the project shall incorporate the following measures:

AQ-MM-6 The project applicant/phase developer shall develop a Green Cleaning Product education program ~~consisting~~to be made available at rental offices, leasing spaces, and/or on websites. The education program is intended for households and institutional consumers and consists of:

1) Provision of educational materials ~~in rental offices, leasing spaces, and/or~~ on ~~websites, about~~ low ROG/VOC consumer products~~ for planned households and institutional consumers;~~.

2) Educational materials ~~shall be provided for~~addressing the use of detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn and garden products; disinfectants; sanitizers; aerosol paints; automotive specialty products; low ROG/VOC paints and architectural coatings; and low emission landscape equipment.

3) Educational materials~~ will include information~~ on the importance of recycling and purchasing recycled material.

Implementation: Project applicant/phase developer shall supply the Green Cleaning Product education material to consumers prior to operation of individual phases.

Timing: Prior to each phase of construction that includes the applicable land uses and features.

Enforcement: County

AQ-MM-7 Promote and encourage ride share and alternate forms of transportation.

Implementation: The project applicant/phase developer shall provide educational material to consumers and/or occupants prior to operation of individual phases; educational materials will be provided in rental offices, leasing spaces, and/or on websites and shall include SANDAG icommute information and programs and regional energy working group information on alternate forms of transportation (SANDAG 2009; 2013).

Timing: Prior to each phase of construction that includes the applicable land uses and features.

Enforcement: County

Operational emissions were calculated with the incorporation of the design ~~consideration~~considerations and mitigation measures described above. Mitigated

operational emissions are summarized in Table 14. As shown, emissions of ROG, CO, and PM_{10} would remain greater than the SLT for these pollutants despite incorporation of all of the project design ~~features.~~ considerations and mitigation measures.

There is an approximate 2 percent reduction in ROG and CO and an approximate 2.5 percent reduction in PM_{10} attributed to ~~mitigation and~~ the project design considerations and mitigation measures reflected in CalEEMod~~,~~. These pollutants, however, cannot be fully mitigated, as the source is principally from motor vehicle and area sources that are dependent on consumer behavior~~; however, mitigation~~. Mitigation measure AQ-MM-6 includes the Green Cleaning Product education program, which ~~will~~may partially ~~mitigate for~~reduce ROG emissions over time~~-~~. While this measure is not quantifiable, it is the only available measure to reduce ROG emissions as substantial ROG emissions result from consumer products~~.~~, and consumer habits are beyond the control of the project. Mitigation measure AQ-MM-7 also encourages ridesharing and alternate forms of transportation, as the ROG, CO, and PM_{10} emissions are primarily from motor vehicles which are associated with occupants of the project area commuting to and from the project site. However, given that commuting and consumer behavior cannot be regulated, and the effects of these mitigation measures cannot be quantified, operational impacts would remain ***significant and ~~unmitigated~~unavoidable***.

TABLE 14
MITIGATED OPERATIONAL EMISSIONS
(pounds per day)

Operational Scenario/Emissions Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Scenario A Operations[1]						
Mobile Sources	21.05	45.21	211.52	0.38	44.26	2.66
Area Sources[3]	18.8	0.35	29.66	0	0.58	0.58
Total Scenario A	39.85	45.56	241.18	0.38	44.84	3.24
Scenario B Operations						
Mobile Sources	31.64	67.96	317.92	0.58	66.53	4
Area Sources	30.25	0.71	61.09	0	0.96	0.95
Total Scenario B	61.89	68.67	379.01	0.58	67.49	4.95
Scenario C Operations						
Mobile Sources	66.93	140.93	657.64	1.17	134.75	8.15
Area Sources	54.03	1.16	100.19	0.01	1.73	1.72
Total Scenario C	**120.96**	142.09	**757.83**	1.18	**136.48**	9.87
Scenario D Operations						
Mobile Sources	80.02	168.93	788.54	1.4	162.04	9.79
Area Sources	70.31	1.44	124.93	0.01	2.79	2.76
Total Scenario D	**150.33**	170.37	**913.47**	1.41	**164.83**	12.55
Scenario E "Build-out" Operations						
Mobile Sources	111.58	236.25	1,103.22	1.97	227.42	13.73
Area Sources	97.32	1.87	162.78	0.01	3	2.98
Total Scenario E “Build-out”	**208.9**	238.12	**1,266**	1.98	**230.41**	16.71
SLT	75	250	550	250	100	55
Significant Impact?	**Yes**	No	**Yes**	No	**Yes**	No

ROG =reactive organic gases; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = suspended particulate matter; $PM_{2.5}$ = fine particulate matter; SLT = Screening Level Threshold
[1]Emissions shown represent the maximum daily motor vehicle- or area-source emissions that would occur from summertime operations calculated by CalEEMod.
[2]**Bold** data indicate a threshold has been exceeded.
[3]The area sources calculation includes the natural gas energy calculations from CalEEMod.

4.2.2.4 Conclusions

The project design ~~features~~<u>considerations</u> and mitigation measures would reduce the levels of criteria pollutants; however, not to a level below significance. Therefore operational impacts would remain ***significant and ~~unmitigated~~<u>unavoidable</u>***.

4.3 Cumulatively Considerable Net Increase of Criteria Pollutants

4.3.1 Construction Impacts

4.3.1.1 Guidelines for the Determination of Significance

The County's ~~Air Quality Guidelines~~guidelines state that even if direct air quality impacts from a project are less than significant, the project may still have a ~~cumulatively considerable~~ significant cumulative impact on air quality if the emissions are cumulatively considerable when viewed in combination with other reasonably foreseeable future projects within proximity of the proposed action. Projects that would individually cause a significant direct air quality impact with respect to VOC, NO_X, PM_{10}, or $PM_{2.5}$ would also be considered to have a cumulatively considerable net increase in emissions.

According to the County's guidelines, it is assumed that a project which conforms to the County of San Diego General Plan and does not have emissions exceeding the SLTs would not create a cumulatively considerable net increase to ozone since the emissions were accounted for in the RAQS.

4.3.1.2 Significance of Impacts Prior to Mitigation

As shown in Table 11, with the implementation of mitigation, the construction-related emissions of the criteria pollutants would not exceed the County's SLT for construction and would therefore not cause a significant direct impact.

~~Additionally~~However, as phases of construction become operational, later phases would continue to be constructed, thus resulting in combined daily construction and operational emissions from the project. Table 15 summarizes the cumulative unmitigated construction emissions with the unmitigated operational emissions that would overlap during the same period. This cumulative analysis provides information on which combination of operational and constructional phases surpass the significance thresholds.

TABLE 15
UNMITIGATED CONSTRUCTION + OPERATIONAL EMISSIONS

Overlapping Project Phases	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SO_2 (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)
Phase 1	18.3	236.4	411.6	10.2	469.7	103.7
Phases 1 & 4	39.2	262.5	448.7	10.2	447.8	100.6
Phases 2 & 4	32.4	249.7	454.0	0.0	449.3	99.8
Phase A Operational	40.3	46.6	246.0	0.4	46.0	3.3
Total A + Maximum Construction	***79.4***	***309.1***	***700.0***	*10.5*	***495.3***	***107.0***
Phases 2 & 5	50.1	238.3	451.3	10.3	448.8	99.1
Scenario B Operational	62.5	70.2	386.3	0.6	69.3	5.1
Total B + 2&5	***112.5***	***308.5***	***837.6***	*10.9*	***518.1***	***104.2***
Phases 3 & 5	34.0	240.6	454.7	10.3	449.6	99.2
Scenario C Operational	**122.2**	145.2	**772.5**	1.2	140.1	10.1
Total C + 3&5	***156.2***	***385.7***	***1227.2***	*11.5*	***589.7***	***109.3***
Phase 3	16.9	207.7	411.0	10.2	442.2	97.3
Scenario D Operational	**151.8**	174.1	**931.1**	1.5	169.1	12.8
Total D + 3	***168.7***	***381.7***	***1342.1***	*11.6*	***611.3***	***110.1***
Scenario E Operational	***210.9***	*243.3*	***1290.8***	*2.0*	***236.4***	*17.1*
SLT	75	250	550	250	100	55
Significant Impact?	**Yes**	**Yes**	**Yes**	No	**Yes**	No

Note: SLT = Significance Level Threshold; *Italicized* = Combined totals of operational and construction phases for the project. **Bold** = Emissions exceeds SLT.

As show in Table 15, air emissions of ROG, NO_X, CO, $PM_{2.5}$, and PM_{10} would exceed the County's ~~SLT~~SLTs when construction emission are combined with operational emissions after opening Phase 1, and with the exception of NO_X and $PM_{2.5}$, which are primarily associated with diesel-fueled engines, these emissions would continue to exceed the County ~~SLT~~SLTs at full build-out.

Additionally, the County's General Plan specifies the project area as a semi-rural area. The project would require a General Plan Amendment, a Specific Plan, and a Rezone in order to implement the Master and Phase 1 Implementing Tentative Maps. Given these uses are not currently permitted under the existing General Plan, the refinement in land uses would exceed and intensify the land uses planned for under the County General Plan. Therefore, the project is considered inconsistent with the RAQS.

Implementation of the project would conflict with the current RAQS as well as surpass the ~~County SLT.~~County's SLTs. Thus, this impact would be ***cumulatively significant***.

4.3.1.3 Mitigation Measures and Design Considerations

As the project would result in a cumulatively significant impact, the applicant shall implement all mitigation measures described in subchapters ~~Section~~ 4.2.2.3 and ~~Section~~ 4.2.1.3 to reduce construction emissions.

Table 16 includes the combination of the mitigated construction and operation emissions which would occur at the same point in time. This cumulative analysis provides a summary of which combination of operational and constructional phases surpass the significance thresholds even after application of all project design considerations and mitigation measures previously identified are included.

TABLE 16
MITIGATED CONSTRUCTION + OPERATIONAL EMISSIONS

Overlapping Project Phases	ROG (lb/day)	NO_X (lb/day)	CO (lb/day)	SO_2 (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)
Phase 1	13.6	175.9	425.5	10.2	49.4	14.5
Phases 1 & 4	38.6	201.5	466.1	10.2	27.3	11.4
Phases 2 & 4	33.1	202.4	474.2	10.3	29.6	11.5
Scenario A Operational	39.9	45.6	241.2	0.4	44.8	3.2
Total A + 2 & 4	*73.0*	*247.9*	***715.4***	*10.6*	*74.4*	*14.7*
Phases 2 & 5	52.1	203.7	474.0	10.3	29.9	11.6
Scenario B Operational	61.9	68.7	379.0	0.6	67.5	5.0
Total B + 2 & 5	***114.0***	***272.4***	***853.0***	*10.8*	*97.4*	*16.5*
Phases 3 & 5	36.1	206.0	477.4	10.3	30.7	11.7
Scenario C Operational	121.0	142.1	**757.8**	1.2	**136.5**	9.9
Total C + 3 & 5	***157.0***	***348.1***	***1235.2***	*11.5*	***167.2***	*21.5*
Phase 3	14.1	173.2	432.0	10.2	23.1	9.5
Scenario D Operational	150.3	170.4	**913.5**	1.4	**164.8**	12.6
Total D + 3	***164.4***	***343.6***	***1345.4***	*11.6*	***187.9***	*22.1*
Scenario E Operational	***208.9***	*238.1*	***1266.0***	*2.0*	***230.4***	*16.7*
SLT	75	250	550	250	100	55
Significant Impact?	**Yes**	No	**Yes**	No	**Yes**	No

Note: SLT = Significance Level Threshold; *Italicized* = Combined totals of operational and construction phases for the project. **Bold** = Emissions exceeds SLT.

4.3.1.4 Conclusions

Implementation of the proposed mitigation measures would reduce the maximum daily construction emissions to a level below the County's ~~SLT~~SLTs. However, when combined with the operational emissions as shown in Table 15, the proposed project is considered to have a significant impact. Therefore, even with mitigation implemented, as shown in Table 16, emissions would still exceed the ~~County SLT.~~County's SLTs. Additionally, the project is inconsistent with the RAQS. The project's construction-related cumulative impact would remain ***~~cumulatively~~ significant and ~~unmitigated~~unavoidable***.

4.3.2 Operational Impacts

4.3.2.1 Guidelines for the Determination of Significance

A project that does not conform to the RAQS and/or has a ~~significant~~ direct impact on air quality with regard to operational emissions of VOC, NO_x, $PM_{2.5}$, and/or PM_{10} would also have a significant cumulatively considerable net increase in pollutants.

Additionally, projects that cause road intersections to operate at or below a Level of Service (LOS) E (analysis only required when the addition of peak-hour trips from the proposed project and the surrounding projects exceeds 2,000) and create a CO hot spot create a cumulatively considerable net increase of CO. The details of the cumulative hot spot analysis are included in section 4.4.2.

4.3.2.2 Significance of Impacts Prior to Mitigation

The project is not consistent with the current RAQS. ~~The~~Further, the mobile and area source emissions associated with the full build-out of the project would exceed the County's ~~SLT~~SLTs for ROG, CO, and PM_{10} even after incorporation of mitigation as shown in Tables ~~12~~14 and 16. ~~According to~~Therefore, the ~~County's guidelines, a project that does not conform to the RAQS and/or has a significant direct impact on air quality with regard to~~project's operational-related emissions ~~of PM_{10}, $PM_{2.5}$, NO_x, and/or VOCs,~~ would ~~also~~ have a ~~significantly cumulatively considerable net increase~~***significant cumulative impact*** on regional air quality.

~~The project would result in a significant direct impact on air quality with respect to emissions of ROG and PM_{10} (the CO hot spot analysis in section 4.4.2 shows that there would be no localized impact and therefore no cumulative impact for CO), and it is not consistent with the current RAQS, thus the project would have a ***significant cumulative impact*** on regional air quality.~~

4.3.2.3 Mitigation Measures and Design Considerations

As discussed in subchapter ~~Section~~ 4.2.2.3 and in Attachment 1, the applicant shall implement project design ~~features~~considerations and mitigation measures. However, these project design ~~features~~considerations and mitigation measures would not reduce emissions below the County's SLTs. Some pollutants (ROG, CO, and PM_{10}) cannot be mitigated, as the source is principally from motor vehicle and area sources that are dependent on consumer behavior.

4.3.2.4 Conclusions

~~The project's~~The project is inconsistent with the RAQS, and its operational emissions at full build-out would exceed the County's SLTs for ROG, CO, and PM_{10}. Thus, the project would ~~and would~~ result in a ***cumulatively considerable*** net increase in emissions, which is considered a ***significant and unavoidable cumulative impact***.

4.4 Impacts to Sensitive Receptors

4.4.1 Construction Impacts

4.4.1.1 Guidelines for the Determination of Significance

Projects that would site sensitive receptors near potential CO hot spots (i.e., exceedance of County CO thresholds) or would contribute vehicle traffic to local intersections where a CO hot spot could occur would be considered as having a potentially significant impact.

Projects that would result in exposure to TAC resulting in a maximum incremental cancer risk greater than 1~~0~~ in 1 million without application of best available control technology for toxics or a threshold of 10 in 1 million for project's implementing best emission-control technologies or a health hazard index greater than one would be considered as having a potentially significant impact.

4.4.1.2 Significance of Impacts Prior to Mitigation

Carbon Monoxide

Roadway segments and intersections are rated by a LOS standard developed as a professional industry standard to determine area traffic impacts. The LOS standards range from A to F depending on the amount of typical traffic flow measured in average daily traffic (ADT) volumes. The generally accepted region-wide goal is LOS D (or better). According to the Traffic Impact Analysis there are existing intersections that operate at LOS E or worse (Chen Ryan ~~2013~~2014). Construction-related traffic is not anticipated to significantly impact the existing LOS ~~rating~~ratings. Additionally, construction trips are estimated to be below the 3,000 vehicle trips per day used by the County as a screening level for hot spot analysis and, therefore, are not required to be analyzed. The phased approach to development would also limit the daily volume of construction workers on local roads associated with the project. Thus, construction-related traffic is not expected to impact local intersections or cause an exceedance of the County's guidelines for assessing impacts to sensitive receptors. This impact would be ***less than significant***.

Toxic Air Contaminants—Diesel Particulate Matter

Construction of the project would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Particulate exhaust emissions from diesel-fueled engines (diesel PM or DPM) were identified as a TAC by CARB in 1998. Project construction would result in the generation of DPM emissions from the use of off-road diesel construction equipment required for site grading and earthmoving, trenching, asphalt paving, and other construction activities. Other construction-related sources of DPM include material delivery trucks and construction worker vehicles; however, these sources are minimal relative to construction equipment. Not all construction worker vehicles would be diesel fueled and most DPM emissions associated with material delivery trucks and construction worker vehicles would occur off-site.

Generation of DPM from construction projects typically occur in a single area for a short period. The dose ~~(~~of TACs~~)~~ to which receptors are exposed to is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure a person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period to a fixed amount of emissions would result in a higher exposure level for the Maximally Exposed Individual (MEI) and higher health risks. ~~According to the~~The Office of Environmental Health Hazard Assessment (OEHHA~~), health risk assessments (HRA), which are the tool used to determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period, however, such assessments should be limited to the period/duration of activities associated with the project. The OEHHA~~) Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (HRA Guidance) allows a 9-year exposure period to represent the first 9 years of a child's life, which physiologically and behaviorally result in higher exposure levels. However, the HRA Guidance does not support a HRA for exposures less than 9 years. For cases where exposure would last for less than 9 years, OEHHA suggests assuming a minimum exposure of 9 years.

As previously indicated, for purposes of the air quality modeling, construction activities are estimated to over approximately 8 years (July 2014 to December 2021~~.~~) over the length of five phases. Grading, trenching, and asphalt paving operations typically generate the most DPM emissions, because these activities require the most heavy-duty construction equipment. A health risk assessment was performed combining all the annual exhaust PM_{10} emissions for the entire project from CalEEMod and averaging them over an 8-year period. ~~(~~As previously mentioned, exhaust emissions were reduced by 33 percent to account for overstated equipment load factors in CalEEMod (California 2010~~).~~).~~)~~ The MEI was ~~assumed to be~~ the nearest sensitive receptor to the existing project site, which is modeled to be located as close as one meter from the project site. In reality, the exposure of all sensitive receptors to construction-related emissions of

DPM would vary, as construction activities would move between Phases 1 through 5 of the project.

Although some ~~proposed~~ residents are expected to begin living in the initially completed phases as construction starts on the next sequential phase, the construction activities are planned to occur at further distances from these residents. Therefore, construction activities would occur for a total length of 8 years with the exposure level changing as the construction activities move further away.

Source Description

Construction activities associated with the project would generate DPM emissions from on- and off-road vehicles and equipment. For the purposes of this analysis, PM_{10} exhaust emissions from CalEEMod were used to estimate DPM emissions. The DPM sources are listed in Table 8.

Calculation of Emissions

The DPM emissions for the construction phases were estimated using exhaust PM_{10} values from CalEEMod annual emission estimates. These values were summed and averaged over the length of the 8-year project. Additionally, these emissions were reduced by 33 percent to account for an overstatement of load factors for off-road vehicles (State of California 2010). AERSCREEN assumes an emission source is continuous for a 24-hour period. Thus, construction emissions, which typically occur for 8 hours a day, were adjusted to reflect an emission rate over the 24-hour period. The resulting exhaust PM_{10} value was then converted into grams per second and input into the AERSCREEN modeling program, which calculates pollutant concentrations from various types of sources. Model inputs include a 200 meter by 203 meter site (approximately 10 acres) with an average emission source height of 12 meters above the ground. The model calculates the 1-hour maximum and annual concentration in $\mu g/m^3$. The annual concentration was then used in the dose inhalation equation, which is described in the following *Estimation of Exposure through Inhalation* discussion below.

Emission Sources

A volume source in AERSCREEN was used to represent construction activities that would occur on the project site. The area of the volume source was ~~anticipated~~calculated ~~assumed~~ to be the 40,600 m^2 (approximately 10 acres) to account for size of a typical phase. The volume source representing emissions from the construction equipment was ~~were~~ given an initial exhaust release height of about 12 meters to account for the height of the exhaust stack and the resultant plume. The distance to ambient air was set at the default of 431 meters.

Estimation of Exposure through Inhalation

This assessment considers exposure via inhalation only. The potential exposure through other pathways (e.g., ingestion) requires substance and site-specific data, and the specific parameters for DPM are not known for these pathways (California 1998). This assessment also assumes that a person is exposed continuously for 70 years with an adjustment based on the 8-year construction period, as described below. ~~The OEHHA Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA Guidance)~~OEHHA's HRA Guidance provides direction with respect to the evaluation of cancer risk calculations for short-term exposures (i.e., less than a maximum theoretical project life of 70 years) (OEHHA 2003). The ~~OEHHA~~HRA Guidance states:

> "[A]s the exposure duration decreases the uncertainties introduced by applying cancer potency factors derived from very long term studies increases. Short-term high exposures are not necessarily equivalent to longer-term lower exposures even when the total dose is the same. OEHHA therefore does not support the use of current cancer potency factor to evaluate cancer risk for exposures of less than 9 years. If such risk must be evaluated, we recommend assuming that average daily dose for short-term exposure is assumed to last for a minimum of 9 years." (OEHHA 2003)

Exposure through inhalation is a function of the respiration rate and the concentration of a substance in the air and is calculated by using the following formulas (OEHHA 2003):

Risk = Dose-inhalation x Inhalation cancer potency factor (Equation 1)
where:

- Inhalation cancer potency factor (CPF) = 1.1 (milligram per kilogram per day)$^{-1}$ (for Diesel Particulate Matter [DPM])
- Dose Inhalation = C_{air} x DBR x A x EF x ED x 10^{-6} / AT (Equation 2)

where:

- C_{air} = concentration in µg/m^3
- DBR = breathing rate in liter per kilogram of body weight per day
- A = inhalation absorption factor (1 for DPM)
- EF = exposure frequency in days per year
- ED = exposure duration in years

- AT = averaging time period over which exposure is averaged in days (25,550 days for 70 years)

For modeling purposes, the default values suggested by the OEHHA Guidance were used for the dose inhalation calculation except for daily breathing rate. The default values used in the model are as follows:

- DBR = 302
- EF = 350 days/year (adjusted for construction days)
- ED = 8 years
- AT = 25,550 days
- A = 1

In accordance with CARB policy, a breathing rate equal to the 80th percentile should be used in single-point risk management decisions, such as those subject to a threshold or standard, for which the cancer risk is entirely associated with inhalation and residential cancer risk is being evaluated (State of California 2003). These two criteria are met for this assessment. Thus, a breathing rate of 302 liter per kilogram of body weight per day was used for the residential cancer risk calculations.

The risk is calculated by multiplying the dose by the inhalation potency factor. The inhalation cancer potency factor (CPF) for DPM is 1.1 (OEHHA 2003). To calculate the cancer risk, a multiplying factor was derived based on the effects on humans and the information discussed above.

The guidance provided by OEHHA recommends exposure duration at least 9 years in duration. As construction activities would last for 8 years, the exposure duration of 9 years is used for this analysis. However, to be conservative, the emission rate was determined from the actual construction period, which results in a higher emission rate due to the shorter time frame.

The AERSCREEN calculated emissions are shown in Table 17.

TABLE 17
DPM CONCENTRATIONS

Modeled Concentration	DPM Concentration ($\mu g/m^3$)	Distance (meters)
Maximum 1-hour	1.910	431
Minimum 1-hour	1.089	5,000
Annual	0.191	431

DPM = diesel-exhaust particulate matter

Based on the AERSCEEN modeling results in Table 17, the maximum annual diesel PM concentration of 0.191 µg/m^3 would occur at 431 meters. When included in the inhalation dose equation, this results in an inhalation dose of 6.32E-06 from the maximum annual concentration. This value, when multiplied by the CPF (1.1), would represent a cancer risk of 6.95 in one million at the point of maximum concentration. Therefore, the modeled cancer risks would not exceed the County's significance threshold of 10 in 1 million for project's implementing best emission-control technologies, such as AQ-DC~~-AQ-~~3, and the project's construction-related TAC impacts to sensitive receptors would be ***less than significant***.

Additionally, DPM has chronic (i.e., long-term) non-cancer health impacts. The chronic non-cancer inhalation hazard indices for the project were calculated by dividing the modeled annual average concentrations of the DPM by the Reference Exposure Level (REL). The OEHHA has recommended an ambient concentration of 5 µg/m^3 as the chronic inhalation REL for DPM.

The annual concentration of (0.~~173~~191 µg/m^3 was divided by the REL (5 for DPM) to determine the non-cancer risk from DPM exposure. The following equation is used to calculate the Hazard Quotient:

Hazard Quotient = Ci / RELi (0.191 µg/m^3 / 5) = 3.82 E-02 (0.0382)

where:

- Ci = Concentration in the air of substance I (annual average concentration)
- RELi = Chronic Non-cancer Reference Exposure Level for substance i

The REL is the concentration at or below which no adverse health effects are anticipated and this is referenced as the acute, 8-hour, and chronic hazard index. The resulting value is 0.0382 µg/m^3. This DPM concentration for the project is below the REL and is under the County's more stringent significance threshold of 1 for non-cancer health impacts. Therefore, the non-cancer health impacts associated with the project's construction-related TAC impacts to sensitive receptors would be ***less than significant***.

Crystalline Silica

Crystalline silica was evaluated for its effect on existing residents, future project occupants, and construction workers. Overexposure to respirable crystalline silica can cause silicosis which is a disabling, nonreversible, and sometimes fatal lung disease. Crystalline silica is a basic component of soil, granite, and most other types of rock (Occupational Safety and Health Administration [OSHA] 2012). Silicosis is considered an occupational hazard that is primarily limited to construction workers and miners. The following are the sources of exposure for crystalline silica:

- Sandblasting for surface preparation
- Crushing and drilling rock and concrete
- Masonry and concrete work/building and road construction and repair
- Mining/tunneling/demolition work

There are currently no adopted CEQA significance thresholds for environmental exposure of nearby receptors to airborne crystalline silica generated by construction activities. ~~In a literature search, a~~A study ~~was produced~~published by the South Coast Air Quality Management District (SCAQMD) that involved crystalline silica monitoring in Duarte and Azusa, CA (SCAQMD 2008b) near a rock quarry operation~~. The~~ was analyzed. In the study, the atmospheric sampling for crystalline silica is based on sampling particulate matter, specifically PM_4 (particulate matter less than 4 microns). OEHHA defines an inhalation REL of 3 µg/m^3 for crystalline silica as the level below which no adverse health effect would occur.

The Azusa Rock Quarry is permitted by the SCAQMD to specifically operate aggregate crushing and screening at no more than 900,000 tons per month (which equates to 37,500 tons per day) or 10.8 million tons per year (~~Azusa Rock Quarry Final EIR 2010~~West Coast Environmental and Engineering 2008); this includes a 6-day work week and operational hours between 6 a.m. and 10 p.m. The total size of the mine is a proposed 270 acres, with a 190-acre disturbance footprint. The maximum 24-hour reported value in the SCAQMD study was 1.3 µg/m^3, and the average was 0.5 µg/m^3; therefore, the results of the SCAQMD study show levels lower than the REL.

The proposed project involves construction grading of 5 individual phases of the following sizes: 121.6 acres for Phase 1, 85.1 acres for Phase 2, 225.8 acres for Phase 3, 60.3 for Phase 4, and 115.2 for Phase 5. It has been conservatively estimated that ~~assumed~~ each of these phases would involve grading of 50,000 tons per day of material, with the total movement of material, including aggregate rock, to be 4 million tons. The aggregate rock quantities are estimated to be approximately 15,000 tons per day (10,000 cy * 1.5 tons/cy = 15,000 tons), based on the blasting analysis. The project has a work schedule of 5 days a week, 8 hours a day. Thus, the project would not exceed the actual or permitted aggregate mining operations assessed at the Azusa Rock Quarry.

The levels of crystalline silica resulting from the rock quarry operations at the Azusa Rock Quarry are expected to be higher than the project given the lower level of activity and lower daily and total aggregate handling associated with the project. It can then be inferred that levels due to construction of the proposed project would be less than those associated the studied Azusa Rock Quarry; therefore, in the absence of additional empirical evidence specific to construction projects, it is anticipated the project would generate concentrations of crystalline silica lower than the OEHHA REL of 3 µg/m^3.

Thus, construction and blasting activities from the project are expected to have impacts that are ***less than significant*** due to crystalline silica.

4.4.1.3 Mitigation Measures and Design Considerations

CO hot spot and DPM health risk impacts would be less than significant, and therefore no mitigation is required.

Project Design Considerations

Due to the community concern regarding exposure of sensitive receptors to crystalline silica, a conservative approach has been adopted and the following design consideration will be included as part of the project conditions. The total elimination or substitution of silica from the construction process is not feasible, but best engineering practices, administrative actions, and personal protective equipment would reduce potential impacts from crystalline silica dust in many construction activities (Yeheyis, Aguilar, Hewage & Sadiq 2012):

AQ-DC-8 The contractor shall use all available engineering controls such as blasting cabinets and local exhaust ventilation. The use of compressed air for cleaning surfaces shall be avoided. Water sprays, wet methods for cutting, chipping, sawing, grinding etc. shall be used, as feasible. The use of respirators approved for protection against silica shall be issued to construction workers during blasting and grading operations, where feasible.

~~**Design Consideration**~~ AQ-DC-8~~,~~ is a conservative approach based on the OSHA guidelines for protection from silicosis.

4.4.1.4 Conclusions

Construction-related traffic on local roads would not be anticipated to contribute traffic volumes to intersections that would cause a CO hot spot. Thus, construction-related impacts on localized CO concentrations would be considered ***less than significant***.

The modeled cancer risks would not exceed the County's significance threshold of 10 in 1 million, and the non-cancer health impacts would not exceed the REL or County thresholds; therefore, the project's construction-related TAC impacts to sensitive receptors would be ***less than significant***.

Crystalline silica generated during construction of the project would not exceed the OEHHA REL of 3 µg/m^3. Thus, construction and blasting activities from the project are expected to have impacts that are ***less than significant*** due to crystalline silica.

4.4.2 Operational Impacts

4.4.2.1 Guidelines for the Determination of Significance

The guidelines for determination of significance are discussed in subchapter ~~Section~~ 4.4.1.1.

4.4.2.2 Significance of Impacts Prior to Mitigation

Carbon Monoxide

Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and certain meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses. A CO hot spot occurs when localized CO concentrations exceed the NAAQS or CAAQS. As a result, the County recommends analysis of CO emissions at a local as well as a regional level.

Following construction of the project, the project-related traffic would contribute vehicle trips on existing and future intersections. The addition of these trips could degrade the LOS of intersections to a level where a CO hot spot could occur. The County's ~~Air Quality Guidelines~~guidelines state that intersections that are likely to result in a CO hot spot would operate at a LOS E or worse and would include peak-hour trips exceeding 3,000 vehicle trips.

Another appropriate procedure for evaluating CO hot spots is provided in the procedures and guidelines contained in the Protocol to determine whether a project poses the potential for a CO hot spot (UCD ITS 1997). Similar to the County screening criteria, the Protocol indicates that projects may worsen air quality if they worsen traffic flow, defined as increasing average delay at signalized intersections operating at LOS E or F, or causing an intersection that would operate at LOS D or better without the project~~,~~ to operate at LOS E or F. Unsignalized intersections are not evaluated, as they are typically signalized as volumes and delays increase. The Protocol also provides guidance for preparing a detailed CO hot spot analysis.

~~Following construction of the project, the project-related traffic would contribute vehicle trips on existing and future intersections. The addition of these trips could degrade the LOS of intersections to a level where a CO hot spot could occur. The County's Air Quality Guidelines state that intersections that are likely to result in a CO hot spot would operate at a LOS E or worse and would include peak-hour trips exceeding 3,000 vehicle trips at signalized intersections. This analysis included studying traffic volumes in both Phase A and the Build-out scenario~~This analysis included studying traffic volumes in both

Operational Scenario A and the Build-out Scenario (Operational Scenarios A through E) in order to assess varying degrees of CO under two different levels of development intensity. It was determined that there was one signalized intersection operating at LOS E or worse, exceeding 3,000 trips; this was the SR 76 / Old River Road / E. Vista Way intersection (Chen Ryan ~~2013~~2014). Under ~~Phase~~Operational Scenario A, this intersection has 3,074 trips, and under the Build-out ~~scenario~~Scenario it has 3,195 trips. These volumes surpass the County's threshold for a hot spot analysis, and therefore a detailed analysis was done for the intersection.

The CALINE4 model was used for inputting the trip volumes from the Traffic Impact Study and an averaged emission factor for vehicles traveling 5 miles per hour was taken from the 2011 EMFAC database. Table 18 shows the PM volumes that were modeled in the hot spot analysis:

TABLE 18
MAXIMUM CARBON ~~DIOXIDE~~MONOXIDE CONCENTRATIONS AT SR 76/OLD RIVER ROAD/EAST VISTA WAY

Operational Scenario	Peak Hour Volumes P.M.	1-hour CO (ppm)	1-hour CO Standard CAAQS/ NAAQS	8-hour CO (ppm)	8-hour CO Standard CAAQS/ NAAQS
Scenario A	3,074	6.5	20/35~~9.0/9~~	3.9	9.0/9~~20/35~~
Scenario A-E (Build-out)	3,195	6.6		4	

CO = carbon dioxide
ppm = parts per million
CAAQS = California Ambient Air Quality Standard
NAAQS = National Ambient Air Quality Standard

The ambient concentration of CO (3.5 ppm) is included in the results of the CALINE4 modeling; therefore, the actual project increase is 3.0 ppm for Scenario A, and 3.1 ppm for the Build-out scenario. In order to calculate the 8-hour concentration, the 1-hour value was multiplied by a conversion factor of 0.6, as recommended in the Protocol (UCD ITS 1997). This resulted in a value of 3.9 ppm (Scenario A) and 4 ppm (Build-out), which is also below the 8-hour CO standard threshold. Therefore, there would be no impacts to CO at the intersection that would exceed the County's thresholds; ~~therefore,~~ this impact would be ***less than significant***.

Additionally, according to the County's guidelines, projects that cause road intersections to operate at or below a LOS E and create a CO hot spot create a cumulatively considerable net increase of CO. A detailed CO hot spot analysis is required when ~~signalized intersections result in~~the addition of traffic from cumulative projects and the project causes a 2,000~~–~~-trip increase ~~between the~~over existing conditions ~~and the cumulative plus project plus the existing conditions~~at a signalized intersection.

There are three intersections, listed in Table 19, that result in an increase of over 2,000 trips. These three intersections were modeled in CALINE4 in order to determine if the CO emissions exceeded the thresholds.

TABLE 19
TRIP VOLUMES FOR SIGNALIZED INTERSECTIONS WITH A CHANGE OVER 2,000 ADT

Intersection	Existing Conditions	Cumulative + Project + Existing	Change
SR 76/Old River/East Vista Way	3,054	5,601	**2,547**
SR 76/Olive Hill Road/Camino del Rey	2,948	5,668	**2,720**
Old Highway 395/SR 76	1,947	4,031	**2,084**

Note: Bolded numbers are those that exceed the County's threshold of 2,000 ADT.

In this cumulative analysis, the 2022 emission factors at a 5-miles-per-hour velocity for a combined vehicle mix were used for the three intersections. As evident in Table 20, the 1-hour and the 8-hour concentrations of CO at these intersections are below the CAAQS and NAAQS thresholds. Therefore, there would be no impacts to CO at the intersections that would exceed the County's thresholds~~; therefore~~, and this impact would be ***less than significant***.

TABLE 20
MAXIMUM CARBON ~~DIOXIDE~~MONOXIDE CONCENTRATIONS AT ~~SR-76/OLD RIVER ROAD/ EAST VISTA WAY~~INTERSECTIONS WITH A CHANGE OVER 2,000 ADT

Scenario	Peak Hour Volumes	1-hour CO (ppm)	1-hour CO Standard CAAQS/ NAAQS	8-hour CO (ppm)	8-hour CO Standard CAAQS/ NAAQS
SR-76/Old River/East Vista Way	5,601	6.9	20/35~~9.0/9~~	4.14	9.0/9~~20/35~~
SR-76/Olive Hill Road/Camino del Rey	5,668	8		4.8	
Old Highway 395/SR 76	4,031	7.5		4.5	

CO = carbon dioxide
ppm = parts per million
CAAQS = California Ambient Air Quality Standard
NAAQS = National Ambient Air Quality Standard

PM_{10}

Guidance for assessing localized impacts from PM_{10} generated by traffic is provided by the Federal Highway Administration in the *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas*. Based on this guidance of projects of local air quality concern should be assessed. Projects of air quality concern include:

- A project on a new highway or expressway that serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT) and 8 percent or more of such AADT is diesel truck traffic;
- New exit ramps and other highway facility improvements to connect a highway or expressway to a major freight, bus, or intermodal terminal;
- Expansion of an existing highway or other facility that affects a congested intersection (operated at Level-of-Service D, E, or F) that has a significant increase in the number of diesel trucks; and,
- Similar highway projects that involve a significant increase in the number of diesel transit busses and/or diesel trucks.

The project is not a highway improvement project; the volume on I-15 in this area ranges between 107,000 and 113,000 AADT (Caltrans 2011). Based on the Caltrans traffic volume data for I-15 between Deer Springs Road and SR 76, the diesel truck traffic, the primary source of diesel exhaust, represents approximately 7 percent of the total traffic volume.

The project also would not create new freeway ramps that would connect to a major freight, bus, or intermodal terminal. The project is primarily residential and would not generate a substantial increase in diesel trucks or transit ~~busses~~buses. The project would result in the degradation of the ~~intersection~~intersections at SR 76/Old River/East Vista Way, SR 76/Olive Hill Road/Camino del Rey, and Old Highway 395/SR 76; however, based on the I-15 traffic data, roadways in the project area are ~~comprise~~composed of less than 8 percent diesel trucks, and the project would not ~~substantial~~substantially increase the number of diesel trucks.

Therefore, the proposed project would not result in adverse concentrations of localized PM_{10} emissions, and this would be a **less than significant impact**.

4.4.2.3 Mitigation Measures and Design Considerations

There are no impacts to sensitive receptors during operation, and therefore there is no mitigation required.

4.4.2.4 Conclusions

Operation of the project would not expose sensitive receptors to CO hot spots or contribute traffic trips that would cause a CO hot spot at intersections. In addition, the project would not generate substantial sources of TAC that would affect sensitive receptors. Therefore, the project's impact with respect to localized CO and TAC would be ***less than significant.***

4.5 Odor Impacts

4.5.1 Guidelines for the Determination of Significance

The project plans ~~to~~ include a ~~water reclamation facility (~~WRF~~)~~ on-site. Currently, there are no quantitative thresholds established by the SDAPCD with regards to odors. As previously mentioned, the "considerable number of persons" requirement in Rule 51 is normally satisfied when 10 different individuals/households have made separate complaints within 90 days. Odor complaints from a "considerable" number of persons or businesses in the area would be considered to be a significant, adverse odor impact. Odor impacts resulting from the project would be considered significant if the project would frequently expose the public to objectionable odors in violation of California Code of Regulations, Health and Safety Code Section 41700, for air quality public nuisance.

4.5.2 Significance of Impacts Prior to Mitigation

Project design considerations ~~measures~~ would be provided to reduce any potential odor impacts to the surrounding areas. As required by ~~Pursuant to~~ Section ~~6300~~6318 of the County Zoning Ordinance, odor control units would be designed to treat odorous air from within treatment structures so not to emit matter causing unpleasant odors which are perceptible by the average person at or beyond the lot line of the WRF, which is defined as a ratio of one volume of odorous air to eight or more volumes of clean air. Foul air from the plant headworks would be treated on-site prior to discharge. The industry standard treatment process of foul air is achieved by activated carbon towers, which would be employed at the WRF; this is included in the project as AQ-DC-9. ~~The proposed means of foul air treatment would be activated carbon towers.~~

Activated charcoal or carbon has a large internal surface area (lots of micro-pores) which creates adsorption of odor. As contaminated water or air passes through an activated carbon filter (or tower), the carbon traps a wide range of impurities and contaminants, catching them in the carbon filter. Activated carbon filters have many applications in medicine, water, and air filtration. In wastewater treatment plants, these towers are used to trap the volatile organic compounds that are corrosive or odorous. These active carbon adsorption units provide excellent treatment of highly hydrophobic odorants (90–99 percent) ~~(~~; Lebrero et al. 2011).

The future residents may be affected from odors from the surrounding agricultural land uses; however, the surrounding agricultural operations are limited to mostly citrus groves and flower production operations, which do not use substantial quantities of chemical pesticides or fertilizers. None of the surrounding land uses include animal confinement facilities. Thus, given the surrounding agricultural operations are limited to flower production and citrus groves, which are not typically significant odor sources, and given ~~project design setbacks from agricultural uses and~~ that no significant objectionable odors

have been detected during site visits, odor impacts to future residents are anticipated to be **less than significant**.

With the inclusion of the project design ~~measure~~considerations, the project would not result in a substantial increase in odor levels at nearby sensitive receptors. Implementation of the project would result in **less than significant** odor impacts.

4.5.3 Mitigation Measures and Design Considerations

Project Design Consideration

AQ-DC-9 The proposed ~~means~~ project ~~of~~ will treat foul air ~~treatment would be~~ through activated carbon towers.

Project Mitigation Measures

There are no impacts to sensitive receptors during operation and, therefore, there is no mitigation required.

4.5.4 Conclusions

With the inclusion of the previously mentioned design considerations, the project would not result in a substantial increase in odor levels at nearby sensitive receptors. Therefore, the project's impact with respect to odor levels would be ***less than significant***.

5.0 Summary of Recommended Project Design Features, Impacts, and~~&~~ Mitigation

~~The project would develop single-family and mixed-use residences,~~; ~~age-restricted single-family homes,~~; ~~facilities to serve the senior citizens' neighborhood; commercial uses; a K-8 school; civic facilities including improvements to an existing~~ a ~~fire station; and~~ K-8 school; and, ~~a private recreational facility and recreational amenities.~~ The project's consistency with the RAQS was evaluated to determine if the project would conflict with or obstruct implementation of the applicable air quality plan. In addition, emissions from construction and operation of the project were analyzed to determine the potential direct and cumulative air quality impacts.

The County's General Plan ~~specifies~~identifies the project area as a semi-rural area. The project requires a General Plan Amendment, a Specific Plan and a rezone in order to implement Master and Phase 1 Implementing Tentative Maps, and an MUP. Given these

uses are not currently permitted under the existing General Plan, the refinement in land uses would currently exceed and intensify the land uses currently planned for under the County General Plan. Therefore, the emissions associated with the project have not been accounted for in the RAQS and the project would be inconsistent with the RAQS. Impacts associated with consistency with the RAQS would be significant. Even with the implementation of ~~T~~the RAQS-related mitigation measure is AQ-MM-1 — a revised housing forecast — the impact would remain significant and unavoidable.

Construction impacts would not have a significant direct and impact; however, construction emissions would result in a significant cumulative impact. The project's five phases of development are the basis for the construction timing as provided by the project applicant. The construction emissions were estimated with CalEEMod using the construction timeline as shown in Table 9. The results of the modeling for the construction phases are that, with the implementation of project design considerations and mitigation measures, emissions would be less than the ~~SLT~~SLTs for all criteria pollutants. ~~(~~The construction-related mitigation measures include: AQ-MM-2 — dust control measures; AQ-MM-3 — blasting NO_x control; AQ-MM-4 — rock crushing emissions control; and AQ-MM-5 — blasting PM_{10} and $PM_{2.5}$ control. According to the County's ~~Air Quality Guidelines~~guidelines, construction emissions wound not cause a significant direct impact, but would result in a significant cumulatively considerable net increase in emissions.

Construction-related vehicle trips would contribute traffic to local roadways; however, the magnitude of construction-related traffic would not be expected to cause or contribute to a CO hot spot at local intersections. The project design ~~features~~consideration conservatively included for reducing crystalline silica exposure would ~~be conservative measures to~~ help reduce exposure to sensitive receptors as well as construction workers.

The project's operational impacts on air quality in the County would be significant for ROG, CO, and PM_{10} despite project design considerations and mitigation measures. ~~(~~The mitigation measures include: AQ-MM-1 — a revised housing forecast; ~~AQ-MM-2 — dust control measures; AQ-MM-3 — blasting NO_x control; AQ-MM-4 — rock crushing emissions control; AQ-MM-5 — blasting PM_{10} and $PM_{2.5}$ control;~~ AQ-MM-6 — green cleaning product education program; and AQ-MM-7 — alternate transportation programs~~.~~.) The County's ~~Air Quality Guidelines~~guidelines consider projects with operational emissions that exceed the County's SLT, which is a significant direct impact, to cause a significant cumulatively considerable net increase in emissions.

To assess the potential localized CO impacts from operational sources, screening methods provided by the County's Air Quality Guidelines were used to determine that a CO hot spot would not occur at the intersections affected by the project. Furthermore, due to traffic impacts, at Old Highway 395 and West Lilac Road intersection, a signalized traffic stop would be installed to improve traffic conditions at that location thereby

reducing the threats of a CO hot spot. Operation of the project would not be anticipated to expose sensitive receptors to substantial concentrations of CO or TAC.

With implementation of AQ-DC-9, ~~T~~the project's construction and operational activities would not be anticipated to expose a substantial number of people to objectionable odors. This impact would be considered less than significant.

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7.0 List of Preparers and Persons and Organizations Contacted

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ATTACHMENTS

ATTACHMENT 1

Soil Weight Calculations

	Lbs/CF	Lbs/CY	Tons/CY
Loose earth	75	2,025	1.0125
Rammed earth	100	2,700	1.35
Source	http://www.engineeringtoolbox.com/earth-soil-weight-d_1349.html		

Maximum Daily Acreage Calulation

Acres	Depth	SqFt/Acre	Total FT^3	Total yd^3	Tons
10	3	43,560	1,306,800	48,400	49,005

Project Total Earth Movement

Total yd^3	Daily Max yd^3	Tons/day	Total Days at Max
4,070,000	50,000	50,625	81.4

Elementary School Employee Estimate

School	Lilac	Bonsall	Bonsall West	Pauma	Valley Center	Average
Teachers	17	44	21	13	19	114
Students	570	911	464	260	498	2703
Teachers/Student	0.0298246	0.048298573	0.045258621	0.05	0.03815261	0.042175361

Middle School Employee Estimate

School	Sullivan	Valley Center	Average
Teachers	21	25	46
Students	479	850	1329
Teachers/Student	0.0438413	0.029411765	0.034612491

Land Use	Size	Metric	Teachers	Admin1*	Office	Total Population
Elementary School	568	Students	24	3	2	29
Middle School	132	Students	5	3	1	9

* Assumes 1 principal, 1 janitor, and 1 cafateria staff
** Assumes an office assistant per 250 students

Land Use	Units	Metric	Square feet	Employees	Residents	Total Population
Assisted Living	200	Beds	158,200	149	200	349

Land Use	Units	Metric	Employee Ratio	Total Employees
Retail	61,500	square feet	1/KSF	62
Office	28,500	square feet	2.3/KSF	66
Inn	50	Rooms	0.32/KSF	32
Recycling Center	0.6	Acre	0.59/KSF	5
Water Reclamation	2.4	Acre	0.59/KSF	20
House of Worship	10.7	Acre	*	3

*Employees are assumed to be 2 theologian, 1 office worker, and 1 grounds keeper.
** Square feet based on a floor area ratio of 33%

Total Non-Residential Populaiton 575

TABLE 4.1
PROJECT LAND USE BY SPECIFIC PLAN PHASING

Land Use	Unit	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Single Family	DU	350	196	357	-	-
Multi-Family	DU	-	270	105	-	-
Senior Community	DU	-	-	-	171	297
Assisted Living	Bed	-	-	-	200	-
Specialty/Strip Commercial	KSF	-	55.0	4.0	-	2.5
Office	KSF	-	25.0	3.5	-	-
Country Inn / B&B	Room	-	50	-	-	-
Church	AC	-	-	-	-	10.7
Elementary School (K-5)	Student	-	-	568	-	-
Middle School (6-8)	Student	-	-	132	-	-
Recreation Center	KSF	-	-	40.0	-	-
Neighborhood/County Park	AC	3.2	2.8	12.0	3.7	2.1
Water Reclamation	AC	-	-	2.4	-	-
Recycling Center	AC	-	0.6	-	-	-

Source: Accretive Investments, Inc., Chen Ryan Associates; January 2013

TABLE 4.2
TRAFFIC ANALYSIS PHASING

Phasing	SP Phase 1	SP Phase 2	SP Phase 3	SP Phase 4	SP Phase 5
Traffic Analysis Phase A					
Traffic Analysis Phase B					
Traffic Analysis Phase C					
Traffic Analysis Phase D					
Traffic Analysis Phase E (Buildout)					

Source: Accretive Investments, Inc., Chen Ryan Associates; January 2013

TABLE 4.3
PROJECT LAND USE BY TRAFFIC ANALYSIS PHASING

Land Use	Unit	Phase A	Phase B	Phase C	Phase D	Phase E
Single Family	DU	350	350	546	546	903
Multi-Family	DU	-	-	270	270	375
Senior Community	DU	-	171	171	468	468
Assisted Living	Bed	-	200	200	200	200
Specialty/Strip Commercial	KSF	-	-	55.0	57.5	61.5
Office	KSF	-	-	25.0	25.0	28.5
Country Inn / B&B	Room	-	-	50	50	50
Church	AC	-	-	-	10.7	10.7
Elementary School (K-5)	Student	-	-	-	-	568
Middle School (6-8)	Student	-	-	-	-	132
Recreation Center	KSF	-	-	-	-	40.0
Neighborhood/County Park	AC	3.2	6.9	9.7	11.8	23.8
Water Reclamation	AC	-	-	-	-	2.4
Recycling Center	AC	-	-	0.6	0.6	0.6

Source: Accretive Investments, Inc., Chen Ryan Associates; January 2013

TABLE 4.4
LILAC HILLS RANCH PROJECT TRIP GENERATION
PHASE A

Land Use	Units	Trip Rate	Daily Trips	AM Peak Hour		PM Peak Hour	
				%	Trips	%	Trips
Single Family	350	10 / DU	3,500	8%	280 (84-in / 196-out)	10%	350 (245-in / 105-out)
Neighborhood/County Park	3.2	5 / AC	16	4%	1 (0-in / 0-out)	8%	1 (1-in / 1-out)
Total by Phase A			**3,516**		**281 (84-in / 196-out)**		**351 (246-in / 106-out)**

Source: Chen Ryan Associates; January 2013

TABLE 4.5
LILAC HILLS RANCH PROJECT TRIP GENERATION
PHASE B

Land Use	Units	Trip Rate	Daily Trips	AM Peak Hour		PM Peak Hour	
				%	Trips	%	Trips
Single Family	350	10 / DU	3,500	8%	280 (84-in / 196-out)	10%	350 (245-in / 105-out)
Senior Community	171	4 / DU	684	5%	34 (14-in / 21-out)	7%	48 (29-in / 19-out)
Assisted Living	200	2.5 / Bed	500	4%	20 (12-in / 8-out)	8%	40 (20-in / 20-out)
Neighborhood/County Park	6.9	5 / AC	35	4%	1 (1-in / 1-out)	8%	3 (1-in / 1-out)
Total by Phase B			**4,719**		**336 (110-in / 225-out)**		**441 (295-in / 146-out)**

Source: Chen Ryan Associates; January 2013

TABLE 4.6
LILAC HILLS RANCH PROJECT TRIP GENERATION
PHASE C

Land Use	Units	Trip Rate	Daily Trips	AM Peak Hour		PM Peak Hour	
				%	Trips	%	Trips
Single Family	546	10 / DU	5,460	8%	437 (131-in / 306-out)	10%	546 (382-in / 164-out)
Multi-Family	270	6 / DU	1,620	8%	130 (26-in / 104-out)	9%	146 (102-in / 44-out)
Senior Community	171	4 / DU	684	5%	34 (14-in / 21-out)	7%	48 (29-in / 19-out)
Assisted Living	200	2.5 / Bed	500	4%	20 (12-in / 8-out)	8%	40 (20-in / 20-out)
Specialty/Strip Commercial	55.0	40 / KSF	2,200	3%	66 (40-in / 26-out)	9%	198 (99-in / 99-out)
Office	25.0	14 / KSF	350	15%	53 (47-in / 5-out)	15%	53 (11-in / 42-out)
Country Inn / B&B	50	9 / Room	450	8%	36 (14-in / 22-out)	9%	41 (24-in / 16-out)
Neighborhood/County Park	9.7	5 / AC	49	4%	2 (1-in / 1-out)	8%	4 (2-in / 2-out)
Recycling Center	0.6	6 / AC	4	11%	0 (0-in / 0-out)	10%	0 (0-in / 0-out)
Total by Phase C			**11,317**		**778 (285-in / 492-out)**		**1,075 (669-in / 406-out)**

Source: Chen Ryan Associates; January 2013

TABLE 4.7
LILAC HILLS RANCH PROJECT TRIP GENERATION
PHASE D

Land Use	Units	Trip Rate	Daily Trips	AM Peak Hour		PM Peak Hour	
				%	Trips	%	Trips
Single Family	546	10 / DU	5,460	8%	437 (131-in / 306-out)	10%	546 (382-in / 164-out)
Multi-Family	270	6 / DU	1,620	8%	130 (26-in / 104-out)	9%	146 (102-in / 44-out)
Senior Community	468	4 / DU	1,872	5%	94 (37-in / 56-out)	7%	131 (79-in / 52-out)
Assisted Living	200	2.5 / Bed	500	4%	20 (12-in / 8-out)	8%	40 (20-in / 20-out)
Specialty/Strip Commercial	57.5	40 / KSF	2,300	3%	69 (41-in / 28-out)	9%	207 (104-in / 104-out)
Office	25.0	14 / KSF	350	15%	53 (47-in / 5-out)	15%	53 (11-in / 42-out)
Country Inn / B&B	50	9 / Room	450	8%	36 (14-in / 22-out)	9%	41 (24-in / 16-out)
Church	10.7	30 / AC	321	5%	16 (10-in / 6-out)	8%	26 (13-in / 13-out)
Neighborhood/County Park	11.8	5 / AC	59	4%	2 (1-in / 1-out)	8%	5 (2-in / 2-out)
Recycling Center	0.6	6 / AC	4	11%	0 (0-in / 0-out)	10%	0 (0-in / 0-out)
Total by Phase D			**12,936**		**856 (320-in / 536-out)**		**1,194 (737-in / 457-out)**

Source: Chen Ryan Associates; January 2013

TABLE 4.8
LILAC HILLS RANCH PROJECT TRIP GENERATION
PHASE E – BUILDOUT

Land Use	Units	Trip Rate	Daily Trips	AM Peak Hour		PM Peak Hour	
				%	Trips	%	Trips
Single Family	903	10 / DU	9,030	8%	722 (217-in / 506-out)	10%	903 (632-in / 271-out)
Multi-Family	375	6 / DU	2,250	8%	180 (36-in / 144-out)	9%	203 (142-in / 61-out)
Senior Community	468	4 / DU	1,872	5%	94 (37-in / 56-out)	7%	131 (79-in / 52-out)
Assisted Living	200	2.5 / Bed	500	4%	20 (12-in / 8-out)	8%	40 (20-in / 20-out)
Specialty/Strip Commercial	61.5	40 / KSF	2,460	3%	74 (44-in / 30-out)	9%	221 (111-in / 111-out)
Office	28.5	14 / KSF	399	15%	60 (54-in / 6-out)	15%	60 (12-in / 48-out)
Country Inn / B&B	50	9 / Room	450	8%	36 (14-in / 22-out)	9%	41 (24-in / 16-out)
Church	10.7	30 / AC	321	5%	16 (10-in / 6-out)	8%	26 (13-in / 13-out)
Elementary School (K-5)	568	1.6 / Student	909	32%	291 (175-in / 116-out)	9%	82 (33-in / 49-out)
Middle School (6-8)	132	1.4 / Student	185	30%	56 (33-in / 22-out)	9%	17 (7-in / 10-out)
Recreation Center[1]	40.0	22.88 / KSF	915	12%	108 (57-in / 51-out)	10%	95 (38-in / 57-out)
Neighborhood/County Park	23.8	5 / AC	119	4%	5 (2-in / 2-out)	8%	10 (5-in / 5-out)
Water Reclamation	2.4	6 / AC	14	11%	2 (1-in / 1-out)	10%	1 (1-in / 1-out)
Recycling Center	0.6	6 / AC	4	11%	0 (0-in / 0-out)	10%	0 (0-in / 0-out)
Total by Phase E - Buildout			**19,428**		**1,663 (693-in / 970-out)**		**1,829 (1,115-in / 714-out)**

Source: Chen Ryan Associates; January 2013

Note:
1. Trip generation rate is based on ITE Trip Generation Manual 8th Edition.

TABLE 4.9
LILAC HILLS RANCH INTERNAL AND EXTERNAL PROJECT TRIPS
PHASE E – BUILDOUT

Land Use	Quantity	Total Trips				Internal Trips				External Trips		
		Daily	AM Peak Hour	PM Peak Hour	% Internal	Daily	AM Peak Hour	PM Peak Hour	% External	Daily	AM Peak Hour	PM Peak Hour
Single Family	903 DU	9,030	722 (217-in / 506-out)	903 (632-in / 271-out)	10%	903	72 (22-in / 51-out)	90 (63-in / 27-out)	90%	8,127	650 (195-in / 455-out)	813 (569-in / 244-out)
Multi-Family	375 DU	2,250	180 (36-in / 144-out)	203 (142-in / 61-out)	10%	225	18 (4-in / 14-out)	20 (14-in / 6-out)	90%	2,025	162 (32-in / 130-out)	182 (128-in / 55-out)
Senior Community	468 DU	1,872	94 (37-in / 56-out)	131 (79-in / 52-out)	10%	187	9 (4-in / 6-out)	13 (8-in / 5-out)	90%	1,685	84 (34-in / 51-out)	118 (71-in / 47-out)
Assisted Living	200 bed	500	20 (12-in / 8-out)	40 (20-in / 20-out)	10%	50	2 (1-in / 1-out)	4 (2-in / 2-out)	90%	450	18 (11-in / 7-out)	36 (18-in / 18-out)
Specialty/Strip Commercial	61.5 KSF	2,460	74 (44-in / 30-out)	221 (111-in / 111-out)	50%	1,230	37 (22-in / 15-out)	111 (55-in / 55-out)	50%	1,230	37 (22-in / 15-out)	111 (55-in / 55-out)
Office	28.5 KSF	399	60 (54-in / 6-out)	60 (12-in / 48-out)	10%	40	6 (5-in / 1-out)	6 (1-in / 5-out)	90%	359	54 (48-in / 5-out)	54 (11-in / 43-out)
Country Inn / B&B	50 room	450	36 (14-in / 22-out)	41 (24-in / 16-out)	10%	45	4 (1-in / 2-out)	4 (2-in / 2-out)	90%	405	32 (13-in / 19-out)	36 (22-in / 15-out)
Church	10.7 AC	321	16 (10-in / 6-out)	26 (13-in / 13-out)	50%	161	8 (5-in / 3-out)	13 (6-in / 6-out)	50%	161	8 (5-in / 3-out)	13 (6-in / 6-out)
Elementary School (K-5)	568 student	909	291 (175-in / 116-out)	82 (33-in / 49-out)	80%	727	233 (140-in / 93-out)	65 (26-in / 39-out)	20%	182	58 (35-in / 23-out)	16 (7-in / 10-out)
Middle School (6-8)	132 student	185	56 (33-in / 22-out)	17 (7-in / 10-out)	80%	148	44 (27-in / 18-out)	13 (5-in / 8-out)	20%	37	11 (7-in / 4-out)	3 (1-in / 2-out)
Recreation Center	40.0 KSF	915	108 (57-in / 51-out)	95 (38-in / 57-out)	50%	458	54 (29-in / 25-out)	48 (19-in / 29-out)	50%	458	54 (29-in / 25-out)	48 (19-in / 29-out)
Neighborhood/County Park	23.8 AC	119	5 (2-in / 2-out)	10 (5-in / 5-out)	80%	95	4 (2-in / 2-out)	8 (4-in / 4-out)	20%	24	1 (0-in / 0-out)	2 (1-in / 1-out)
Water Reclamation	2.4 AC	14	2 (1-in / 1-out)	1 (1-in / 1-out)	50%	7	1 (0-in / 0-out)	1 (0-in / 0-out)	50%	7	1 (0-in / 0-out)	1 (0-in / 0-out)
Recycling Center	0.6 ACE	4	0 (0-in / 0-out)	0 (0-in / 0-out)	50%	2	0 (0-in / 0-out)	0 (0-in / 0-out)	50%	2	0 (0-in / 0-out)	0 (0-in / 0-out)
Total		**19,428**	**1,663 (693-in / 970-out)**	**1,829 (1,115-in / 714-out)**	22%	**4,278**	**492 (261-in / 231-out)**	**396 (207-in / 189-out)**	78%	**15,151**	**1,171 (431-in / 739-out)**	**1,433 (908-in / 525-out)**

Source: Chen Ryan Associates; January 2013

ATTACHMENT 2

CALLEEMOD CONSTRUCTION OUTPUT FILES

Lilac Ranch - Phase 1 - Construction

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	3.2	Acre
Single Family Housing	350	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

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	25.70	208.87	106.46	0.23	0.65	9.50	10.11	0.01	9.49	9.50	0.00	25,682.52	0.00	2.31	0.00	25,730.96
2015	24.30	192.44	101.84	0.23	1.98	8.69	9.30	0.03	8.69	8.70	0.00	25,673.24	0.00	2.16	0.00	25,718.58
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	18.67	118.51	127.30	0.23	0.56	7.80	8.36	0.01	7.80	7.81	0.00	25,682.52	0.00	2.31	0.00	25,730.96
2015	18.66	118.49	127.10	0.23	1.98	7.80	8.36	0.03	7.80	7.81	0.00	25,673.24	0.00	2.16	0.00	25,718.58
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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Energy	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Mobile	21.45	46.22	216.33	0.39	43.24	2.19	45.43	0.60	2.13	2.73		37,058.06		1.46		37,088.70
Total	**226.24**	**53.22**	**520.02**	**0.67**	**43.24**	**2.19**	**85.52**	**0.60**	**2.13**	**42.82**	**4,508.10**	**45,489.63**		**10.56**	**0.38**	**50,338.50**

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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Energy	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Mobile	21.45	46.22	216.33	0.39	43.24	2.19	45.43	0.60	2.13	2.73		37,058.06		1.46		37,088.70
Total	**226.24**	**53.22**	**520.02**	**0.67**	**43.24**	**2.19**	**85.52**	**0.60**	**2.13**	**42.82**	**4,508.10**	**45,489.63**		**10.56**	**0.38**	**50,338.50**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

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					0.19	0.00	0.19	0.00	0.00	0.00						0.00
Off-Road	2.26	14.59	10.47	0.02		1.20	1.20		1.20	1.20		1,530.72		0.20		1,534.96
Total	**2.26**	**14.59**	**10.47**	**0.02**	**0.19**	**1.20**	**1.39**	**0.00**	**1.20**	**1.20**		**1,530.72**		**0.20**		**1,534.96**

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	lb/day										lb/day					
Hauling	0.04	0.46	0.21	0.00	0.35	0.02	0.37	0.00	0.02	0.02		73.05		0.00		73.09
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	0.05	0.50	0.00	0.10	0.00	0.11	0.00	0.00	0.00		81.94		0.00		82.04
Total	**0.08**	**0.51**	**0.71**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.02**	**0.02**		**154.99**		**0.00**		**155.13**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	3.85	10.06	9.97	0.02		0.81	0.81		0.81	0.81	0.00	1,530.72		0.20		1,534.96
Total	**3.85**	**10.06**	**9.97**	**0.02**	**0.07**	**0.81**	**0.88**	**0.00**	**0.81**	**0.81**	**0.00**	**1,530.72**		**0.20**		**1,534.96**

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	lb/day										lb/day					
Hauling	0.04	0.46	0.21	0.00	0.35	0.02	0.37	0.00	0.02	0.02		73.05		0.00		73.09

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	0.05	0.50	0.00	0.10	0.00	0.11	0.00	0.00	0.00		81.94		0.00		82.04
Total	**0.08**	**0.51**	**0.71**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.02**	**0.02**		**154.99**		**0.00**		**155.13**

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					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	4.10	25.17	17.55	0.03		2.14	2.14		2.14	2.14		2,462.42		0.37		2,470.14
Total	**4.10**	**25.17**	**17.55**	**0.03**	**0.18**	**2.14**	**2.32**	**0.00**	**2.14**	**2.14**		**2,462.42**		**0.37**		**2,470.14**

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	0.08	0.81	0.00	0.17	0.01	0.18	0.00	0.01	0.01		133.15		0.01		133.32
Total	**0.07**	**0.08**	**0.81**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**133.15**		**0.01**		**133.32**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.42		0.37		2,470.14
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.42**		**0.37**		**2,470.14**

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	0.08	0.81	0.00	0.17	0.01	0.18	0.00	0.01	0.01		133.15		0.01		133.32
Total	**0.07**	**0.08**	**0.81**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**133.15**		**0.01**		**133.32**

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					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	25.48	208.63	103.96	0.23		9.48	9.48		9.48	9.48		25,272.84		2.28		25,320.76
Total	**25.48**	**208.63**	**103.96**	**0.23**	**0.09**	**9.48**	**9.57**	**0.00**	**9.48**	**9.48**		**25,272.84**		**2.28**		**25,320.76**

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	0.22	0.25	2.50	0.00	0.52	0.02	0.54	0.01	0.02	0.02		409.68		0.02		410.20
Total	**0.22**	**0.25**	**2.50**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**409.68**		**0.02**		**410.20**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		2.28		25,320.76
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**2.28**		**25,320.76**

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	0.22	0.25	2.50	0.00	0.52	0.02	0.54	0.01	0.02	0.02		409.68		0.02		410.20
Total	**0.22**	**0.25**	**2.50**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**409.68**		**0.02**		**410.20**

3.4 Grading - 2015

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					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	24.10	192.21	99.53	0.23		8.68	8.68		8.68	8.68		25,272.84		2.14		25,317.70
Total	**24.10**	**192.21**	**99.53**	**0.23**	**0.09**	**8.68**	**8.77**	**0.00**	**8.68**	**8.68**		**25,272.84**		**2.14**		**25,317.70**

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	0.21	0.23	2.30	0.00	0.52	0.02	0.54	0.01	0.02	0.02		400.40		0.02		400.88
Total	**0.21**	**0.23**	**2.30**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**400.40**		**0.02**		**400.88**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		2.14		25,317.70
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**2.14**		**25,317.70**

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	0.21	0.23	2.30	0.00	0.52	0.02	0.54	0.01	0.02	0.02		400.40		0.02		400.88
Total	**0.21**	**0.23**	**2.30**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**400.40**		**0.02**		**400.88**

3.5 Building Construction - 2015

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	5.06	34.38	26.82	0.05		2.18	2.18		2.18	2.18		4,663.08		0.45		4,672.61
Total	**5.06**	**34.38**	**26.82**	**0.05**		**2.18**	**2.18**		**2.18**	**2.18**		**4,663.08**		**0.45**		**4,672.61**

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	0.46	5.44	3.07	0.01	0.34	0.18	0.52	0.01	0.16	0.17		1,011.73		0.02		1,012.21
Worker	0.65	0.71	7.26	0.01	1.64	0.06	1.70	0.02	0.05	0.08		1,261.26		0.07		1,262.78
Total	**1.11**	**6.15**	**10.33**	**0.02**	**1.98**	**0.24**	**2.22**	**0.03**	**0.21**	**0.25**		**2,272.99**		**0.09**		**2,274.99**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.45		4,672.61
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.45**		**4,672.61**

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	0.46	5.44	3.07	0.01	0.34	0.18	0.52	0.01	0.16	0.17		1,011.73		0.02		1,012.21
Worker	0.65	0.71	7.26	0.01	1.64	0.06	1.70	0.02	0.05	0.08		1,261.26		0.07		1,262.78
Total	**1.11**	**6.15**	**10.33**	**0.02**	**1.98**	**0.24**	**2.22**	**0.03**	**0.21**	**0.25**		**2,272.99**		**0.09**		**2,274.99**

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	21.45	46.22	216.33	0.39	43.24	2.19	45.43	0.60	2.13	2.73		37,058.06		1.46		37,088.70
Unmitigated	21.45	46.22	216.33	0.39	43.24	2.19	45.43	0.60	2.13	2.73		37,058.06		1.46		37,088.70
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
City Park	5.09	5.09	5.09	12,548	12,548
Single Family Housing	3,349.50	3,528.00	3069.50	12,341,703	12,341,703
Total	3,354.59	3,533.09	3,074.59	12,354,251	12,354,251

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60

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	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
NaturalGas Unmitigated	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	36571	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66

Total		**0.39**	**3.37**	**1.43**	**0.02**		**0.00**	**0.27**		**0.00**	**0.27**		**4,302.47**		**0.08**	**0.08**	**4,328.66**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	36.571	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Total		**0.39**	**3.37**	**1.43**	**0.02**		**0.00**	**0.27**		**0.00**	**0.27**		**4,302.47**		**0.08**	**0.08**	**4,328.66**

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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Unmitigated	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
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	5.40					0.00	0.00		0.00	0.00						0.00
Consumer Products	13.48					0.00	0.00		0.00	0.00						0.00
Hearth	184.59	3.28	272.63	0.26		0.00	39.66		0.00	39.66	4,508.10	4,076.47		8.97	0.30	8,867.39
Landscaping	0.93	0.35	29.63	0.00		0.00	0.16		0.00	0.16		52.63		0.05		53.75
Total	**204.40**	**3.63**	**302.26**	**0.26**		**0.00**	**39.82**		**0.00**	**39.82**	**4,508.10**	**4,129.10**		**9.02**	**0.30**	**8,921.14**

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	5.40					0.00	0.00		0.00	0.00						0.00
Consumer Products	13.48					0.00	0.00		0.00	0.00						0.00
Hearth	184.59	3.28	272.63	0.26		0.00	39.66		0.00	39.66	4,508.10	4,076.47		8.97	0.30	8,867.39
Landscaping	0.93	0.35	29.63	0.00		0.00	0.16		0.00	0.16		52.63		0.05		53.75
Total	**204.40**	**3.63**	**302.26**	**0.26**		**0.00**	**39.82**		**0.00**	**39.82**	**4,508.10**	**4,129.10**		**9.02**	**0.30**	**8,921.14**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 1 - Construction

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	3.2	Acre
Single Family Housing	350	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Trips and VMT - per SANDAG

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					
2015	15.97	30.19	21.40	0.03	0.33	2.55	2.74	0.00	2.55	2.55	0.00	3,067.80	0.00	0.45	0.00	3,077.20
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					
2015	18.03	15.49	19.86	0.03	0.33	1.55	1.74	0.00	1.55	1.55	0.00	3,067.80	0.00	0.45	0.00	3,077.20
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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Energy	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Mobile	21.45	46.22	216.33	0.39	43.24	2.19	45.43	0.60	2.13	2.73		37,058.06		1.46		37,088.70
Total	**226.24**	**53.22**	**520.02**	**0.67**	**43.24**	**2.19**	**85.52**	**0.60**	**2.13**	**42.82**	**4,508.10**	**45,489.63**		**10.56**	**0.38**	**50,338.50**

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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Energy	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Mobile	21.45	46.22	216.33	0.39	43.24	2.19	45.43	0.60	2.13	2.73		37,058.06		1.46		37,088.70
Total	**226.24**	**53.22**	**520.02**	**0.67**	**43.24**	**2.19**	**85.52**	**0.60**	**2.13**	**42.82**	**4,508.10**	**45,489.63**		**10.56**	**0.38**	**50,338.50**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 paving - 2015

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	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54		2,917.65		0.44		2,926.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**4.89**	**30.10**	**20.54**	**0.03**		**2.54**	**2.54**		**2.54**	**2.54**		**2,917.65**		**0.44**		**2,926.87**

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	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	0.08	0.09	0.86	0.00	0.20	0.01	0.20	0.00	0.01	0.01		150.15		0.01		150.33
Total	**0.08**	**0.09**	**0.86**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**150.15**		**0.01**		**150.33**

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	2.57	15.40	19.00	0.03		1.54	1.54		1.54	1.54	0.00	2,917.65		0.44		2,926.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.57**	**15.40**	**19.00**	**0.03**		**1.54**	**1.54**		**1.54**	**1.54**	**0.00**	**2,917.65**		**0.44**		**2,926.87**

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	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	0.08	0.09	0.86	0.00	0.20	0.01	0.20	0.00	0.01	0.01		150.15		0.01		150.33
Total	**0.08**	**0.09**	**0.86**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**150.15**		**0.01**		**150.33**

3.3 architectural coating - 2015

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	15.03					0.00	0.00		0.00	0.00						0.00
Off-Road	0.81	5.14	3.80	0.01		0.44	0.44		0.44	0.44		562.38		0.07		563.92

Total	**15.84**	**5.14**	**3.80**	**0.01**		**0.44**	**0.44**		**0.44**	**0.44**		**562.38**		**0.07**		**563.92**

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	0.13	0.14	1.44	0.00	0.33	0.01	0.34	0.00	0.01	0.01		250.25		0.01		250.55
Total	**0.13**	**0.14**	**1.44**	**0.00**	**0.33**	**0.01**	**0.34**	**0.00**	**0.01**	**0.01**		**250.25**		**0.01**		**250.55**

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	15.03					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.07		563.92
Total	**17.90**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.07**		**563.92**

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	0.13	0.14	1.44	0.00	0.33	0.01	0.34	0.00	0.01	0.01		250.25		0.01		250.55
Total	**0.13**	**0.14**	**1.44**	**0.00**	**0.33**	**0.01**	**0.34**	**0.00**	**0.01**	**0.01**		**250.25**		**0.01**		**250.55**

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	21.45	46.22	216.33	0.39	43.24	2.19	45.43	0.60	2.13	2.73		37,058.06		1.46		37,088.70
Unmitigated	21.45	46.22	216.33	0.39	43.24	2.19	45.43	0.60	2.13	2.73		37,058.06		1.46		37,088.70
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

City Park	5.09	5.09	5.09	12,548	12,548
Single Family Housing	3,349.50	3,528.00	3069.50	12,341,703	12,341,703
Total	3,354.59	3,533.09	3,074.59	12,354,251	12,354,251

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60

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	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
NaturalGas Unmitigated	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	36571	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Total		**0.39**	**3.37**	**1.43**	**0.02**		**0.00**	**0.27**		**0.00**	**0.27**		**4,302.47**		**0.08**	**0.08**	**4,328.66**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	36.571	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Total		**0.39**	**3.37**	**1.43**	**0.02**		**0.00**	**0.27**		**0.00**	**0.27**		**4,302.47**		**0.08**	**0.08**	**4,328.66**

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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Unmitigated	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
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	5.40					0.00	0.00		0.00	0.00						0.00
Consumer Products	13.48					0.00	0.00		0.00	0.00						0.00
Hearth	184.59	3.28	272.63	0.26		0.00	39.66		0.00	39.66	4,508.10	4,076.47		8.97	0.30	8,867.39
Landscaping	0.93	0.35	29.63	0.00		0.00	0.16		0.00	0.16		52.63		0.05		53.75
Total	**204.40**	**3.63**	**302.26**	**0.26**		**0.00**	**39.82**		**0.00**	**39.82**	**4,508.10**	**4,129.10**		**9.02**	**0.30**	**8,921.14**

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	5.40					0.00	0.00		0.00	0.00						0.00
Consumer Products	13.48					0.00	0.00		0.00	0.00						0.00
Hearth	184.59	3.28	272.63	0.26		0.00	39.66		0.00	39.66	4,508.10	4,076.47		8.97	0.30	8,867.39
Landscaping	0.93	0.35	29.63	0.00		0.00	0.16		0.00	0.16		52.63		0.05		53.75

Total	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 1 - Construction

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	3.2	Acre
Single Family Housing	350	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

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	25.72	208.90	106.33	0.23	0.65	9.50	10.11	0.01	9.49	9.50	0.00	25,651.03	0.00	2.31	0.00	25,699.45
2015	24.32	192.46	101.71	0.23	1.98	8.69	9.30	0.03	8.69	8.70	0.00	25,642.39	0.00	2.16	0.00	25,687.71
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	18.69	118.53	127.16	0.23	0.56	7.80	8.36	0.01	7.80	7.81	0.00	25,651.03	0.00	2.31	0.00	25,699.45
2015	18.67	118.51	126.98	0.23	1.98	7.80	8.36	0.03	7.80	7.81	0.00	25,642.39	0.00	2.16	0.00	25,687.71
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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Energy	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Mobile	22.75	48.47	210.08	0.37	43.24	2.21	45.45	0.60	2.14	2.74		34,683.53		1.49		34,714.73
Total	**227.54**	**55.47**	**513.77**	**0.65**	**43.24**	**2.21**	**85.54**	**0.60**	**2.14**	**42.83**	**4,508.10**	**43,115.10**		**10.59**	**0.38**	**47,964.53**

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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Energy	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Mobile	22.75	48.47	210.08	0.37	43.24	2.21	45.45	0.60	2.14	2.74		34,683.53		1.49		34,714.73
Total	**227.54**	**55.47**	**513.77**	**0.65**	**43.24**	**2.21**	**85.54**	**0.60**	**2.14**	**42.83**	**4,508.10**	**43,115.10**		**10.59**	**0.38**	**47,964.53**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

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					0.19	0.00	0.19	0.00	0.00	0.00						0.00
Off-Road	2.26	14.59	10.47	0.02		1.20	1.20		1.20	1.20		1,530.72		0.20		1,534.96
Total	**2.26**	**14.59**	**10.47**	**0.02**	**0.19**	**1.20**	**1.39**	**0.00**	**1.20**	**1.20**		**1,530.72**		**0.20**		**1,534.96**

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	lb/day										lb/day					
Hauling	0.04	0.47	0.23	0.00	0.35	0.02	0.37	0.00	0.02	0.02		72.66		0.00		72.70
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	0.05	0.05	0.47	0.00	0.10	0.00	0.11	0.00	0.00	0.00		75.64		0.00		75.74
Total	**0.09**	**0.52**	**0.70**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.02**	**0.02**		**148.30**		**0.00**		**148.44**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	3.85	10.06	9.97	0.02		0.81	0.81		0.81	0.81	0.00	1,530.72		0.20		1,534.96
Total	**3.85**	**10.06**	**9.97**	**0.02**	**0.07**	**0.81**	**0.88**	**0.00**	**0.81**	**0.81**	**0.00**	**1,530.72**		**0.20**		**1,534.96**

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	lb/day										lb/day					
Hauling	0.04	0.47	0.23	0.00	0.35	0.02	0.37	0.00	0.02	0.02		72.66		0.00		72.70

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	0.05	0.05	0.47	0.00	0.10	0.00	0.11	0.00	0.00	0.00		75.64		0.00		75.74
Total	**0.09**	**0.52**	**0.70**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.02**	**0.02**		**148.30**		**0.00**		**148.44**

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					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	4.10	25.17	17.55	0.03		2.14	2.14		2.14	2.14		2,462.42		0.37		2,470.14
Total	**4.10**	**25.17**	**17.55**	**0.03**	**0.18**	**2.14**	**2.32**	**0.00**	**2.14**	**2.14**		**2,462.42**		**0.37**		**2,470.14**

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	0.08	0.09	0.77	0.00	0.17	0.01	0.18	0.00	0.01	0.01		122.91		0.01		123.07
Total	**0.08**	**0.09**	**0.77**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**122.91**		**0.01**		**123.07**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.42		0.37		2,470.14
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.42**		**0.37**		**2,470.14**

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	0.08	0.09	0.77	0.00	0.17	0.01	0.18	0.00	0.01	0.01		122.91		0.01		123.07
Total	**0.08**	**0.09**	**0.77**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**122.91**		**0.01**		**123.07**

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	lb/day										lb/day					
Fugitive Dust					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	25.48	208.63	103.96	0.23		9.48	9.48		9.48	9.48		25,272.84		2.28		25,320.76
Total	**25.48**	**208.63**	**103.96**	**0.23**	**0.09**	**9.48**	**9.57**	**0.00**	**9.48**	**9.48**		**25,272.84**		**2.28**		**25,320.76**

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	0.24	0.27	2.37	0.00	0.52	0.02	0.54	0.01	0.02	0.02		378.19		0.02		378.68
Total	**0.24**	**0.27**	**2.37**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**378.19**		**0.02**		**378.68**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		2.28		25,320.76
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**2.28**		**25,320.76**

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	0.24	0.27	2.37	0.00	0.52	0.02	0.54	0.01	0.02	0.02		378.19		0.02		378.68
Total	**0.24**	**0.27**	**2.37**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**378.19**		**0.02**		**378.68**

3.4 Grading - 2015

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					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	24.10	192.21	99.53	0.23		8.68	8.68		8.68	8.68		25,272.84		2.14		25,317.70
Total	**24.10**	**192.21**	**99.53**	**0.23**	**0.09**	**8.68**	**8.77**	**0.00**	**8.68**	**8.68**		**25,272.84**		**2.14**		**25,317.70**

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	0.23	0.25	2.18	0.00	0.52	0.02	0.54	0.01	0.02	0.02		369.55		0.02		370.01
Total	**0.23**	**0.25**	**2.18**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**369.55**		**0.02**		**370.01**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		2.14		25,317.70
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**2.14**		**25,317.70**

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	0.23	0.25	2.18	0.00	0.52	0.02	0.54	0.01	0.02	0.02		369.55		0.02		370.01
Total	**0.23**	**0.25**	**2.18**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**369.55**		**0.02**		**370.01**

3.5 Building Construction - 2015

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	5.06	34.38	26.82	0.05		2.18	2.18		2.18	2.18		4,663.08		0.45		4,672.61
Total	**5.06**	**34.38**	**26.82**	**0.05**		**2.18**	**2.18**		**2.18**	**2.18**		**4,663.08**		**0.45**		**4,672.61**

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	0.48	5.51	3.52	0.01	0.34	0.18	0.52	0.01	0.17	0.18		1,003.41		0.02		1,003.91
Worker	0.71	0.78	6.86	0.01	1.64	0.06	1.70	0.02	0.05	0.08		1,164.08		0.07		1,165.53
Total	**1.19**	**6.29**	**10.38**	**0.02**	**1.98**	**0.24**	**2.22**	**0.03**	**0.22**	**0.26**		**2,167.49**		**0.09**		**2,169.44**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.45		4,672.61
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.45**		**4,672.61**

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	0.48	5.51	3.52	0.01	0.34	0.18	0.52	0.01	0.17	0.18		1,003.41		0.02		1,003.91
Worker	0.71	0.78	6.86	0.01	1.64	0.06	1.70	0.02	0.05	0.08		1,164.08		0.07		1,165.53
Total	**1.19**	**6.29**	**10.38**	**0.02**	**1.98**	**0.24**	**2.22**	**0.03**	**0.22**	**0.26**		**2,167.49**		**0.09**		**2,169.44**

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	22.75	48.47	210.08	0.37	43.24	2.21	45.45	0.60	2.14	2.74		34,683.53		1.49		34,714.73
Unmitigated	22.75	48.47	210.08	0.37	43.24	2.21	45.45	0.60	2.14	2.74		34,683.53		1.49		34,714.73
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
City Park	5.09	5.09	5.09	12,548	12,548
Single Family Housing	3,349.50	3,528.00	3069.50	12,341,703	12,341,703
Total	3,354.59	3,533.09	3,074.59	12,354,251	12,354,251

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60

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	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
NaturalGas Unmitigated	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	36571	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66

Total		**0.39**	**3.37**	**1.43**	**0.02**		**0.00**	**0.27**		**0.00**	**0.27**		**4,302.47**		**0.08**	**0.08**	**4,328.66**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	36.571	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Total		**0.39**	**3.37**	**1.43**	**0.02**		**0.00**	**0.27**		**0.00**	**0.27**		**4,302.47**		**0.08**	**0.08**	**4,328.66**

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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Unmitigated	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
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	5.40					0.00	0.00		0.00	0.00						0.00
Consumer Products	13.48					0.00	0.00		0.00	0.00						0.00
Hearth	184.59	3.28	272.63	0.26		0.00	39.66		0.00	39.66	4,508.10	4,076.47		8.97	0.30	8,867.39
Landscaping	0.93	0.35	29.63	0.00		0.00	0.16		0.00	0.16		52.63		0.05		53.75
Total	**204.40**	**3.63**	**302.26**	**0.26**		**0.00**	**39.82**		**0.00**	**39.82**	**4,508.10**	**4,129.10**		**9.02**	**0.30**	**8,921.14**

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	5.40					0.00	0.00		0.00	0.00						0.00
Consumer Products	13.48					0.00	0.00		0.00	0.00						0.00
Hearth	184.59	3.28	272.63	0.26		0.00	39.66		0.00	39.66	4,508.10	4,076.47		8.97	0.30	8,867.39
Landscaping	0.93	0.35	29.63	0.00		0.00	0.16		0.00	0.16		52.63		0.05		53.75
Total	**204.40**	**3.63**	**302.26**	**0.26**		**0.00**	**39.82**		**0.00**	**39.82**	**4,508.10**	**4,129.10**		**9.02**	**0.30**	**8,921.14**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 1 - Construction

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	3.2	Acre
Single Family Housing	350	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Trips and VMT - per SANDAG

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					
2015	15.99	30.20	21.35	0.03	0.33	2.55	2.74	0.00	2.55	2.55	0.00	3,056.23	0.00	0.45	0.00	3,065.62
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					
2015	18.04	15.50	19.81	0.03	0.33	1.55	1.74	0.00	1.55	1.55	0.00	3,056.23	0.00	0.45	0.00	3,065.62
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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Energy	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Mobile	22.75	48.47	210.08	0.37	43.24	2.21	45.45	0.60	2.14	2.74		34,683.53		1.49		34,714.73
Total	**227.54**	**55.47**	**513.77**	**0.65**	**43.24**	**2.21**	**85.54**	**0.60**	**2.14**	**42.83**	**4,508.10**	**43,115.10**		**10.59**	**0.38**	**47,964.53**

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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Energy	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Mobile	22.75	48.47	210.08	0.37	43.24	2.21	45.45	0.60	2.14	2.74		34,683.53		1.49		34,714.73
Total	**227.54**	**55.47**	**513.77**	**0.65**	**43.24**	**2.21**	**85.54**	**0.60**	**2.14**	**42.83**	**4,508.10**	**43,115.10**		**10.59**	**0.38**	**47,964.53**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 paving - 2015

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	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54		2,917.65		0.44		2,926.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**4.89**	**30.10**	**20.54**	**0.03**		**2.54**	**2.54**		**2.54**	**2.54**		**2,917.65**		**0.44**		**2,926.87**

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	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	0.08	0.09	0.82	0.00	0.20	0.01	0.20	0.00	0.01	0.01		138.58		0.01		138.75
Total	**0.08**	**0.09**	**0.82**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**138.58**		**0.01**		**138.75**

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	2.57	15.40	19.00	0.03		1.54	1.54		1.54	1.54	0.00	2,917.65		0.44		2,926.87
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.57**	**15.40**	**19.00**	**0.03**		**1.54**	**1.54**		**1.54**	**1.54**	**0.00**	**2,917.65**		**0.44**		**2,926.87**

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	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	0.08	0.09	0.82	0.00	0.20	0.01	0.20	0.00	0.01	0.01		138.58		0.01		138.75
Total	**0.08**	**0.09**	**0.82**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**138.58**		**0.01**		**138.75**

3.3 architectural coating - 2015

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	15.03					0.00	0.00		0.00	0.00						0.00
Off-Road	0.81	5.14	3.80	0.01		0.44	0.44		0.44	0.44		562.38		0.07		563.92

Total	**15.84**	**5.14**	**3.80**	**0.01**		**0.44**	**0.44**		**0.44**	**0.44**		**562.38**		**0.07**		**563.92**

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	0.14	0.16	1.36	0.00	0.33	0.01	0.34	0.00	0.01	0.01		230.97		0.01		231.26
Total	**0.14**	**0.16**	**1.36**	**0.00**	**0.33**	**0.01**	**0.34**	**0.00**	**0.01**	**0.01**		**230.97**		**0.01**		**231.26**

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	15.03					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.07		563.92
Total	**17.90**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.07**		**563.92**

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	0.14	0.16	1.36	0.00	0.33	0.01	0.34	0.00	0.01	0.01		230.97		0.01		231.26
Total	**0.14**	**0.16**	**1.36**	**0.00**	**0.33**	**0.01**	**0.34**	**0.00**	**0.01**	**0.01**		**230.97**		**0.01**		**231.26**

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	22.75	48.47	210.08	0.37	43.24	2.21	45.45	0.60	2.14	2.74		34,683.53		1.49		34,714.73
Unmitigated	22.75	48.47	210.08	0.37	43.24	2.21	45.45	0.60	2.14	2.74		34,683.53		1.49		34,714.73
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

City Park	5.09	5.09	5.09	12,548	12,548
Single Family Housing	3,349.50	3,528.00	3069.50	12,341,703	12,341,703
Total	3,354.59	3,533.09	3,074.59	12,354,251	12,354,251

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60

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	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
NaturalGas Unmitigated	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	36571	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Total		**0.39**	**3.37**	**1.43**	**0.02**		**0.00**	**0.27**		**0.00**	**0.27**		**4,302.47**		**0.08**	**0.08**	**4,328.66**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	36.571	0.39	3.37	1.43	0.02		0.00	0.27		0.00	0.27		4,302.47		0.08	0.08	4,328.66
Total		**0.39**	**3.37**	**1.43**	**0.02**		**0.00**	**0.27**		**0.00**	**0.27**		**4,302.47**		**0.08**	**0.08**	**4,328.66**

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	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
Unmitigated	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14
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	5.40					0.00	0.00		0.00	0.00						0.00
Consumer Products	13.48					0.00	0.00		0.00	0.00						0.00
Hearth	184.59	3.28	272.63	0.26		0.00	39.66		0.00	39.66	4,508.10	4,076.47		8.97	0.30	8,867.39
Landscaping	0.93	0.35	29.63	0.00		0.00	0.16		0.00	0.16		52.63		0.05		53.75
Total	**204.40**	**3.63**	**302.26**	**0.26**		**0.00**	**39.82**		**0.00**	**39.82**	**4,508.10**	**4,129.10**		**9.02**	**0.30**	**8,921.14**

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	5.40					0.00	0.00		0.00	0.00						0.00
Consumer Products	13.48					0.00	0.00		0.00	0.00						0.00
Hearth	184.59	3.28	272.63	0.26		0.00	39.66		0.00	39.66	4,508.10	4,076.47		8.97	0.30	8,867.39
Landscaping	0.93	0.35	29.63	0.00		0.00	0.16		0.00	0.16		52.63		0.05		53.75

Total	204.40	3.63	302.26	0.26		0.00	39.82		0.00	39.82	4,508.10	4,129.10		9.02	0.30	8,921.14

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 2 - Construction

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	0.6	User Defined Unit
City Park	2.8	Acre
Single Family Housing	196	Dwelling Unit
User Defined Residential	270	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013 & from 2013 traffic study (ChenRyan)

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Demolition -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	22.98	177.08	97.80	0.23	4.10	7.91	8.52	0.06	7.91	7.92	0.00	25,663.63	0.00	2.05	0.00	25,706.75
2017	6.07	36.84	43.87	0.09	4.10	2.04	6.14	0.06	2.01	2.07	0.00	8,778.81	0.00	0.54	0.00	8,790.19
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					
2016	18.64	118.47	126.93	0.23	4.10	7.80	8.36	0.06	7.80	7.81	0.00	25,663.63	0.00	2.05	0.00	25,706.75
2017	11.20	36.27	46.45	0.09	4.10	2.47	6.57	0.06	2.45	2.51	0.00	8,778.81	0.00	0.54	0.00	8,790.19
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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Energy	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
Mobile	12.02	25.90	121.22	0.22	24.23	1.23	25.46	0.34	1.19	1.53		20,763.84		0.82		20,781.01
Total	**294.03**	**32.62**	**524.30**	**0.58**	**24.23**	**1.23**	**78.63**	**0.34**	**1.19**	**54.70**	**6,002.21**	**28,670.83**		**12.88**	**0.45**	**35,082.90**

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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Energy	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
Mobile	12.02	25.90	121.22	0.22	24.23	1.23	25.46	0.34	1.19	1.53		20,763.84		0.82		20,781.01
Total	**294.03**	**32.62**	**524.30**	**0.58**	**24.23**	**1.23**	**78.63**	**0.34**	**1.19**	**54.70**	**6,002.21**	**28,670.83**		**12.88**	**0.45**	**35,082.90**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.20	0.00	0.20	0.00	0.00	0.00						0.00
Off-Road	1.92	12.53	10.32	0.02		0.97	0.97		0.97	0.97		1,530.72		0.17		1,534.32
Total	**1.92**	**12.53**	**10.32**	**0.02**	**0.20**	**0.97**	**1.17**	**0.00**	**0.97**	**0.97**		**1,530.72**		**0.17**		**1,534.32**

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	0.03	0.41	0.19	0.00	0.35	0.02	0.37	0.00	0.01	0.01		77.95		0.00		77.99
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	0.43	0.00	0.10	0.00	0.11	0.00	0.00	0.00		78.16		0.00		78.25
Total	**0.07**	**0.45**	**0.62**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.01**		**156.11**		**0.00**		**156.24**

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					0.08	0.00	0.08	0.00	0.00	0.00						0.00
Off-Road	3.85	10.06	9.97	0.02		0.81	0.81		0.81	0.81	0.00	1,530.72		0.17		1,534.32
Total	**3.85**	**10.06**	**9.97**	**0.02**	**0.08**	**0.81**	**0.89**	**0.00**	**0.81**	**0.81**	**0.00**	**1,530.72**		**0.17**		**1,534.32**

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	0.03	0.41	0.19	0.00	0.35	0.02	0.37	0.00	0.01	0.01		77.95		0.00		77.99

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	0.43	0.00	0.10	0.00	0.11	0.00	0.00	0.00		78.16		0.00		78.25
Total	**0.07**	**0.45**	**0.62**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.01**		**156.11**		**0.00**		**156.24**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	3.56	21.75	17.30	0.03		1.78	1.78		1.78	1.78		2,462.41		0.32		2,469.13
Total	**3.56**	**21.75**	**17.30**	**0.03**	**0.18**	**1.78**	**1.96**	**0.00**	**1.78**	**1.78**		**2,462.41**		**0.32**		**2,469.13**

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	0.06	0.07	0.69	0.00	0.17	0.01	0.18	0.00	0.01	0.01		127.01		0.01		127.15
Total	**0.06**	**0.07**	**0.69**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**127.01**		**0.01**		**127.15**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.41		0.32		2,469.13
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.41**		**0.32**		**2,469.13**

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	0.06	0.07	0.69	0.00	0.17	0.01	0.18	0.00	0.01	0.01		127.01		0.01		127.15
Total	**0.06**	**0.07**	**0.69**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**127.01**		**0.01**		**127.15**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	22.78	176.87	95.67	0.23		7.89	7.89		7.89	7.89		25,272.84		2.03		25,315.51
Total	**22.78**	**176.87**	**95.67**	**0.23**	**0.09**	**7.89**	**7.98**	**0.00**	**7.89**	**7.89**		**25,272.84**		**2.03**		**25,315.51**

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	0.19	0.21	2.13	0.00	0.52	0.02	0.54	0.01	0.02	0.02		390.79		0.02		391.24
Total	**0.19**	**0.21**	**2.13**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**390.79**		**0.02**		**391.24**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		2.03		25,315.51
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**2.03**		**25,315.51**

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	0.19	0.21	2.13	0.00	0.52	0.02	0.54	0.01	0.02	0.02		390.79		0.02		391.24
Total	**0.19**	**0.21**	**2.13**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**390.79**		**0.02**		**391.24**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.63	31.35	26.60	0.05		1.92	1.92		1.92	1.92		4,663.08		0.41		4,671.76
Total	**4.63**	**31.35**	**26.60**	**0.05**		**1.92**	**1.92**		**1.92**	**1.92**		**4,663.08**		**0.41**		**4,671.76**

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	0.63	7.41	4.17	0.01	0.50	0.24	0.74	0.01	0.22	0.24		1,478.63		0.03		1,479.27
Worker	1.34	1.44	14.69	0.03	3.60	0.13	3.73	0.05	0.12	0.17		2,696.47		0.15		2,699.57
Total	**1.97**	**8.85**	**18.86**	**0.04**	**4.10**	**0.37**	**4.47**	**0.06**	**0.34**	**0.41**		**4,175.10**		**0.18**		**4,178.84**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.41		4,671.76
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.41**		**4,671.76**

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	0.63	7.41	4.17	0.01	0.50	0.24	0.74	0.01	0.22	0.24		1,478.63		0.03		1,479.27
Worker	1.34	1.44	14.69	0.03	3.60	0.13	3.73	0.05	0.12	0.17		2,696.47		0.15		2,699.57
Total	**1.97**	**8.85**	**18.86**	**0.04**	**4.10**	**0.37**	**4.47**	**0.06**	**0.34**	**0.41**		**4,175.10**		**0.18**		**4,178.84**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.23	28.54	26.41	0.05		1.69	1.69		1.69	1.69		4,663.08		0.38		4,670.98
Total	**4.23**	**28.54**	**26.41**	**0.05**		**1.69**	**1.69**		**1.69**	**1.69**		**4,663.08**		**0.38**		**4,670.98**

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	0.59	6.96	3.90	0.01	0.50	0.23	0.72	0.01	0.21	0.22		1,480.43		0.03		1,481.04
Worker	1.26	1.33	13.56	0.03	3.60	0.13	3.73	0.05	0.12	0.17		2,635.30		0.14		2,638.18
Total	**1.85**	**8.29**	**17.46**	**0.04**	**4.10**	**0.36**	**4.45**	**0.06**	**0.33**	**0.39**		**4,115.73**		**0.17**		**4,119.22**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.38		4,670.98
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.38**		**4,670.98**

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	0.59	6.96	3.90	0.01	0.50	0.23	0.72	0.01	0.21	0.22		1,480.43		0.03		1,481.04
Worker	1.26	1.33	13.56	0.03	3.60	0.13	3.73	0.05	0.12	0.17		2,635.30		0.14		2,638.18
Total	**1.85**	**8.29**	**17.46**	**0.04**	**4.10**	**0.36**	**4.45**	**0.06**	**0.33**	**0.39**		**4,115.73**		**0.17**		**4,119.22**

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	12.02	25.90	121.22	0.22	24.23	1.23	25.46	0.34	1.19	1.53		20,763.84		0.82		20,781.01
Unmitigated	12.02	25.90	121.22	0.22	24.23	1.23	25.46	0.34	1.19	1.53		20,763.84		0.82		20,781.01
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
City Park	4.45	4.45	4.45	10,980	10,980
Single Family Housing	1,875.72	1,975.68	1718.92	6,911,354	6,911,354
User Defined Industrial	0.00	0.00	0.00		
User Defined Residential	0.00	0.00	0.00		
Total	1,880.17	1,980.13	1,723.37	6,922,333	6,922,333

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00
User Defined Residential	16.80	7.10	7.90	41.60	18.80	39.60

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	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
NaturalGas Unmitigated	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	20479.8	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
User Defined Residential	0	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		**0.22**	**1.89**	**0.80**	**0.01**		**0.00**	**0.15**		**0.00**	**0.15**		**2,409.39**		**0.05**	**0.04**	**2,424.05**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	20.4798	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
User Defined Residential	0	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		**0.22**	**1.89**	**0.80**	**0.01**		**0.00**	**0.15**		**0.00**	**0.15**		**2,409.39**		**0.05**	**0.04**	**2,424.05**

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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Unmitigated	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
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	9.90					0.00	0.00		0.00	0.00						0.00
Consumer Products	24.89					0.00	0.00		0.00	0.00						0.00
Hearth	245.77	4.37	362.98	0.34		0.00	52.81		0.00	52.81	6,002.21	5,427.53		11.94	0.41	11,806.30
Landscaping	1.22	0.46	39.30	0.00		0.00	0.21		0.00	0.21		70.07		0.07		71.54
Total	**281.78**	**4.83**	**402.28**	**0.34**		**0.00**	**53.02**		**0.00**	**53.02**	**6,002.21**	**5,497.60**		**12.01**	**0.41**	**11,877.84**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.90					0.00	0.00		0.00	0.00						0.00
Consumer Products	24.89					0.00	0.00		0.00	0.00						0.00

Hearth	245.77	4.37	362.98	0.34		0.00	52.81		0.00	52.81	6,002.21	5,427.53		11.94	0.41	11,806.30
Landscaping	1.22	0.46	39.30	0.00		0.00	0.21		0.00	0.21		70.07		0.07		71.54
Total	**281.78**	**4.83**	**402.28**	**0.34**		**0.00**	**53.02**		**0.00**	**53.02**	**6,002.21**	**5,497.60**		**12.01**	**0.41**	**11,877.84**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 2 - Construction

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	0.6	User Defined Unit
City Park	2.8	Acre
Single Family Housing	196	Dwelling Unit
User Defined Residential	270	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013 & from 2013 traffic study (ChenRyan)

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	28.81	28.29	21.18	0.03	0.72	2.36	2.55	0.01	2.36	2.36	0.00	3,064.19	0.00	0.42	0.00	3,073.01
2017	28.72	4.63	6.43	0.01	0.72	0.37	1.09	0.01	0.37	0.38	0.00	1,087.53	0.00	0.09	0.00	1,089.35
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					
2016	30.94	15.48	19.79	0.03	0.72	1.55	1.74	0.01	1.55	1.55	0.00	3,064.19	0.00	0.42	0.00	3,073.01
2017	30.92	5.11	6.36	0.01	0.72	0.32	1.04	0.01	0.32	0.33	0.00	1,087.53	0.00	0.09	0.00	1,089.35
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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Energy	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
Mobile	12.02	25.90	121.22	0.22	24.23	1.23	25.46	0.34	1.19	1.53		20,763.84		0.82		20,781.01
Total	**294.03**	**32.62**	**524.30**	**0.58**	**24.23**	**1.23**	**78.63**	**0.34**	**1.19**	**54.70**	**6,002.21**	**28,670.83**		**12.88**	**0.45**	**35,082.90**

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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Energy	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
Mobile	12.02	25.90	121.22	0.22	24.23	1.23	25.46	0.34	1.19	1.53		20,763.84		0.82		20,781.01
Total	**294.03**	**32.62**	**524.30**	**0.58**	**24.23**	**1.23**	**78.63**	**0.34**	**1.19**	**54.70**	**6,002.21**	**28,670.83**		**12.88**	**0.45**	**35,082.90**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35		2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**4.58**	**28.21**	**20.38**	**0.03**		**2.35**	**2.35**		**2.35**	**2.35**		**2,917.64**		**0.41**		**2,926.29**

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	0.00	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	0.08	0.80	0.00	0.20	0.01	0.20	0.00	0.01	0.01		146.55		0.01		146.72
Total	**0.07**	**0.08**	**0.80**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**146.55**		**0.01**		**146.72**

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	2.57	15.40	19.00	0.03		1.54	1.54		1.54	1.54	0.00	2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.57**	**15.40**	**19.00**	**0.03**		**1.54**	**1.54**		**1.54**	**1.54**	**0.00**	**2,917.64**		**0.41**		**2,926.29**

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	0.00	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	0.08	0.80	0.00	0.20	0.01	0.20	0.00	0.01	0.01		146.55		0.01		146.72
Total	**0.07**	**0.08**	**0.80**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**146.55**		**0.01**		**146.72**

3.3 architectural coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.80					0.00	0.00		0.00	0.00						0.00
Off-Road	0.74	4.74	3.76	0.01		0.39	0.39		0.39	0.39		562.38		0.07		563.77
Total	**28.54**	**4.74**	**3.76**	**0.01**		**0.39**	**0.39**		**0.39**	**0.39**		**562.38**		**0.07**		**563.77**

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	0.27	0.29	2.93	0.01	0.72	0.03	0.74	0.01	0.02	0.03		537.34		0.03		537.96
Total	**0.27**	**0.29**	**2.93**	**0.01**	**0.72**	**0.03**	**0.74**	**0.01**	**0.02**	**0.03**		**537.34**		**0.03**		**537.96**

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	27.80					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.07		563.77
Total	**30.67**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.07**		**563.77**

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	0.27	0.29	2.93	0.01	0.72	0.03	0.74	0.01	0.02	0.03		537.34		0.03		537.96
Total	**0.27**	**0.29**	**2.93**	**0.01**	**0.72**	**0.03**	**0.74**	**0.01**	**0.02**	**0.03**		**537.34**		**0.03**		**537.96**

3.3 architectural coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.80					0.00	0.00		0.00	0.00						0.00
Off-Road	0.66	4.37	3.73	0.01		0.35	0.35		0.35	0.35		562.38		0.06		563.63
Total	**28.46**	**4.37**	**3.73**	**0.01**		**0.35**	**0.35**		**0.35**	**0.35**		**562.38**		**0.06**		**563.63**

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	0.25	0.27	2.70	0.01	0.72	0.03	0.74	0.01	0.02	0.03		525.15		0.03		525.72
Total	**0.25**	**0.27**	**2.70**	**0.01**	**0.72**	**0.03**	**0.74**	**0.01**	**0.02**	**0.03**		**525.15**		**0.03**		**525.72**

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	27.80					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.06		563.63
Total	**30.67**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.06**		**563.63**

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	0.25	0.27	2.70	0.01	0.72	0.03	0.74	0.01	0.02	0.03		525.15		0.03		525.72
Total	**0.25**	**0.27**	**2.70**	**0.01**	**0.72**	**0.03**	**0.74**	**0.01**	**0.02**	**0.03**		**525.15**		**0.03**		**525.72**

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	12.02	25.90	121.22	0.22	24.23	1.23	25.46	0.34	1.19	1.53		20,763.84		0.82		20,781.01
Unmitigated	12.02	25.90	121.22	0.22	24.23	1.23	25.46	0.34	1.19	1.53		20,763.84		0.82		20,781.01
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
City Park	4.45	4.45	4.45	10,980	10,980
Single Family Housing	1,875.72	1,975.68	1718.92	6,911,354	6,911,354
User Defined Industrial	0.00	0.00	0.00		

User Defined Residential	0.00	0.00	0.00		
Total	1,880.17	1,980.13	1,723.37	6,922,333	6,922,333

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00
User Defined Residential	16.80	7.10	7.90	41.60	18.80	39.60

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	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
NaturalGas Unmitigated	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	20479.8	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
User Defined Residential	0	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		**0.22**	**1.89**	**0.80**	**0.01**		**0.00**	**0.15**		**0.00**	**0.15**		**2,409.39**		**0.05**	**0.04**	**2,424.05**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	20.4798	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
User Defined Residential	0	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		**0.22**	**1.89**	**0.80**	**0.01**		**0.00**	**0.15**		**0.00**	**0.15**		**2,409.39**		**0.05**	**0.04**	**2,424.05**

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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Unmitigated	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
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	9.90					0.00	0.00		0.00	0.00						0.00
Consumer Products	24.89					0.00	0.00		0.00	0.00						0.00
Hearth	245.77	4.37	362.98	0.34		0.00	52.81		0.00	52.81	6,002.21	5,427.53		11.94	0.41	11,806.30
Landscaping	1.22	0.46	39.30	0.00		0.00	0.21		0.00	0.21		70.07		0.07		71.54
Total	**281.78**	**4.83**	**402.28**	**0.34**		**0.00**	**53.02**		**0.00**	**53.02**	**6,002.21**	**5,497.60**		**12.01**	**0.41**	**11,877.84**

Mitigated

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

SubCategory	lb/day										lb/day					
Architectural Coating	9.90					0.00	0.00		0.00	0.00						0.00
Consumer Products	24.89					0.00	0.00		0.00	0.00						0.00
Hearth	245.77	4.37	362.98	0.34		0.00	52.81		0.00	52.81	6,002.21	5,427.53		11.94	0.41	11,806.30
Landscaping	1.22	0.46	39.30	0.00		0.00	0.21		0.00	0.21		70.07		0.07		71.54
Total	**281.78**	**4.83**	**402.28**	**0.34**		**0.00**	**53.02**		**0.00**	**53.02**	**6,002.21**	**5,497.60**		**12.01**	**0.41**	**11,877.84**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 2 - Construction

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	0.6	User Defined Unit
City Park	2.8	Acre
Single Family Housing	196	Dwelling Unit
User Defined Residential	270	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013 & from 2013 traffic study (ChenRyan)

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Demolition -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	22.99	177.10	97.68	0.23	4.10	7.91	8.52	0.06	7.91	7.92	0.00	25,633.46	0.00	2.05	0.00	25,676.56
2017	6.22	37.02	43.72	0.09	4.10	2.04	6.14	0.06	2.02	2.08	0.00	8,562.27	0.00	0.54	0.00	8,573.57
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					
2016	18.66	118.49	126.81	0.23	4.10	7.80	8.36	0.06	7.80	7.81	0.00	25,633.46	0.00	2.05	0.00	25,676.56
2017	11.34	36.45	46.30	0.09	4.10	2.48	6.58	0.06	2.45	2.51	0.00	8,562.27	0.00	0.54	0.00	8,573.57
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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Energy	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
Mobile	12.75	27.16	117.72	0.21	24.23	1.24	25.46	0.34	1.20	1.54		19,433.38		0.83		19,450.86
Total	**294.76**	**33.88**	**520.80**	**0.57**	**24.23**	**1.24**	**78.63**	**0.34**	**1.20**	**54.71**	**6,002.21**	**27,340.37**		**12.89**	**0.45**	**33,752.75**

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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Energy	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
Mobile	12.75	27.16	117.72	0.21	24.23	1.24	25.46	0.34	1.20	1.54		19,433.38		0.83		19,450.86
Total	**294.76**	**33.88**	**520.80**	**0.57**	**24.23**	**1.24**	**78.63**	**0.34**	**1.20**	**54.71**	**6,002.21**	**27,340.37**		**12.89**	**0.45**	**33,752.75**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.20	0.00	0.20	0.00	0.00	0.00						0.00
Off-Road	1.92	12.53	10.32	0.02		0.97	0.97		0.97	0.97		1,530.72		0.17		1,534.32
Total	**1.92**	**12.53**	**10.32**	**0.02**	**0.20**	**0.97**	**1.17**	**0.00**	**0.97**	**0.97**		**1,530.72**		**0.17**		**1,534.32**

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	0.04	0.42	0.21	0.00	0.35	0.02	0.37	0.00	0.01	0.01		77.52		0.00		77.56
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	0.05	0.40	0.00	0.10	0.00	0.11	0.00	0.00	0.00		72.12		0.00		72.21
Total	**0.08**	**0.47**	**0.61**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.01**		**149.64**		**0.00**		**149.77**

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					0.08	0.00	0.08	0.00	0.00	0.00						0.00
Off-Road	3.85	10.06	9.97	0.02		0.81	0.81		0.81	0.81	0.00	1,530.72		0.17		1,534.32
Total	**3.85**	**10.06**	**9.97**	**0.02**	**0.08**	**0.81**	**0.89**	**0.00**	**0.81**	**0.81**	**0.00**	**1,530.72**		**0.17**		**1,534.32**

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	0.04	0.42	0.21	0.00	0.35	0.02	0.37	0.00	0.01	0.01		77.52		0.00		77.56

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	0.05	0.40	0.00	0.10	0.00	0.11	0.00	0.00	0.00		72.12		0.00		72.21
Total	**0.08**	**0.47**	**0.61**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.01**		**149.64**		**0.00**		**149.77**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	3.56	21.75	17.30	0.03		1.78	1.78		1.78	1.78		2,462.41		0.32		2,469.13
Total	**3.56**	**21.75**	**17.30**	**0.03**	**0.18**	**1.78**	**1.96**	**0.00**	**1.78**	**1.78**		**2,462.41**		**0.32**		**2,469.13**

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	0.65	0.00	0.17	0.01	0.18	0.00	0.01	0.01		117.20		0.01		117.34
Total	**0.07**	**0.07**	**0.65**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**117.20**		**0.01**		**117.34**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.41		0.32		2,469.13
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.41**		**0.32**		**2,469.13**

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	0.65	0.00	0.17	0.01	0.18	0.00	0.01	0.01		117.20		0.01		117.34
Total	**0.07**	**0.07**	**0.65**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**117.20**		**0.01**		**117.34**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	22.78	176.87	95.67	0.23		7.89	7.89		7.89	7.89		25,272.84		2.03		25,315.51
Total	**22.78**	**176.87**	**95.67**	**0.23**	**0.09**	**7.89**	**7.98**	**0.00**	**7.89**	**7.89**		**25,272.84**		**2.03**		**25,315.51**

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	0.21	0.23	2.01	0.00	0.52	0.02	0.54	0.01	0.02	0.02		360.62		0.02		361.05
Total	**0.21**	**0.23**	**2.01**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**360.62**		**0.02**		**361.05**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		2.03		25,315.51
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**2.03**		**25,315.51**

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	0.21	0.23	2.01	0.00	0.52	0.02	0.54	0.01	0.02	0.02		360.62		0.02		361.05
Total	**0.21**	**0.23**	**2.01**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**360.62**		**0.02**		**361.05**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.63	31.35	26.60	0.05		1.92	1.92		1.92	1.92		4,663.08		0.41		4,671.76
Total	**4.63**	**31.35**	**26.60**	**0.05**		**1.92**	**1.92**		**1.92**	**1.92**		**4,663.08**		**0.41**		**4,671.76**

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	0.66	7.50	4.81	0.01	0.50	0.25	0.74	0.01	0.23	0.24		1,466.23		0.03		1,466.90
Worker	1.46	1.58	13.87	0.03	3.60	0.13	3.73	0.05	0.12	0.17		2,488.29		0.14		2,491.25
Total	**2.12**	**9.08**	**18.68**	**0.04**	**4.10**	**0.38**	**4.47**	**0.06**	**0.35**	**0.41**		**3,954.52**		**0.17**		**3,958.15**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.41		4,671.76
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.41**		**4,671.76**

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	0.66	7.50	4.81	0.01	0.50	0.25	0.74	0.01	0.23	0.24		1,466.23		0.03		1,466.90
Worker	1.46	1.58	13.87	0.03	3.60	0.13	3.73	0.05	0.12	0.17		2,488.29		0.14		2,491.25
Total	**2.12**	**9.08**	**18.68**	**0.04**	**4.10**	**0.38**	**4.47**	**0.06**	**0.35**	**0.41**		**3,954.52**		**0.17**		**3,958.15**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.23	28.54	26.41	0.05		1.69	1.69		1.69	1.69		4,663.08		0.38		4,670.98
Total	**4.23**	**28.54**	**26.41**	**0.05**		**1.69**	**1.69**		**1.69**	**1.69**		**4,663.08**		**0.38**		**4,670.98**

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	0.62	7.02	4.53	0.01	0.50	0.23	0.73	0.01	0.21	0.23		1,467.80		0.03		1,468.44
Worker	1.37	1.46	12.77	0.03	3.60	0.13	3.73	0.05	0.12	0.17		2,431.39		0.13		2,434.15
Total	**1.99**	**8.48**	**17.30**	**0.04**	**4.10**	**0.36**	**4.46**	**0.06**	**0.33**	**0.40**		**3,899.19**		**0.16**		**3,902.59**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.38		4,670.98
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.38**		**4,670.98**

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	0.62	7.02	4.53	0.01	0.50	0.23	0.73	0.01	0.21	0.23		1,467.80		0.03		1,468.44
Worker	1.37	1.46	12.77	0.03	3.60	0.13	3.73	0.05	0.12	0.17		2,431.39		0.13		2,434.15
Total	**1.99**	**8.48**	**17.30**	**0.04**	**4.10**	**0.36**	**4.46**	**0.06**	**0.33**	**0.40**		**3,899.19**		**0.16**		**3,902.59**

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	12.75	27.16	117.72	0.21	24.23	1.24	25.46	0.34	1.20	1.54		19,433.38		0.83		19,450.86
Unmitigated	12.75	27.16	117.72	0.21	24.23	1.24	25.46	0.34	1.20	1.54		19,433.38		0.83		19,450.86
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
City Park	4.45	4.45	4.45	10,980	10,980
Single Family Housing	1,875.72	1,975.68	1718.92	6,911,354	6,911,354
User Defined Industrial	0.00	0.00	0.00		
User Defined Residential	0.00	0.00	0.00		
Total	1,880.17	1,980.13	1,723.37	6,922,333	6,922,333

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00
User Defined Residential	16.80	7.10	7.90	41.60	18.80	39.60

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	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
NaturalGas Unmitigated	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	20479.8	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
User Defined Residential	0	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		**0.22**	**1.89**	**0.80**	**0.01**		**0.00**	**0.15**		**0.00**	**0.15**		**2,409.39**		**0.05**	**0.04**	**2,424.05**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	20.4798	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
User Defined Residential	0	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		**0.22**	**1.89**	**0.80**	**0.01**		**0.00**	**0.15**		**0.00**	**0.15**		**2,409.39**		**0.05**	**0.04**	**2,424.05**

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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Unmitigated	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
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	9.90					0.00	0.00		0.00	0.00						0.00
Consumer Products	24.89					0.00	0.00		0.00	0.00						0.00
Hearth	245.77	4.37	362.98	0.34		0.00	52.81		0.00	52.81	6,002.21	5,427.53		11.94	0.41	11,806.30
Landscaping	1.22	0.46	39.30	0.00		0.00	0.21		0.00	0.21		70.07		0.07		71.54
Total	**281.78**	**4.83**	**402.28**	**0.34**		**0.00**	**53.02**		**0.00**	**53.02**	**6,002.21**	**5,497.60**		**12.01**	**0.41**	**11,877.84**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.90					0.00	0.00		0.00	0.00						0.00
Consumer Products	24.89					0.00	0.00		0.00	0.00						0.00

Hearth	245.77	4.37	362.98	0.34		0.00	52.81		0.00	52.81	6,002.21	5,427.53		11.94	0.41	11,806.30
Landscaping	1.22	0.46	39.30	0.00		0.00	0.21		0.00	0.21		70.07		0.07		71.54
Total	**281.78**	**4.83**	**402.28**	**0.34**		**0.00**	**53.02**		**0.00**	**53.02**	**6,002.21**	**5,497.60**		**12.01**	**0.41**	**11,877.84**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 2 - Construction

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	0.6	User Defined Unit
City Park	2.8	Acre
Single Family Housing	196	Dwelling Unit
User Defined Residential	270	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013 & from 2013 traffic study (ChenRyan)

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	28.83	28.30	21.13	0.03	0.72	2.36	2.55	0.01	2.36	2.36	0.00	3,052.88	0.00	0.42	0.00	3,061.69
2017	28.74	4.66	6.28	0.01	0.72	0.37	1.09	0.01	0.37	0.38	0.00	1,046.90	0.00	0.09	0.00	1,048.69
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					
2016	30.96	15.49	19.75	0.03	0.72	1.55	1.74	0.01	1.55	1.55	0.00	3,052.88	0.00	0.42	0.00	3,061.69
2017	30.95	5.14	6.21	0.01	0.72	0.32	1.04	0.01	0.32	0.33	0.00	1,046.90	0.00	0.09	0.00	1,048.69
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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Energy	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
Mobile	12.75	27.16	117.72	0.21	24.23	1.24	25.46	0.34	1.20	1.54		19,433.38		0.83		19,450.86
Total	**294.76**	**33.88**	**520.80**	**0.57**	**24.23**	**1.24**	**78.63**	**0.34**	**1.20**	**54.71**	**6,002.21**	**27,340.37**		**12.89**	**0.45**	**33,752.75**

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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Energy	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
Mobile	12.75	27.16	117.72	0.21	24.23	1.24	25.46	0.34	1.20	1.54		19,433.38		0.83		19,450.86
Total	**294.76**	**33.88**	**520.80**	**0.57**	**24.23**	**1.24**	**78.63**	**0.34**	**1.20**	**54.71**	**6,002.21**	**27,340.37**		**12.89**	**0.45**	**33,752.75**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35		2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**4.58**	**28.21**	**20.38**	**0.03**		**2.35**	**2.35**		**2.35**	**2.35**		**2,917.64**		**0.41**		**2,926.29**

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	0.00	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	0.08	0.09	0.75	0.00	0.20	0.01	0.20	0.00	0.01	0.01		135.23		0.01		135.39
Total	**0.08**	**0.09**	**0.75**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**135.23**		**0.01**		**135.39**

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	2.57	15.40	19.00	0.03		1.54	1.54		1.54	1.54	0.00	2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.57**	**15.40**	**19.00**	**0.03**		**1.54**	**1.54**		**1.54**	**1.54**	**0.00**	**2,917.64**		**0.41**		**2,926.29**

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	0.00	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	0.08	0.09	0.75	0.00	0.20	0.01	0.20	0.00	0.01	0.01		135.23		0.01		135.39
Total	**0.08**	**0.09**	**0.75**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**135.23**		**0.01**		**135.39**

3.3 architectural coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.80					0.00	0.00		0.00	0.00						0.00
Off-Road	0.74	4.74	3.76	0.01		0.39	0.39		0.39	0.39		562.38		0.07		563.77
Total	**28.54**	**4.74**	**3.76**	**0.01**		**0.39**	**0.39**		**0.39**	**0.39**		**562.38**		**0.07**		**563.77**

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	0.29	0.31	2.76	0.01	0.72	0.03	0.74	0.01	0.02	0.03		495.85		0.03		496.44
Total	**0.29**	**0.31**	**2.76**	**0.01**	**0.72**	**0.03**	**0.74**	**0.01**	**0.02**	**0.03**		**495.85**		**0.03**		**496.44**

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	27.80					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.07		563.77
Total	**30.67**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.07**		**563.77**

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	0.29	0.31	2.76	0.01	0.72	0.03	0.74	0.01	0.02	0.03		495.85		0.03		496.44
Total	**0.29**	**0.31**	**2.76**	**0.01**	**0.72**	**0.03**	**0.74**	**0.01**	**0.02**	**0.03**		**495.85**		**0.03**		**496.44**

3.3 architectural coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.80					0.00	0.00		0.00	0.00						0.00
Off-Road	0.66	4.37	3.73	0.01		0.35	0.35		0.35	0.35		562.38		0.06		563.63
Total	**28.46**	**4.37**	**3.73**	**0.01**		**0.35**	**0.35**		**0.35**	**0.35**		**562.38**		**0.06**		**563.63**

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	0.27	0.29	2.55	0.01	0.72	0.03	0.74	0.01	0.02	0.03		484.52		0.03		485.07
Total	**0.27**	**0.29**	**2.55**	**0.01**	**0.72**	**0.03**	**0.74**	**0.01**	**0.02**	**0.03**		**484.52**		**0.03**		**485.07**

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	27.80					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.06		563.63
Total	**30.67**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.06**		**563.63**

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	0.27	0.29	2.55	0.01	0.72	0.03	0.74	0.01	0.02	0.03		484.52		0.03		485.07
Total	**0.27**	**0.29**	**2.55**	**0.01**	**0.72**	**0.03**	**0.74**	**0.01**	**0.02**	**0.03**		**484.52**		**0.03**		**485.07**

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	lb/day										lb/day					
Mitigated	12.75	27.16	117.72	0.21	24.23	1.24	25.46	0.34	1.20	1.54		19,433.38		0.83		19,450.86
Unmitigated	12.75	27.16	117.72	0.21	24.23	1.24	25.46	0.34	1.20	1.54		19,433.38		0.83		19,450.86
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
City Park	4.45	4.45	4.45	10,980	10,980
Single Family Housing	1,875.72	1,975.68	1718.92	6,911,354	6,911,354
User Defined Industrial	0.00	0.00	0.00		

User Defined Residential	0.00	0.00	0.00		
Total	1,880.17	1,980.13	1,723.37	6,922,333	6,922,333

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00
User Defined Residential	16.80	7.10	7.90	41.60	18.80	39.60

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	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
NaturalGas Unmitigated	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	20479.8	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
User Defined Residential	0	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		**0.22**	**1.89**	**0.80**	**0.01**		**0.00**	**0.15**		**0.00**	**0.15**		**2,409.39**		**0.05**	**0.04**	**2,424.05**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Single Family Housing	20.4798	0.22	1.89	0.80	0.01		0.00	0.15		0.00	0.15		2,409.39		0.05	0.04	2,424.05
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
User Defined Residential	0	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		**0.22**	**1.89**	**0.80**	**0.01**		**0.00**	**0.15**		**0.00**	**0.15**		**2,409.39**		**0.05**	**0.04**	**2,424.05**

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	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
Unmitigated	281.79	4.83	402.28	0.35		0.00	53.02		0.00	53.02	6,002.21	5,497.60		12.01	0.41	11,877.84
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	9.90					0.00	0.00		0.00	0.00						0.00
Consumer Products	24.89					0.00	0.00		0.00	0.00						0.00
Hearth	245.77	4.37	362.98	0.34		0.00	52.81		0.00	52.81	6,002.21	5,427.53		11.94	0.41	11,806.30
Landscaping	1.22	0.46	39.30	0.00		0.00	0.21		0.00	0.21		70.07		0.07		71.54
Total	**281.78**	**4.83**	**402.28**	**0.34**		**0.00**	**53.02**		**0.00**	**53.02**	**6,002.21**	**5,497.60**		**12.01**	**0.41**	**11,877.84**

Mitigated

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

SubCategory	lb/day										lb/day					
Architectural Coating	9.90					0.00	0.00		0.00	0.00						0.00
Consumer Products	24.89					0.00	0.00		0.00	0.00						0.00
Hearth	245.77	4.37	362.98	0.34		0.00	52.81		0.00	52.81	6,002.21	5,427.53		11.94	0.41	11,806.30
Landscaping	1.22	0.46	39.30	0.00		0.00	0.21		0.00	0.21		70.07		0.07		71.54
Total	**281.78**	**4.83**	**402.28**	**0.34**		**0.00**	**53.02**		**0.00**	**53.02**	**6,002.21**	**5,497.60**		**12.01**	**0.41**	**11,877.84**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 3 - Construction

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Office Park	3.5	1000sqft
Elementary School	700	Student
User Defined Industrial	2.4	User Defined Unit
City Park	12	Acre
Health Club	40	1000sqft
Condo/Townhouse	105	Dwelling Unit
Single Family Housing	357	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table.

Grading - max disturbance per equipment

Demolition -

Trips and VMT - per SANDAG

Architectural Coating -

Construction Off-road Equipment Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	21.71	162.71	94.29	0.23	0.67	7.18	7.79	0.01	7.18	7.19	0.00	25,654.77	0.00	1.95	0.00	25,695.63
2018	20.51	149.38	91.25	0.23	3.83	6.48	7.09	0.06	6.48	6.49	0.00	25,646.50	0.00	1.84	0.00	25,685.20
2019	5.14	32.14	40.78	0.09	3.83	1.61	5.45	0.06	1.59	1.65	0.00	8,737.39	0.00	0.45	0.00	8,746.87
2020	4.77	29.57	39.81	0.09	3.83	1.42	5.25	0.06	1.39	1.45	0.00	8,696.49	0.00	0.42	0.00	8,705.23
2021	4.43	27.12	39.04	0.09	3.83	1.25	5.08	0.06	1.22	1.28	0.00	8,679.74	0.00	0.39	0.00	8,687.84
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					

2017	18.63	118.46	126.76	0.23	0.56	7.80	8.36	0.01	7.80	7.81	0.00	25,654.77	0.00	1.95	0.00	25,695.63
2018	18.62	118.44	126.61	0.23	3.83	7.80	8.36	0.06	7.80	7.81	0.00	25,646.50	0.00	1.84	0.00	25,685.20
2019	11.00	36.61	43.69	0.09	3.83	2.48	6.31	0.06	2.45	2.51	0.00	8,737.39	0.00	0.45	0.00	8,746.87
2020	10.93	36.19	42.86	0.09	3.83	2.47	6.30	0.06	2.44	2.50	0.00	8,696.49	0.00	0.42	0.00	8,705.23
2021	10.87	35.85	42.25	0.09	3.83	2.46	6.30	0.06	2.44	2.50	0.00	8,679.74	0.00	0.39	0.00	8,687.84
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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Energy	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
Mobile	27.88	54.68	253.60	0.64	70.58	3.26	73.84	0.98	3.16	4.15		52,018.69		2.17		52,064.33
Total	**298.44**	**63.77**	**654.01**	**1.01**	**70.58**	**3.26**	**126.76**	**0.98**	**3.16**	**57.07**	**5,950.69**	**62,945.58**		**14.18**	**0.50**	**69,349.97**

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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Energy	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81

Mobile	27.88	54.68	253.60	0.64	70.58	3.26	73.84	0.98	3.16	4.15		52,018.69		2.17		52,064.33
Total	**298.44**	**63.77**	**654.01**	**1.01**	**70.58**	**3.26**	**126.76**	**0.98**	**3.16**	**57.07**	**5,950.69**	**62,945.58**		**14.18**	**0.50**	**69,349.97**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

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

Fugitive Dust					0.22	0.00	0.22	0.00	0.00	0.00						0.00
Off-Road	1.77	11.59	10.25	0.02		0.87	0.87		0.87	0.87		1,530.72		0.16		1,534.05
Total	**1.77**	**11.59**	**10.25**	**0.02**	**0.22**	**0.87**	**1.09**	**0.00**	**0.87**	**0.87**		**1,530.72**		**0.16**		**1,534.05**

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	0.03	0.41	0.19	0.00	0.35	0.02	0.37	0.00	0.01	0.01		83.30		0.00		83.34
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	0.39	0.00	0.10	0.00	0.11	0.00	0.00	0.00		76.39		0.00		76.47
Total	**0.07**	**0.45**	**0.58**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.01**		**159.69**		**0.00**		**159.81**

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					0.08	0.00	0.08	0.00	0.00	0.00						0.00
Off-Road	3.85	10.06	9.97	0.02		0.81	0.81		0.81	0.81	0.00	1,530.72		0.16		1,534.05
Total	**3.85**	**10.06**	**9.97**	**0.02**	**0.08**	**0.81**	**0.89**	**0.00**	**0.81**	**0.81**	**0.00**	**1,530.72**		**0.16**		**1,534.05**

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	0.03	0.41	0.19	0.00	0.35	0.02	0.37	0.00	0.01	0.01		83.30		0.00		83.34
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	0.39	0.00	0.10	0.00	0.11	0.00	0.00	0.00		76.39		0.00		76.47
Total	**0.07**	**0.45**	**0.58**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.01**		**159.69**		**0.00**		**159.81**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	3.32	20.22	17.19	0.03		1.61	1.61		1.61	1.61		2,462.41		0.30		2,468.68
Total	**3.32**	**20.22**	**17.19**	**0.03**	**0.18**	**1.61**	**1.79**	**0.00**	**1.61**	**1.61**		**2,462.41**		**0.30**		**2,468.68**

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	0.06	0.06	0.64	0.00	0.17	0.01	0.18	0.00	0.01	0.01		124.13		0.01		124.26
Total	**0.06**	**0.06**	**0.64**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**124.13**		**0.01**		**124.26**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.41		0.30		2,468.68
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.41**		**0.30**		**2,468.68**

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	0.06	0.06	0.64	0.00	0.17	0.01	0.18	0.00	0.01	0.01		124.13		0.01		124.26
Total	**0.06**	**0.06**	**0.64**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**124.13**		**0.01**		**124.26**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.09	0.00	0.09	0.00	0.00	0.00						0.00

Off-Road	21.53	162.52	92.33	0.23		7.17	7.17		7.17	7.17		25,272.84		1.93		25,313.29
Total	**21.53**	**162.52**	**92.33**	**0.23**	**0.09**	**7.17**	**7.26**	**0.00**	**7.17**	**7.17**		**25,272.84**		**1.93**		**25,313.29**

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	0.00	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	0.18	0.19	1.97	0.00	0.52	0.02	0.54	0.01	0.02	0.02		381.93		0.02		382.35
Total	**0.18**	**0.19**	**1.97**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**381.93**		**0.02**		**382.35**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		1.93		25,313.29
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**1.93**		**25,313.29**

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	0.00	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	0.18	0.19	1.97	0.00	0.52	0.02	0.54	0.01	0.02	0.02		381.93		0.02		382.35
Total	**0.18**	**0.19**	**1.97**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**381.93**		**0.02**		**382.35**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	20.33	149.20	89.43	0.23		6.46	6.46		6.46	6.46		25,272.84		1.82		25,311.15
Total	**20.33**	**149.20**	**89.43**	**0.23**	**0.09**	**6.46**	**6.55**	**0.00**	**6.46**	**6.46**		**25,272.84**		**1.82**		**25,311.15**

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	0.17	0.18	1.82	0.00	0.52	0.02	0.54	0.01	0.02	0.02		373.66		0.02		374.05
Total	**0.17**	**0.18**	**1.82**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**373.66**		**0.02**		**374.05**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		1.82		25,311.15
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**1.82**		**25,311.15**

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	0.17	0.18	1.82	0.00	0.52	0.02	0.54	0.01	0.02	0.02		373.66		0.02		374.05
Total	**0.17**	**0.18**	**1.82**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**373.66**		**0.02**		**374.05**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.85	25.89	26.24	0.05		1.46	1.46		1.46	1.46		4,663.08		0.34		4,670.27
Total	**3.85**	**25.89**	**26.24**	**0.05**		**1.46**	**1.46**		**1.46**	**1.46**		**4,663.08**		**0.34**		**4,670.27**

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	0.67	8.03	4.48	0.02	0.61	0.26	0.87	0.02	0.24	0.26		1,811.41		0.03		1,812.10
Worker	1.06	1.10	11.23	0.03	3.22	0.11	3.34	0.04	0.10	0.15		2,307.37		0.12		2,309.79
Total	**1.73**	**9.13**	**15.71**	**0.05**	**3.83**	**0.37**	**4.21**	**0.06**	**0.34**	**0.41**		**4,118.78**		**0.15**		**4,121.89**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.34		4,670.27
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.34**		**4,670.27**

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	0.67	8.03	4.48	0.02	0.61	0.26	0.87	0.02	0.24	0.26		1,811.41		0.03		1,812.10
Worker	1.06	1.10	11.23	0.03	3.22	0.11	3.34	0.04	0.10	0.15		2,307.37		0.12		2,309.79
Total	**1.73**	**9.13**	**15.71**	**0.05**	**3.83**	**0.37**	**4.21**	**0.06**	**0.34**	**0.41**		**4,118.78**		**0.15**		**4,121.89**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.49	23.51	26.08	0.05		1.25	1.25		1.25	1.25		4,663.08		0.31		4,669.65
Total	**3.49**	**23.51**	**26.08**	**0.05**		**1.25**	**1.25**		**1.25**	**1.25**		**4,663.08**		**0.31**		**4,669.65**

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	0.64	7.61	4.21	0.02	0.61	0.25	0.86	0.02	0.23	0.24		1,813.56		0.03		1,814.21
Worker	1.01	1.02	10.49	0.03	3.22	0.11	3.34	0.04	0.10	0.15		2,260.75		0.11		2,263.02
Total	**1.65**	**8.63**	**14.70**	**0.05**	**3.83**	**0.36**	**4.20**	**0.06**	**0.33**	**0.39**		**4,074.31**		**0.14**		**4,077.23**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.31		4,669.65
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.31**		**4,669.65**

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	0.64	7.61	4.21	0.02	0.61	0.25	0.86	0.02	0.23	0.24		1,813.56		0.03		1,814.21
Worker	1.01	1.02	10.49	0.03	3.22	0.11	3.34	0.04	0.10	0.15		2,260.75		0.11		2,263.02
Total	**1.65**	**8.63**	**14.70**	**0.05**	**3.83**	**0.36**	**4.20**	**0.06**	**0.33**	**0.39**		**4,074.31**		**0.14**		**4,077.23**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.20	21.36	25.94	0.05		1.07	1.07		1.07	1.07		4,663.08		0.28		4,669.05
Total	**3.20**	**21.36**	**25.94**	**0.05**		**1.07**	**1.07**		**1.07**	**1.07**		**4,663.08**		**0.28**		**4,669.05**

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	0.60	7.26	4.01	0.02	0.61	0.24	0.84	0.02	0.22	0.23		1,815.36		0.03		1,815.98
Worker	0.97	0.95	9.86	0.03	3.22	0.11	3.34	0.04	0.10	0.15		2,218.05		0.10		2,220.20
Total	**1.57**	**8.21**	**13.87**	**0.05**	**3.83**	**0.35**	**4.18**	**0.06**	**0.32**	**0.38**		**4,033.41**		**0.13**		**4,036.18**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.28		4,669.05
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.28**		**4,669.05**

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	0.60	7.26	4.01	0.02	0.61	0.24	0.84	0.02	0.22	0.23		1,815.36		0.03		1,815.98
Worker	0.97	0.95	9.86	0.03	3.22	0.11	3.34	0.04	0.10	0.15		2,218.05		0.10		2,220.20

Total	**1.57**	**8.21**	**13.87**	**0.05**	**3.83**	**0.35**	**4.18**	**0.06**	**0.32**	**0.38**		**4,033.41**		**0.13**		**4,036.18**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.92	19.24	25.78	0.05		0.90	0.90		0.90	0.90		4,663.08		0.26		4,668.51
Total	**2.92**	**19.24**	**25.78**	**0.05**		**0.90**	**0.90**		**0.90**	**0.90**		**4,663.08**		**0.26**		**4,668.51**

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	0.58	6.98	3.80	0.02	0.61	0.23	0.84	0.02	0.21	0.23		1,817.08		0.03		1,817.66
Worker	0.94	0.90	9.46	0.03	3.22	0.12	3.34	0.04	0.11	0.15		2,199.58		0.10		2,201.66
Total	**1.52**	**7.88**	**13.26**	**0.05**	**3.83**	**0.35**	**4.18**	**0.06**	**0.32**	**0.38**		**4,016.66**		**0.13**		**4,019.32**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.26		4,668.51
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.26**		**4,668.51**

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	0.58	6.98	3.80	0.02	0.61	0.23	0.84	0.02	0.21	0.23		1,817.08		0.03		1,817.66
Worker	0.94	0.90	9.46	0.03	3.22	0.12	3.34	0.04	0.11	0.15		2,199.58		0.10		2,201.66
Total	**1.52**	**7.88**	**13.26**	**0.05**	**3.83**	**0.35**	**4.18**	**0.06**	**0.32**	**0.38**		**4,016.66**		**0.13**		**4,019.32**

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	27.88	54.68	253.60	0.64	70.58	3.26	73.84	0.98	3.16	4.15		52,018.69		2.17		52,064.33
Unmitigated	27.88	54.68	253.60	0.64	70.58	3.26	73.84	0.98	3.16	4.15		52,018.69		2.17		52,064.33
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
City Park	19.08	19.08	19.08	47,055	47,055
Condo/Townhouse	691.95	751.80	637.35	2,563,448	2,563,448
Elementary School	903.00	0.00	0.00	1,931,890	1,931,890
Health Club	1,317.20	834.80	1069.20	2,176,406	2,176,406
Office Park	39.97	5.74	2.66	86,140	86,140
Single Family Housing	3,416.49	3,598.56	3130.89	12,588,537	12,588,537
User Defined Industrial	0.00	0.00	0.00		
Total	6,387.69	5,209.98	4,859.18	19,393,477	19,393,477

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Condo/Townhouse	16.80	7.10	7.90	41.60	18.80	39.60
Elementary School	14.70	6.60	6.60	65.00	30.00	5.00
Health Club	14.70	6.60	6.60	16.90	64.10	19.00
Office Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00

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	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
NaturalGas Unmitigated	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Condo/Townhouse	6638.55	0.07	0.61	0.26	0.00		0.00	0.05		0.00	0.05		781.01		0.01	0.01	785.76
Elementary School	994.078	0.01	0.10	0.08	0.00		0.00	0.01		0.00	0.01		116.95		0.00	0.00	117.66
Health Club	1292.05	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01		152.01		0.00	0.00	152.93
Office Park	322.959	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		38.00		0.00	0.00	38.23
Single Family Housing	37302.5	0.40	3.44	1.46	0.02		0.00	0.28		0.00	0.28		4,388.52		0.08	0.08	4,415.23

User Defined Industrial	0	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		**0.49**	**4.31**	**1.94**	**0.02**		**0.00**	**0.35**		**0.00**	**0.35**		**5,476.49**		**0.09**	**0.09**	**5,509.81**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Condo/Townhouse	6.63855	0.07	0.61	0.26	0.00		0.00	0.05		0.00	0.05		781.01		0.01	0.01	785.76
Elementary School	0.994078	0.01	0.10	0.08	0.00		0.00	0.01		0.00	0.01		116.95		0.00	0.00	117.66
Health Club	1.29205	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01		152.01		0.00	0.00	152.93
Office Park	0.322959	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		38.00		0.00	0.00	38.23
Single Family Housing	37.3025	0.40	3.44	1.46	0.02		0.00	0.28		0.00	0.28		4,388.52		0.08	0.08	4,415.23
User Defined Industrial	0	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		**0.49**	**4.31**	**1.94**	**0.02**		**0.00**	**0.35**		**0.00**	**0.35**		**5,476.49**		**0.09**	**0.09**	**5,509.81**

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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Unmitigated	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
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	7.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	18.18					0.00	0.00		0.00	0.00						0.00
Hearth	243.66	4.33	359.87	0.34		0.00	52.36		0.00	52.35	5,950.69	5,380.94		11.84	0.40	11,704.96
Landscaping	1.17	0.44	38.61	0.00		0.00	0.21		0.00	0.21		69.47		0.07		70.87
Total	**270.06**	**4.77**	**398.48**	**0.34**		**0.00**	**52.57**		**0.00**	**52.56**	**5,950.69**	**5,450.41**		**11.91**	**0.40**	**11,775.83**

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	7.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	18.18					0.00	0.00		0.00	0.00						0.00
Hearth	243.66	4.33	359.87	0.34		0.00	52.36		0.00	52.35	5,950.69	5,380.94		11.84	0.40	11,704.96

Landscaping	1.17	0.44	38.61	0.00		0.00	0.21		0.00	0.21		69.47		0.07		70.87
Total	**270.06**	**4.77**	**398.48**	**0.34**		**0.00**	**52.57**		**0.00**	**52.56**	**5,950.69**	**5,450.41**		**11.91**	**0.40**	**11,775.83**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 3 - Construction

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Office Park	3.5	1000sqft
Elementary School	700	Student
User Defined Industrial	2.4	User Defined Unit
City Park	12	Acre
Health Club	40	1000sqft
Condo/Townhouse	105	Dwelling Unit
Single Family Housing	357	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table

Grading -

Trips and VMT - per SANDAG

Construction Off-road Equipment Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.08	24.80	20.79	0.03	0.64	2.00	2.19	0.01	2.00	2.00	0.00	3,057.77	0.00	0.37	0.00	3,065.49
2019	3.55	3.87	5.76	0.01	0.64	0.28	0.92	0.01	0.28	0.29	0.00	1,010.87	0.00	0.07	0.00	1,012.32
2020	3.49	3.55	5.62	0.01	0.64	0.24	0.88	0.01	0.24	0.25	0.00	1,002.40	0.00	0.06	0.00	1,003.74
2021	3.44	3.23	5.51	0.01	0.64	0.21	0.85	0.01	0.21	0.22	0.00	998.73	0.00	0.06	0.00	999.96
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					
2018	5.89	15.47	19.68	0.03	0.64	1.55	1.74	0.01	1.55	1.55	0.00	3,057.77	0.00	0.37	0.00	3,065.49
2019	5.88	5.05	5.74	0.01	0.64	0.32	0.96	0.01	0.32	0.33	0.00	1,010.87	0.00	0.07	0.00	1,012.32
2020	5.87	5.04	5.62	0.01	0.64	0.32	0.96	0.01	0.32	0.33	0.00	1,002.40	0.00	0.06	0.00	1,003.74

2021	5.87	5.03	5.54	0.01	0.64	0.32	0.96	0.01	0.32	0.33	0.00	998.73	0.00	0.06	0.00	999.96
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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Energy	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
Mobile	27.88	54.68	253.60	0.64	70.58	3.26	73.84	0.98	3.16	4.15		52,018.69		2.17		52,064.33
Total	**298.44**	**63.77**	**654.01**	**1.01**	**70.58**	**3.26**	**126.76**	**0.98**	**3.16**	**57.07**	**5,950.69**	**62,945.58**		**14.18**	**0.50**	**69,349.97**

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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Energy	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
Mobile	27.88	54.68	253.60	0.64	70.58	3.26	73.84	0.98	3.16	4.15		52,018.69		2.17		52,064.33
Total	**298.44**	**63.77**	**654.01**	**1.01**	**70.58**	**3.26**	**126.76**	**0.98**	**3.16**	**57.07**	**5,950.69**	**62,945.58**		**14.18**	**0.50**	**69,349.97**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.02	24.73	20.10	0.03		1.99	1.99		1.99	1.99		2,917.65		0.36		2,925.22
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**4.02**	**24.73**	**20.10**	**0.03**		**1.99**	**1.99**		**1.99**	**1.99**		**2,917.65**		**0.36**		**2,925.22**

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	0.06	0.07	0.68	0.00	0.20	0.01	0.20	0.00	0.01	0.01		140.12		0.01		140.27
Total	**0.06**	**0.07**	**0.68**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**140.12**		**0.01**		**140.27**

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	2.57	15.40	19.00	0.03		1.54	1.54		1.54	1.54	0.00	2,917.65		0.36		2,925.22
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.57**	**15.40**	**19.00**	**0.03**		**1.54**	**1.54**		**1.54**	**1.54**	**0.00**	**2,917.65**		**0.36**		**2,925.22**

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	0.06	0.07	0.68	0.00	0.20	0.01	0.20	0.00	0.01	0.01		140.12		0.01		140.27
Total	**0.06**	**0.07**	**0.68**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**140.12**		**0.01**		**140.27**

3.3 architectural coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.60	4.01	3.71	0.01		0.30	0.30		0.30	0.30		562.38		0.05		563.50
Total	**3.41**	**4.01**	**3.71**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**		**562.38**		**0.05**		**563.50**

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	0.21	0.22	2.23	0.01	0.64	0.02	0.66	0.01	0.02	0.03		457.74		0.02		458.22
Total	**0.21**	**0.22**	**2.23**	**0.01**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**457.74**		**0.02**		**458.22**

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	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.05		563.50
Total	**5.68**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.05**		**563.50**

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	0.21	0.22	2.23	0.01	0.64	0.02	0.66	0.01	0.02	0.03		457.74		0.02		458.22
Total	**0.21**	**0.22**	**2.23**	**0.01**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**457.74**		**0.02**		**458.22**

3.3 architectural coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.53	3.67	3.68	0.01		0.26	0.26		0.26	0.26		562.38		0.05		563.38
Total	**3.34**	**3.67**	**3.68**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**		**562.38**		**0.05**		**563.38**

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	0.20	0.20	2.08	0.01	0.64	0.02	0.66	0.01	0.02	0.03		448.49		0.02		448.94
Total	**0.20**	**0.20**	**2.08**	**0.01**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**448.49**		**0.02**		**448.94**

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	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.05		563.38
Total	**5.68**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.05**		**563.38**

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	0.20	0.20	2.08	0.01	0.64	0.02	0.66	0.01	0.02	0.03		448.49		0.02		448.94
Total	**0.20**	**0.20**	**2.08**	**0.01**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**448.49**		**0.02**		**448.94**

3.3 architectural coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.48	3.36	3.66	0.01		0.22	0.22		0.22	0.22		562.38		0.04		563.29
Total	**3.29**	**3.36**	**3.66**	**0.01**		**0.22**	**0.22**		**0.22**	**0.22**		**562.38**		**0.04**		**563.29**

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	0.00	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	0.19	0.19	1.96	0.01	0.64	0.02	0.66	0.01	0.02	0.03		440.02		0.02		440.44
Total	**0.19**	**0.19**	**1.96**	**0.01**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**440.02**		**0.02**		**440.44**

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	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.04		563.29
Total	**5.68**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.04**		**563.29**

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	0.00	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	0.19	0.19	1.96	0.01	0.64	0.02	0.66	0.01	0.02	0.03		440.02		0.02		440.44
Total	**0.19**	**0.19**	**1.96**	**0.01**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**440.02**		**0.02**		**440.44**

3.3 architectural coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.44	3.05	3.63	0.01		0.19	0.19		0.19	0.19		562.38		0.04		563.19
Total	**3.25**	**3.05**	**3.63**	**0.01**		**0.19**	**0.19**		**0.19**	**0.19**		**562.38**		**0.04**		**563.19**

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	0.19	0.18	1.88	0.01	0.64	0.02	0.66	0.01	0.02	0.03		436.35		0.02		436.77
Total	**0.19**	**0.18**	**1.88**	**0.01**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**436.35**		**0.02**		**436.77**

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	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.04		563.19
Total	**5.68**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.04**		**563.19**

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	0.19	0.18	1.88	0.01	0.64	0.02	0.66	0.01	0.02	0.03		436.35		0.02		436.77

Total	**0.19**	**0.18**	**1.88**	**0.01**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**436.35**		**0.02**		**436.77**

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	27.88	54.68	253.60	0.64	70.58	3.26	73.84	0.98	3.16	4.15		52,018.69		2.17		52,064.33
Unmitigated	27.88	54.68	253.60	0.64	70.58	3.26	73.84	0.98	3.16	4.15		52,018.69		2.17		52,064.33
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
City Park	19.08	19.08	19.08	47,055	47,055
Condo/Townhouse	691.95	751.80	637.35	2,563,448	2,563,448
Elementary School	903.00	0.00	0.00	1,931,890	1,931,890
Health Club	1,317.20	834.80	1069.20	2,176,406	2,176,406
Office Park	39.97	5.74	2.66	86,140	86,140

Single Family Housing	3,416.49	3,598.56	3130.89	12,588,537	12,588,537
User Defined Industrial	0.00	0.00	0.00		
Total	6,387.69	5,209.98	4,859.18	19,393,477	19,393,477

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Condo/Townhouse	16.80	7.10	7.90	41.60	18.80	39.60
Elementary School	14.70	6.60	6.60	65.00	30.00	5.00
Health Club	14.70	6.60	6.60	16.90	64.10	19.00
Office Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00

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	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
NaturalGas Unmitigated	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Condo/Townhouse	6638.55	0.07	0.61	0.26	0.00		0.00	0.05		0.00	0.05		781.01		0.01	0.01	785.76
Elementary School	994.078	0.01	0.10	0.08	0.00		0.00	0.01		0.00	0.01		116.95		0.00	0.00	117.66
Health Club	1292.05	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01		152.01		0.00	0.00	152.93
Office Park	322.959	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		38.00		0.00	0.00	38.23
Single Family Housing	37302.5	0.40	3.44	1.46	0.02		0.00	0.28		0.00	0.28		4,388.52		0.08	0.08	4,415.23
User Defined Industrial	0	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		**0.49**	**4.31**	**1.94**	**0.02**		**0.00**	**0.35**		**0.00**	**0.35**		**5,476.49**		**0.09**	**0.09**	**5,509.81**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Condo/Townhouse	6.63855	0.07	0.61	0.26	0.00		0.00	0.05		0.00	0.05		781.01		0.01	0.01	785.76
Elementary School	0.994078	0.01	0.10	0.08	0.00		0.00	0.01		0.00	0.01		116.95		0.00	0.00	117.66
Health Club	1.29205	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01		152.01		0.00	0.00	152.93

Office Park	0.322959	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		38.00		0.00	0.00	38.23
Single Family Housing	37.3025	0.40	3.44	1.46	0.02		0.00	0.28		0.00	0.28		4,388.52		0.08	0.08	4,415.23
User Defined Industrial	0	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		**0.49**	**4.31**	**1.94**	**0.02**		**0.00**	**0.35**		**0.00**	**0.35**		**5,476.49**		**0.09**	**0.09**	**5,509.81**

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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Unmitigated	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
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	7.05					0.00	0.00		0.00	0.00						0.00

Consumer Products	18.18					0.00	0.00		0.00	0.00						0.00
Hearth	243.66	4.33	359.87	0.34		0.00	52.36		0.00	52.35	5,950.69	5,380.94		11.84	0.40	11,704.96
Landscaping	1.17	0.44	38.61	0.00		0.00	0.21		0.00	0.21		69.47		0.07		70.87
Total	**270.06**	**4.77**	**398.48**	**0.34**		**0.00**	**52.57**		**0.00**	**52.56**	**5,950.69**	**5,450.41**		**11.91**	**0.40**	**11,775.83**

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	7.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	18.18					0.00	0.00		0.00	0.00						0.00
Hearth	243.66	4.33	359.87	0.34		0.00	52.36		0.00	52.35	5,950.69	5,380.94		11.84	0.40	11,704.96
Landscaping	1.17	0.44	38.61	0.00		0.00	0.21		0.00	0.21		69.47		0.07		70.87
Total	**270.06**	**4.77**	**398.48**	**0.34**		**0.00**	**52.57**		**0.00**	**52.56**	**5,950.69**	**5,450.41**		**11.91**	**0.40**	**11,775.83**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 3 - Construction

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Office Park	3.5	1000sqft
Elementary School	700	Student
User Defined Industrial	2.4	User Defined Unit
City Park	12	Acre
Health Club	40	1000sqft
Condo/Townhouse	105	Dwelling Unit
Single Family Housing	357	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table.

Grading - max disturbance per equipment

Demolition -

Trips and VMT - per SANDAG

Architectural Coating -

Construction Off-road Equipment Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	21.73	162.73	94.18	0.23	0.67	7.18	7.79	0.01	7.18	7.19	0.00	25,625.21	0.00	1.95	0.00	25,666.06
2018	20.52	149.39	91.14	0.23	3.83	6.48	7.09	0.06	6.48	6.49	0.00	25,617.52	0.00	1.84	0.00	25,656.21
2019	5.26	32.26	40.90	0.09	3.83	1.62	5.45	0.06	1.59	1.65	0.00	8,545.71	0.00	0.45	0.00	8,555.13
2020	4.89	29.67	39.95	0.09	3.83	1.43	5.26	0.06	1.40	1.46	0.00	8,507.56	0.00	0.41	0.00	8,516.22
2021	4.55	27.19	39.17	0.09	3.83	1.25	5.08	0.06	1.22	1.28	0.00	8,491.85	0.00	0.38	0.00	8,499.88
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					

2017	18.65	118.47	126.65	0.23	0.56	7.80	8.36	0.01	7.80	7.81	0.00	25,625.21	0.00	1.95	0.00	25,666.06
2018	18.63	118.46	126.51	0.23	3.83	7.80	8.36	0.06	7.80	7.81	0.00	25,617.52	0.00	1.84	0.00	25,656.21
2019	11.12	36.73	43.81	0.09	3.83	2.49	6.32	0.06	2.46	2.52	0.00	8,545.71	0.00	0.45	0.00	8,555.13
2020	11.05	36.29	42.99	0.09	3.83	2.47	6.31	0.06	2.45	2.51	0.00	8,507.56	0.00	0.41	0.00	8,516.22
2021	10.98	35.93	42.38	0.09	3.83	2.47	6.30	0.06	2.44	2.50	0.00	8,491.85	0.00	0.38	0.00	8,499.88
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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Energy	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
Mobile	30.14	56.94	247.18	0.60	70.58	3.28	73.85	0.98	3.18	4.16		48,707.84		1.88		48,747.42
Total	**300.70**	**66.03**	**647.59**	**0.97**	**70.58**	**3.28**	**126.77**	**0.98**	**3.18**	**57.08**	**5,950.69**	**59,634.73**		**13.89**	**0.50**	**66,033.06**

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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Energy	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81

Mobile	30.14	56.94	247.18	0.60	70.58	3.28	73.85	0.98	3.18	4.16		48,707.84		1.88		48,747.42
Total	**300.70**	**66.03**	**647.59**	**0.97**	**70.58**	**3.28**	**126.77**	**0.98**	**3.18**	**57.08**	**5,950.69**	**59,634.73**		**13.89**	**0.50**	**66,033.06**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

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

Fugitive Dust					0.22	0.00	0.22	0.00	0.00	0.00						0.00
Off-Road	1.77	11.59	10.25	0.02		0.87	0.87		0.87	0.87		1,530.72		0.16		1,534.05
Total	**1.77**	**11.59**	**10.25**	**0.02**	**0.22**	**0.87**	**1.09**	**0.00**	**0.87**	**0.87**		**1,530.72**		**0.16**		**1,534.05**

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	0.04	0.42	0.21	0.00	0.35	0.02	0.37	0.00	0.01	0.01		82.84		0.00		82.87
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	0.37	0.00	0.10	0.00	0.11	0.00	0.00	0.00		70.48		0.00		70.56
Total	**0.08**	**0.46**	**0.58**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.01**		**153.32**		**0.00**		**153.43**

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					0.08	0.00	0.08	0.00	0.00	0.00						0.00
Off-Road	3.85	10.06	9.97	0.02		0.81	0.81		0.81	0.81	0.00	1,530.72		0.16		1,534.05
Total	**3.85**	**10.06**	**9.97**	**0.02**	**0.08**	**0.81**	**0.89**	**0.00**	**0.81**	**0.81**	**0.00**	**1,530.72**		**0.16**		**1,534.05**

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	0.04	0.42	0.21	0.00	0.35	0.02	0.37	0.00	0.01	0.01		82.84		0.00		82.87
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	0.37	0.00	0.10	0.00	0.11	0.00	0.00	0.00		70.48		0.00		70.56
Total	**0.08**	**0.46**	**0.58**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.01**		**153.32**		**0.00**		**153.43**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	3.32	20.22	17.19	0.03		1.61	1.61		1.61	1.61		2,462.41		0.30		2,468.68
Total	**3.32**	**20.22**	**17.19**	**0.03**	**0.18**	**1.61**	**1.79**	**0.00**	**1.61**	**1.61**		**2,462.41**		**0.30**		**2,468.68**

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	0.06	0.07	0.60	0.00	0.17	0.01	0.18	0.00	0.01	0.01		114.52		0.01		114.65
Total	**0.06**	**0.07**	**0.60**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**114.52**		**0.01**		**114.65**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.41		0.30		2,468.68
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.41**		**0.30**		**2,468.68**

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	0.06	0.07	0.60	0.00	0.17	0.01	0.18	0.00	0.01	0.01		114.52		0.01		114.65
Total	**0.06**	**0.07**	**0.60**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**114.52**		**0.01**		**114.65**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.09	0.00	0.09	0.00	0.00	0.00						0.00

Off-Road	21.53	162.52	92.33	0.23		7.17	7.17		7.17	7.17		25,272.84		1.93		25,313.29
Total	**21.53**	**162.52**	**92.33**	**0.23**	**0.09**	**7.17**	**7.26**	**0.00**	**7.17**	**7.17**		**25,272.84**		**1.93**		**25,313.29**

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	0.00	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	0.20	0.21	1.85	0.00	0.52	0.02	0.54	0.01	0.02	0.02		352.38		0.02		352.78
Total	**0.20**	**0.21**	**1.85**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**352.38**		**0.02**		**352.78**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		1.93		25,313.29
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**1.93**		**25,313.29**

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	0.00	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	0.20	0.21	1.85	0.00	0.52	0.02	0.54	0.01	0.02	0.02		352.38		0.02		352.78
Total	**0.20**	**0.21**	**1.85**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**352.38**		**0.02**		**352.78**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	20.33	149.20	89.43	0.23		6.46	6.46		6.46	6.46		25,272.84		1.82		25,311.15
Total	**20.33**	**149.20**	**89.43**	**0.23**	**0.09**	**6.46**	**6.55**	**0.00**	**6.46**	**6.46**		**25,272.84**		**1.82**		**25,311.15**

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	0.19	0.19	1.71	0.00	0.52	0.02	0.54	0.01	0.02	0.02		344.68		0.02		345.06
Total	**0.19**	**0.19**	**1.71**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**344.68**		**0.02**		**345.06**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		1.82		25,311.15
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**1.82**		**25,311.15**

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	0.19	0.19	1.71	0.00	0.52	0.02	0.54	0.01	0.02	0.02		344.68		0.02		345.06
Total	**0.19**	**0.19**	**1.71**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**344.68**		**0.02**		**345.06**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.85	25.89	26.24	0.05		1.46	1.46		1.46	1.46		4,663.08		0.34		4,670.27
Total	**3.85**	**25.89**	**26.24**	**0.05**		**1.46**	**1.46**		**1.46**	**1.46**		**4,663.08**		**0.34**		**4,670.27**

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	0.71	8.07	5.25	0.02	0.61	0.27	0.87	0.02	0.25	0.26		1,795.71		0.03		1,796.43
Worker	1.15	1.20	10.56	0.02	3.22	0.11	3.34	0.04	0.10	0.15		2,128.43		0.11		2,130.73
Total	**1.86**	**9.27**	**15.81**	**0.04**	**3.83**	**0.38**	**4.21**	**0.06**	**0.35**	**0.41**		**3,924.14**		**0.14**		**3,927.16**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.34		4,670.27
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.34**		**4,670.27**

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	0.71	8.07	5.25	0.02	0.61	0.27	0.87	0.02	0.25	0.26		1,795.71		0.03		1,796.43
Worker	1.15	1.20	10.56	0.02	3.22	0.11	3.34	0.04	0.10	0.15		2,128.43		0.11		2,130.73
Total	**1.86**	**9.27**	**15.81**	**0.04**	**3.83**	**0.38**	**4.21**	**0.06**	**0.35**	**0.41**		**3,924.14**		**0.14**		**3,927.16**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.49	23.51	26.08	0.05		1.25	1.25		1.25	1.25		4,663.08		0.31		4,669.65
Total	**3.49**	**23.51**	**26.08**	**0.05**		**1.25**	**1.25**		**1.25**	**1.25**		**4,663.08**		**0.31**		**4,669.65**

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	0.67	7.64	4.97	0.02	0.61	0.25	0.86	0.02	0.23	0.25		1,797.56		0.03		1,798.25
Worker	1.10	1.12	9.85	0.02	3.22	0.11	3.34	0.04	0.10	0.15		2,085.07		0.10		2,087.23
Total	**1.77**	**8.76**	**14.82**	**0.04**	**3.83**	**0.36**	**4.20**	**0.06**	**0.33**	**0.40**		**3,882.63**		**0.13**		**3,885.48**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.31		4,669.65
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.31**		**4,669.65**

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	0.67	7.64	4.97	0.02	0.61	0.25	0.86	0.02	0.23	0.25		1,797.56		0.03		1,798.25
Worker	1.10	1.12	9.85	0.02	3.22	0.11	3.34	0.04	0.10	0.15		2,085.07		0.10		2,087.23
Total	**1.77**	**8.76**	**14.82**	**0.04**	**3.83**	**0.36**	**4.20**	**0.06**	**0.33**	**0.40**		**3,882.63**		**0.13**		**3,885.48**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.20	21.36	25.94	0.05		1.07	1.07		1.07	1.07		4,663.08		0.28		4,669.05
Total	**3.20**	**21.36**	**25.94**	**0.05**		**1.07**	**1.07**		**1.07**	**1.07**		**4,663.08**		**0.28**		**4,669.05**

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	0.64	7.27	4.75	0.02	0.61	0.24	0.85	0.02	0.22	0.24		1,799.12		0.03		1,799.77
Worker	1.06	1.04	9.25	0.02	3.22	0.11	3.34	0.04	0.10	0.15		2,045.36		0.10		2,047.40
Total	**1.70**	**8.31**	**14.00**	**0.04**	**3.83**	**0.35**	**4.19**	**0.06**	**0.32**	**0.39**		**3,844.48**		**0.13**		**3,847.17**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.28		4,669.05
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.28**		**4,669.05**

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	0.64	7.27	4.75	0.02	0.61	0.24	0.85	0.02	0.22	0.24		1,799.12		0.03		1,799.77
Worker	1.06	1.04	9.25	0.02	3.22	0.11	3.34	0.04	0.10	0.15		2,045.36		0.10		2,047.40

Total	**1.70**	**8.31**	**14.00**	**0.04**	**3.83**	**0.35**	**4.19**	**0.06**	**0.32**	**0.39**		**3,844.48**		**0.13**		**3,847.17**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.92	19.24	25.78	0.05		0.90	0.90		0.90	0.90		4,663.08		0.26		4,668.51
Total	**2.92**	**19.24**	**25.78**	**0.05**		**0.90**	**0.90**		**0.90**	**0.90**		**4,663.08**		**0.26**		**4,668.51**

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	0.61	6.97	4.54	0.02	0.61	0.23	0.84	0.02	0.21	0.23		1,800.59		0.03		1,801.21
Worker	1.02	0.98	8.85	0.02	3.22	0.12	3.34	0.04	0.11	0.15		2,028.18		0.09		2,030.16
Total	**1.63**	**7.95**	**13.39**	**0.04**	**3.83**	**0.35**	**4.18**	**0.06**	**0.32**	**0.38**		**3,828.77**		**0.12**		**3,831.37**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.26		4,668.51
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.26**		**4,668.51**

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	0.61	6.97	4.54	0.02	0.61	0.23	0.84	0.02	0.21	0.23		1,800.59		0.03		1,801.21
Worker	1.02	0.98	8.85	0.02	3.22	0.12	3.34	0.04	0.11	0.15		2,028.18		0.09		2,030.16
Total	**1.63**	**7.95**	**13.39**	**0.04**	**3.83**	**0.35**	**4.18**	**0.06**	**0.32**	**0.38**		**3,828.77**		**0.12**		**3,831.37**

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	30.14	56.94	247.18	0.60	70.58	3.28	73.85	0.98	3.18	4.16		48,707.84		1.88		48,747.42
Unmitigated	30.14	56.94	247.18	0.60	70.58	3.28	73.85	0.98	3.18	4.16		48,707.84		1.88		48,747.42
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
City Park	19.08	19.08	19.08	47,055	47,055
Condo/Townhouse	691.95	751.80	637.35	2,563,448	2,563,448
Elementary School	903.00	0.00	0.00	1,931,890	1,931,890
Health Club	1,317.20	834.80	1069.20	2,176,406	2,176,406
Office Park	39.97	5.74	2.66	86,140	86,140
Single Family Housing	3,416.49	3,598.56	3130.89	12,588,537	12,588,537
User Defined Industrial	0.00	0.00	0.00		
Total	6,387.69	5,209.98	4,859.18	19,393,477	19,393,477

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Condo/Townhouse	16.80	7.10	7.90	41.60	18.80	39.60
Elementary School	14.70	6.60	6.60	65.00	30.00	5.00
Health Club	14.70	6.60	6.60	16.90	64.10	19.00
Office Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00

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	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
NaturalGas Unmitigated	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Condo/Townhouse	6638.55	0.07	0.61	0.26	0.00		0.00	0.05		0.00	0.05		781.01		0.01	0.01	785.76
Elementary School	994.078	0.01	0.10	0.08	0.00		0.00	0.01		0.00	0.01		116.95		0.00	0.00	117.66
Health Club	1292.05	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01		152.01		0.00	0.00	152.93
Office Park	322.959	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		38.00		0.00	0.00	38.23
Single Family Housing	37302.5	0.40	3.44	1.46	0.02		0.00	0.28		0.00	0.28		4,388.52		0.08	0.08	4,415.23

User Defined Industrial	0	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		**0.49**	**4.31**	**1.94**	**0.02**		**0.00**	**0.35**		**0.00**	**0.35**		**5,476.49**		**0.09**	**0.09**	**5,509.81**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Condo/Townhouse	6.63855	0.07	0.61	0.26	0.00		0.00	0.05		0.00	0.05		781.01		0.01	0.01	785.76
Elementary School	0.994078	0.01	0.10	0.08	0.00		0.00	0.01		0.00	0.01		116.95		0.00	0.00	117.66
Health Club	1.29205	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01		152.01		0.00	0.00	152.93
Office Park	0.322959	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		38.00		0.00	0.00	38.23
Single Family Housing	37.3025	0.40	3.44	1.46	0.02		0.00	0.28		0.00	0.28		4,388.52		0.08	0.08	4,415.23
User Defined Industrial	0	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		**0.49**	**4.31**	**1.94**	**0.02**		**0.00**	**0.35**		**0.00**	**0.35**		**5,476.49**		**0.09**	**0.09**	**5,509.81**

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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Unmitigated	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
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	7.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	18.18					0.00	0.00		0.00	0.00						0.00
Hearth	243.66	4.33	359.87	0.34		0.00	52.36		0.00	52.35	5,950.69	5,380.94		11.84	0.40	11,704.96
Landscaping	1.17	0.44	38.61	0.00		0.00	0.21		0.00	0.21		69.47		0.07		70.87
Total	**270.06**	**4.77**	**398.48**	**0.34**		**0.00**	**52.57**		**0.00**	**52.56**	**5,950.69**	**5,450.41**		**11.91**	**0.40**	**11,775.83**

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	7.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	18.18					0.00	0.00		0.00	0.00						0.00
Hearth	243.66	4.33	359.87	0.34		0.00	52.36		0.00	52.35	5,950.69	5,380.94		11.84	0.40	11,704.96

Landscaping	1.17	0.44	38.61	0.00		0.00	0.21		0.00	0.21		69.47		0.07		70.87
Total	**270.06**	**4.77**	**398.48**	**0.34**		**0.00**	**52.57**		**0.00**	**52.56**	**5,950.69**	**5,450.41**		**11.91**	**0.40**	**11,775.83**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 3 - Construction

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Office Park	3.5	1000sqft
Elementary School	700	Student
User Defined Industrial	2.4	User Defined Unit
City Park	12	Acre
Health Club	40	1000sqft
Condo/Townhouse	105	Dwelling Unit
Single Family Housing	357	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table

Grading -

Trips and VMT - per SANDAG

Construction Off-road Equipment Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.09	24.80	20.75	0.03	0.64	2.00	2.19	0.01	2.00	2.00	0.00	3,046.90	0.00	0.37	0.00	3,054.61
2019	3.56	3.89	5.63	0.01	0.64	0.28	0.92	0.01	0.28	0.29	0.00	976.02	0.00	0.07	0.00	977.44
2020	3.51	3.57	5.49	0.01	0.64	0.24	0.88	0.01	0.24	0.25	0.00	968.14	0.00	0.06	0.00	969.46
2021	3.45	3.25	5.39	0.01	0.64	0.21	0.85	0.01	0.21	0.22	0.00	964.73	0.00	0.06	0.00	965.93
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					
2018	5.91	15.47	19.64	0.03	0.64	1.55	1.74	0.01	1.55	1.55	0.00	3,046.90	0.00	0.37	0.00	3,054.61
2019	5.90	5.07	5.62	0.01	0.64	0.32	0.96	0.01	0.32	0.33	0.00	976.02	0.00	0.07	0.00	977.44
2020	5.89	5.06	5.50	0.01	0.64	0.32	0.96	0.01	0.32	0.33	0.00	968.14	0.00	0.06	0.00	969.46

2021	5.88	5.04	5.42	0.01	0.64	0.32	0.96	0.01	0.32	0.33	0.00	964.73	0.00	0.06	0.00	965.93
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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Energy	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
Mobile	30.14	56.94	247.18	0.60	70.58	3.28	73.85	0.98	3.18	4.16		48,707.84		1.88		48,747.42
Total	**300.70**	**66.03**	**647.59**	**0.97**	**70.58**	**3.28**	**126.77**	**0.98**	**3.18**	**57.08**	**5,950.69**	**59,634.73**		**13.89**	**0.50**	**66,033.06**

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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Energy	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
Mobile	30.14	56.94	247.18	0.60	70.58	3.28	73.85	0.98	3.18	4.16		48,707.84		1.88		48,747.42
Total	**300.70**	**66.03**	**647.59**	**0.97**	**70.58**	**3.28**	**126.77**	**0.98**	**3.18**	**57.08**	**5,950.69**	**59,634.73**		**13.89**	**0.50**	**66,033.06**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.02	24.73	20.10	0.03		1.99	1.99		1.99	1.99		2,917.65		0.36		2,925.22
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**4.02**	**24.73**	**20.10**	**0.03**		**1.99**	**1.99**		**1.99**	**1.99**		**2,917.65**		**0.36**		**2,925.22**

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	0.64	0.00	0.20	0.01	0.20	0.00	0.01	0.01		129.26		0.01		129.40
Total	**0.07**	**0.07**	**0.64**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**129.26**		**0.01**		**129.40**

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	2.57	15.40	19.00	0.03		1.54	1.54		1.54	1.54	0.00	2,917.65		0.36		2,925.22
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.57**	**15.40**	**19.00**	**0.03**		**1.54**	**1.54**		**1.54**	**1.54**	**0.00**	**2,917.65**		**0.36**		**2,925.22**

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	0.64	0.00	0.20	0.01	0.20	0.00	0.01	0.01		129.26		0.01		129.40
Total	**0.07**	**0.07**	**0.64**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**129.26**		**0.01**		**129.40**

3.3 architectural coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.60	4.01	3.71	0.01		0.30	0.30		0.30	0.30		562.38		0.05		563.50
Total	**3.41**	**4.01**	**3.71**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**		**562.38**		**0.05**		**563.50**

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	0.23	0.24	2.09	0.00	0.64	0.02	0.66	0.01	0.02	0.03		422.24		0.02		422.69
Total	**0.23**	**0.24**	**2.09**	**0.00**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**422.24**		**0.02**		**422.69**

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	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.05		563.50
Total	**5.68**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.05**		**563.50**

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	0.23	0.24	2.09	0.00	0.64	0.02	0.66	0.01	0.02	0.03		422.24		0.02		422.69
Total	**0.23**	**0.24**	**2.09**	**0.00**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**422.24**		**0.02**		**422.69**

3.3 architectural coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.53	3.67	3.68	0.01		0.26	0.26		0.26	0.26		562.38		0.05		563.38
Total	**3.34**	**3.67**	**3.68**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**		**562.38**		**0.05**		**563.38**

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	0.22	0.22	1.95	0.00	0.64	0.02	0.66	0.01	0.02	0.03		413.64		0.02		414.07
Total	**0.22**	**0.22**	**1.95**	**0.00**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**413.64**		**0.02**		**414.07**

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	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.05		563.38
Total	**5.68**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.05**		**563.38**

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	0.22	0.22	1.95	0.00	0.64	0.02	0.66	0.01	0.02	0.03		413.64		0.02		414.07
Total	**0.22**	**0.22**	**1.95**	**0.00**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**413.64**		**0.02**		**414.07**

3.3 architectural coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.48	3.36	3.66	0.01		0.22	0.22		0.22	0.22		562.38		0.04		563.29
Total	**3.29**	**3.36**	**3.66**	**0.01**		**0.22**	**0.22**		**0.22**	**0.22**		**562.38**		**0.04**		**563.29**

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	0.00	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	0.21	0.21	1.83	0.00	0.64	0.02	0.66	0.01	0.02	0.03		405.76		0.02		406.16
Total	**0.21**	**0.21**	**1.83**	**0.00**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**405.76**		**0.02**		**406.16**

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	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.04		563.29
Total	**5.68**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.04**		**563.29**

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	0.00	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	0.21	0.21	1.83	0.00	0.64	0.02	0.66	0.01	0.02	0.03		405.76		0.02		406.16
Total	**0.21**	**0.21**	**1.83**	**0.00**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**405.76**		**0.02**		**406.16**

3.3 architectural coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	0.44	3.05	3.63	0.01		0.19	0.19		0.19	0.19		562.38		0.04		563.19
Total	**3.25**	**3.05**	**3.63**	**0.01**		**0.19**	**0.19**		**0.19**	**0.19**		**562.38**		**0.04**		**563.19**

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	0.20	0.19	1.76	0.00	0.64	0.02	0.66	0.01	0.02	0.03		402.35		0.02		402.74
Total	**0.20**	**0.19**	**1.76**	**0.00**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**402.35**		**0.02**		**402.74**

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	2.81					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.04		563.19
Total	**5.68**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.04**		**563.19**

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	0.20	0.19	1.76	0.00	0.64	0.02	0.66	0.01	0.02	0.03		402.35		0.02		402.74

Total	**0.20**	**0.19**	**1.76**	**0.00**	**0.64**	**0.02**	**0.66**	**0.01**	**0.02**	**0.03**		**402.35**		**0.02**		**402.74**

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	30.14	56.94	247.18	0.60	70.58	3.28	73.85	0.98	3.18	4.16		48,707.84		1.88		48,747.42
Unmitigated	30.14	56.94	247.18	0.60	70.58	3.28	73.85	0.98	3.18	4.16		48,707.84		1.88		48,747.42
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
City Park	19.08	19.08	19.08	47,055	47,055
Condo/Townhouse	691.95	751.80	637.35	2,563,448	2,563,448
Elementary School	903.00	0.00	0.00	1,931,890	1,931,890
Health Club	1,317.20	834.80	1069.20	2,176,406	2,176,406
Office Park	39.97	5.74	2.66	86,140	86,140

Single Family Housing	3,416.49	3,598.56	3130.89	12,588,537	12,588,537
User Defined Industrial	0.00	0.00	0.00		
Total	6,387.69	5,209.98	4,859.18	19,393,477	19,393,477

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Condo/Townhouse	16.80	7.10	7.90	41.60	18.80	39.60
Elementary School	14.70	6.60	6.60	65.00	30.00	5.00
Health Club	14.70	6.60	6.60	16.90	64.10	19.00
Office Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00

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	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81
NaturalGas Unmitigated	0.50	4.31	1.94	0.03		0.00	0.35		0.00	0.35		5,476.48		0.10	0.10	5,509.81

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Condo/Townhouse	6638.55	0.07	0.61	0.26	0.00		0.00	0.05		0.00	0.05		781.01		0.01	0.01	785.76
Elementary School	994.078	0.01	0.10	0.08	0.00		0.00	0.01		0.00	0.01		116.95		0.00	0.00	117.66
Health Club	1292.05	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01		152.01		0.00	0.00	152.93
Office Park	322.959	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		38.00		0.00	0.00	38.23
Single Family Housing	37302.5	0.40	3.44	1.46	0.02		0.00	0.28		0.00	0.28		4,388.52		0.08	0.08	4,415.23
User Defined Industrial	0	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		**0.49**	**4.31**	**1.94**	**0.02**		**0.00**	**0.35**		**0.00**	**0.35**		**5,476.49**		**0.09**	**0.09**	**5,509.81**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Condo/Townhouse	6.63855	0.07	0.61	0.26	0.00		0.00	0.05		0.00	0.05		781.01		0.01	0.01	785.76
Elementary School	0.994078	0.01	0.10	0.08	0.00		0.00	0.01		0.00	0.01		116.95		0.00	0.00	117.66
Health Club	1.29205	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01		152.01		0.00	0.00	152.93

Office Park	0.322959	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		38.00		0.00	0.00	38.23
Single Family Housing	37.3025	0.40	3.44	1.46	0.02		0.00	0.28		0.00	0.28		4,388.52		0.08	0.08	4,415.23
User Defined Industrial	0	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		**0.49**	**4.31**	**1.94**	**0.02**		**0.00**	**0.35**		**0.00**	**0.35**		**5,476.49**		**0.09**	**0.09**	**5,509.81**

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	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
Unmitigated	270.06	4.78	398.47	0.34		0.00	52.57		0.00	52.57	5,950.69	5,450.41		11.91	0.40	11,775.83
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	7.05					0.00	0.00		0.00	0.00						0.00

Consumer Products	18.18					0.00	0.00		0.00	0.00						0.00
Hearth	243.66	4.33	359.87	0.34		0.00	52.36		0.00	52.35	5,950.69	5,380.94		11.84	0.40	11,704.96
Landscaping	1.17	0.44	38.61	0.00		0.00	0.21		0.00	0.21		69.47		0.07		70.87
Total	**270.06**	**4.77**	**398.48**	**0.34**		**0.00**	**52.57**		**0.00**	**52.56**	**5,950.69**	**5,450.41**		**11.91**	**0.40**	**11,775.83**

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	7.05					0.00	0.00		0.00	0.00						0.00
Consumer Products	18.18					0.00	0.00		0.00	0.00						0.00
Hearth	243.66	4.33	359.87	0.34		0.00	52.36		0.00	52.35	5,950.69	5,380.94		11.84	0.40	11,704.96
Landscaping	1.17	0.44	38.61	0.00		0.00	0.21		0.00	0.21		69.47		0.07		70.87
Total	**270.06**	**4.77**	**398.48**	**0.34**		**0.00**	**52.57**		**0.00**	**52.56**	**5,950.69**	**5,450.41**		**11.91**	**0.40**	**11,775.83**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 4 - Construction

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	3.7	Acre
Congregate Care (Assisted Living)	200	Dwelling Unit
Congregate Care (Assisted Living)	171	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

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					
2015	24.30	192.44	101.84	0.23	0.61	8.69	9.30	0.01	8.69	8.70	0.00	25,673.24	0.00	2.16	0.00	25,718.58
2016	6.39	38.24	43.90	0.09	3.85	2.22	6.08	0.06	2.20	2.26	0.00	8,366.90	0.00	0.58	0.00	8,379.06
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					
2015	18.66	118.49	127.10	0.23	0.56	7.80	8.36	0.01	7.80	7.81	0.00	25,673.24	0.00	2.16	0.00	25,718.58
2016	11.11	34.86	46.29	0.09	3.85	2.42	6.27	0.06	2.40	2.45	0.00	8,366.90	0.00	0.58	0.00	8,379.06
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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Energy	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
Mobile	6.20	13.36	62.53	0.11	12.50	0.63	13.13	0.17	0.62	0.79		10,708.94		0.42		10,717.79
Total	**409.77**	**21.67**	**672.33**	**0.67**	**12.50**	**0.63**	**97.47**	**0.17**	**0.62**	**85.12**	**9,557.17**	**20,667.21**		**19.51**	**0.67**	**30,841.67**

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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Energy	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
Mobile	6.20	13.36	62.53	0.11	12.50	0.63	13.13	0.17	0.62	0.79		10,708.94		0.42		10,717.79
Total	**409.77**	**21.67**	**672.33**	**0.67**	**12.50**	**0.63**	**97.47**	**0.17**	**0.62**	**85.12**	**9,557.17**	**20,667.21**		**19.51**	**0.67**	**30,841.67**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Demolition - 2015

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					0.19	0.00	0.19	0.00	0.00	0.00						0.00
Off-Road	2.08	13.52	10.39	0.02		1.08	1.08		1.08	1.08		1,530.72		0.19		1,534.66
Total	**2.08**	**13.52**	**10.39**	**0.02**	**0.19**	**1.08**	**1.27**	**0.00**	**1.08**	**1.08**		**1,530.72**		**0.19**		**1,534.66**

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	0.01	0.14	0.06	0.00	0.12	0.01	0.12	0.00	0.00	0.00		24.41		0.00		24.42
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	0.05	0.46	0.00	0.10	0.00	0.11	0.00	0.00	0.00		80.08		0.00		80.18
Total	**0.05**	**0.19**	**0.52**	**0.00**	**0.22**	**0.01**	**0.23**	**0.00**	**0.00**	**0.00**		**104.49**		**0.00**		**104.60**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	3.85	10.06	9.97	0.02		0.81	0.81		0.81	0.81	0.00	1,530.72		0.19		1,534.66
Total	**3.85**	**10.06**	**9.97**	**0.02**	**0.07**	**0.81**	**0.88**	**0.00**	**0.81**	**0.81**	**0.00**	**1,530.72**		**0.19**		**1,534.66**

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	0.01	0.14	0.06	0.00	0.12	0.01	0.12	0.00	0.00	0.00		24.41		0.00		24.42

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	0.05	0.46	0.00	0.10	0.00	0.11	0.00	0.00	0.00		80.08		0.00		80.18
Total	**0.05**	**0.19**	**0.52**	**0.00**	**0.22**	**0.01**	**0.23**	**0.00**	**0.00**	**0.00**		**104.49**		**0.00**		**104.60**

3.3 Site Preparation - 2015

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					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	3.82	23.40	17.42	0.03		1.96	1.96		1.96	1.96		2,462.41		0.34		2,469.63
Total	**3.82**	**23.40**	**17.42**	**0.03**	**0.18**	**1.96**	**2.14**	**0.00**	**1.96**	**1.96**		**2,462.41**		**0.34**		**2,469.63**

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	0.75	0.00	0.17	0.01	0.18	0.00	0.01	0.01		130.13		0.01		130.29
Total	**0.07**	**0.07**	**0.75**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**130.13**		**0.01**		**130.29**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.41		0.34		2,469.63
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.41**		**0.34**		**2,469.63**

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	0.75	0.00	0.17	0.01	0.18	0.00	0.01	0.01		130.13		0.01		130.29
Total	**0.07**	**0.07**	**0.75**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**130.13**		**0.01**		**130.29**

3.4 Grading - 2015

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					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	24.10	192.21	99.53	0.23		8.68	8.68		8.68	8.68		25,272.84		2.14		25,317.70
Total	**24.10**	**192.21**	**99.53**	**0.23**	**0.09**	**8.68**	**8.77**	**0.00**	**8.68**	**8.68**		**25,272.84**		**2.14**		**25,317.70**

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	0.21	0.23	2.30	0.00	0.52	0.02	0.54	0.01	0.02	0.02		400.40		0.02		400.88
Total	**0.21**	**0.23**	**2.30**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**400.40**		**0.02**		**400.88**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		2.14		25,317.70
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**2.14**		**25,317.70**

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	0.21	0.23	2.30	0.00	0.52	0.02	0.54	0.01	0.02	0.02		400.40		0.02		400.88
Total	**0.21**	**0.23**	**2.30**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**400.40**		**0.02**		**400.88**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.63	31.35	26.60	0.05		1.92	1.92		1.92	1.92		4,663.08		0.41		4,671.76
Total	**4.63**	**31.35**	**26.60**	**0.05**		**1.92**	**1.92**		**1.92**	**1.92**		**4,663.08**		**0.41**		**4,671.76**

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	0.46	5.49	3.09	0.01	0.37	0.18	0.55	0.01	0.16	0.17		1,095.28		0.02		1,095.76
Worker	1.30	1.40	14.21	0.03	3.48	0.12	3.61	0.05	0.11	0.16		2,608.54		0.14		2,611.54
Total	**1.76**	**6.89**	**17.30**	**0.04**	**3.85**	**0.30**	**4.16**	**0.06**	**0.27**	**0.33**		**3,703.82**		**0.16**		**3,707.30**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.41		4,671.76
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.41**		**4,671.76**

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	0.46	5.49	3.09	0.01	0.37	0.18	0.55	0.01	0.16	0.17		1,095.28		0.02		1,095.76
Worker	1.30	1.40	14.21	0.03	3.48	0.12	3.61	0.05	0.11	0.16		2,608.54		0.14		2,611.54
Total	**1.76**	**6.89**	**17.30**	**0.04**	**3.85**	**0.30**	**4.16**	**0.06**	**0.27**	**0.33**		**3,703.82**		**0.16**		**3,707.30**

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	6.20	13.36	62.53	0.11	12.50	0.63	13.13	0.17	0.62	0.79		10,708.94		0.42		10,717.79
Unmitigated	6.20	13.36	62.53	0.11	12.50	0.63	13.13	0.17	0.62	0.79		10,708.94		0.42		10,717.79
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
City Park	5.88	5.88	5.88	14,509	14,509
Congregate Care (Assisted Living)	548.00	440.00	488.00	1,939,146	1,939,146
Congregate Care (Assisted Living)	468.54	376.20	417.24	1,657,970	1,657,970
Total	1,022.42	822.08	911.12	3,611,625	3,611,625

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60

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	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
NaturalGas Unmitigated	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	4937.87	0.05	0.46	0.19	0.00		0.00	0.04		0.00	0.04		580.93		0.01	0.01	584.46
Congregate Care (Assisted Living)	5775.29	0.06	0.53	0.23	0.00		0.00	0.04		0.00	0.04		679.45		0.01	0.01	683.58
Total		**0.11**	**0.99**	**0.42**	**0.00**		**0.00**	**0.08**		**0.00**	**0.08**		**1,260.38**		**0.02**	**0.02**	**1,268.04**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00

Congregate Care (Assisted Living)	4.93787	0.05	0.46	0.19	0.00		0.00	0.04		0.00	0.04		580.93		0.01	0.01	584.46
Congregate Care (Assisted Living)	5.77529	0.06	0.53	0.23	0.00		0.00	0.04		0.00	0.04		679.45		0.01	0.01	683.58
Total		**0.11**	**0.99**	**0.42**	**0.00**		**0.00**	**0.08**		**0.00**	**0.08**		**1,260.38**		**0.02**	**0.02**	**1,268.04**

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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Unmitigated	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
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	3.18					0.00	0.00		0.00	0.00						0.00
Consumer Products	7.94					0.00	0.00		0.00	0.00						0.00

Hearth	391.34	6.96	577.97	0.55		0.00	84.09		0.00	84.08	9,557.17	8,642.12		19.02	0.65	18,798.87
Landscaping	0.99	0.37	31.41	0.00		0.00	0.17		0.00	0.17		55.78		0.06		56.98
Total	**403.45**	**7.33**	**609.38**	**0.55**		**0.00**	**84.26**		**0.00**	**84.25**	**9,557.17**	**8,697.90**		**19.08**	**0.65**	**18,855.85**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.18					0.00	0.00		0.00	0.00						0.00
Consumer Products	7.94					0.00	0.00		0.00	0.00						0.00
Hearth	391.34	6.96	577.97	0.55		0.00	84.09		0.00	84.08	9,557.17	8,642.12		19.02	0.65	18,798.87
Landscaping	0.99	0.37	31.41	0.00		0.00	0.17		0.00	0.17		55.78		0.06		56.98
Total	**403.45**	**7.33**	**609.38**	**0.55**		**0.00**	**84.26**		**0.00**	**84.25**	**9,557.17**	**8,697.90**		**19.08**	**0.65**	**18,855.85**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 4 - Construction

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	3.7	Acre
Congregate Care (Assisted Living)	200	Dwelling Unit
Congregate Care (Assisted Living)	171	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	9.85	28.29	21.18	0.03	0.69	2.36	2.55	0.01	2.36	2.36	0.00	3,064.19	0.00	0.42	0.00	3,073.01
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					
2016	11.98	15.48	19.79	0.03	0.69	1.55	1.74	0.01	1.55	1.55	0.00	3,064.19	0.00	0.42	0.00	3,073.01
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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Energy	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
Mobile	6.20	13.36	62.53	0.11	12.50	0.63	13.13	0.17	0.62	0.79		10,708.94		0.42		10,717.79
Total	**409.77**	**21.67**	**672.33**	**0.67**	**12.50**	**0.63**	**97.47**	**0.17**	**0.62**	**85.12**	**9,557.17**	**20,667.21**		**19.51**	**0.67**	**30,841.67**

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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Energy	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
Mobile	6.20	13.36	62.53	0.11	12.50	0.63	13.13	0.17	0.62	0.79		10,708.94		0.42		10,717.79
Total	**409.77**	**21.67**	**672.33**	**0.67**	**12.50**	**0.63**	**97.47**	**0.17**	**0.62**	**85.12**	**9,557.17**	**20,667.21**		**19.51**	**0.67**	**30,841.67**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35		2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**4.58**	**28.21**	**20.38**	**0.03**		**2.35**	**2.35**		**2.35**	**2.35**		**2,917.64**		**0.41**		**2,926.29**

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	0.00	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	0.08	0.80	0.00	0.20	0.01	0.20	0.00	0.01	0.01		146.55		0.01		146.72
Total	**0.07**	**0.08**	**0.80**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**146.55**		**0.01**		**146.72**

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	2.57	15.40	19.00	0.03		1.54	1.54		1.54	1.54	0.00	2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.57**	**15.40**	**19.00**	**0.03**		**1.54**	**1.54**		**1.54**	**1.54**	**0.00**	**2,917.64**		**0.41**		**2,926.29**

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	0.00	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	0.08	0.80	0.00	0.20	0.01	0.20	0.00	0.01	0.01		146.55		0.01		146.72
Total	**0.07**	**0.08**	**0.80**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**146.55**		**0.01**		**146.72**

3.3 architectural coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.85					0.00	0.00		0.00	0.00						0.00

Off-Road	0.74	4.74	3.76	0.01		0.39	0.39		0.39	0.39		562.38		0.07		563.77
Total	**9.59**	**4.74**	**3.76**	**0.01**		**0.39**	**0.39**		**0.39**	**0.39**		**562.38**		**0.07**		**563.77**

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	0.26	0.28	2.82	0.01	0.69	0.02	0.72	0.01	0.02	0.03		517.80		0.03		518.40
Total	**0.26**	**0.28**	**2.82**	**0.01**	**0.69**	**0.02**	**0.72**	**0.01**	**0.02**	**0.03**		**517.80**		**0.03**		**518.40**

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	8.85					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.07		563.77
Total	**11.72**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.07**		**563.77**

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	0.26	0.28	2.82	0.01	0.69	0.02	0.72	0.01	0.02	0.03		517.80		0.03		518.40
Total	**0.26**	**0.28**	**2.82**	**0.01**	**0.69**	**0.02**	**0.72**	**0.01**	**0.02**	**0.03**		**517.80**		**0.03**		**518.40**

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	6.20	13.36	62.53	0.11	12.50	0.63	13.13	0.17	0.62	0.79		10,708.94		0.42		10,717.79
Unmitigated	6.20	13.36	62.53	0.11	12.50	0.63	13.13	0.17	0.62	0.79		10,708.94		0.42		10,717.79
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
City Park	5.88	5.88	5.88	14,509	14,509
Congregate Care (Assisted Living)	548.00	440.00	488.00	1,939,146	1,939,146
Congregate Care (Assisted Living)	468.54	376.20	417.24	1,657,970	1,657,970
Total	1,022.42	822.08	911.12	3,611,625	3,611,625

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60

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	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
NaturalGas Unmitigated	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	4937.87	0.05	0.46	0.19	0.00		0.00	0.04		0.00	0.04		580.93		0.01	0.01	584.46
Congregate Care (Assisted Living)	5775.29	0.06	0.53	0.23	0.00		0.00	0.04		0.00	0.04		679.45		0.01	0.01	683.58
Total		**0.11**	**0.99**	**0.42**	**0.00**		**0.00**	**0.08**		**0.00**	**0.08**		**1,260.38**		**0.02**	**0.02**	**1,268.04**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	4.93787	0.05	0.46	0.19	0.00		0.00	0.04		0.00	0.04		580.93		0.01	0.01	584.46
Congregate Care (Assisted Living)	5.77529	0.06	0.53	0.23	0.00		0.00	0.04		0.00	0.04		679.45		0.01	0.01	683.58
Total		**0.11**	**0.99**	**0.42**	**0.00**		**0.00**	**0.08**		**0.00**	**0.08**		**1,260.38**		**0.02**	**0.02**	**1,268.04**

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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Unmitigated	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
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	3.18					0.00	0.00		0.00	0.00						0.00
Consumer Products	7.94					0.00	0.00		0.00	0.00						0.00
Hearth	391.34	6.96	577.97	0.55		0.00	84.09		0.00	84.08	9,557.17	8,642.12		19.02	0.65	18,798.87
Landscaping	0.99	0.37	31.41	0.00		0.00	0.17		0.00	0.17		55.78		0.06		56.98
Total	**403.45**	**7.33**	**609.38**	**0.55**		**0.00**	**84.26**		**0.00**	**84.25**	**9,557.17**	**8,697.90**		**19.08**	**0.65**	**18,855.85**

Mitigated

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

Architectural Coating	3.18					0.00	0.00		0.00	0.00						0.00
Consumer Products	7.94					0.00	0.00		0.00	0.00						0.00
Hearth	391.34	6.96	577.97	0.55		0.00	84.09		0.00	84.08	9,557.17	8,642.12		19.02	0.65	18,798.87
Landscaping	0.99	0.37	31.41	0.00		0.00	0.17		0.00	0.17		55.78		0.06		56.98
Total	**403.45**	**7.33**	**609.38**	**0.55**		**0.00**	**84.26**		**0.00**	**84.25**	**9,557.17**	**8,697.90**		**19.08**	**0.65**	**18,855.85**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 4 - Construction

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	3.7	Acre
Congregate Care (Assisted Living)	200	Dwelling Unit
Congregate Care (Assisted Living)	171	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

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					
2015	24.32	192.46	101.71	0.23	0.61	8.69	9.30	0.01	8.69	8.70	0.00	25,642.39	0.00	2.16	0.00	25,687.71
2016	6.53	38.43	43.58	0.09	3.85	2.23	6.08	0.06	2.20	2.26	0.00	8,156.32	0.00	0.57	0.00	8,168.37
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					
2015	18.67	118.51	126.98	0.23	0.56	7.80	8.36	0.01	7.80	7.81	0.00	25,642.39	0.00	2.16	0.00	25,687.71
2016	11.25	35.05	45.96	0.09	3.85	2.42	6.28	0.06	2.40	2.46	0.00	8,156.32	0.00	0.57	0.00	8,168.37
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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Energy	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
Mobile	6.58	14.01	60.72	0.11	12.50	0.64	13.13	0.17	0.62	0.79		10,022.76		0.43		10,031.78
Total	**410.15**	**22.32**	**670.52**	**0.67**	**12.50**	**0.64**	**97.47**	**0.17**	**0.62**	**85.12**	**9,557.17**	**19,981.03**		**19.52**	**0.67**	**30,155.66**

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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Energy	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
Mobile	6.58	14.01	60.72	0.11	12.50	0.64	13.13	0.17	0.62	0.79		10,022.76		0.43		10,031.78
Total	**410.15**	**22.32**	**670.52**	**0.67**	**12.50**	**0.64**	**97.47**	**0.17**	**0.62**	**85.12**	**9,557.17**	**19,981.03**		**19.52**	**0.67**	**30,155.66**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Demolition - 2015

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					0.19	0.00	0.19	0.00	0.00	0.00						0.00
Off-Road	2.08	13.52	10.39	0.02		1.08	1.08		1.08	1.08		1,530.72		0.19		1,534.66
Total	**2.08**	**13.52**	**10.39**	**0.02**	**0.19**	**1.08**	**1.27**	**0.00**	**1.08**	**1.08**		**1,530.72**		**0.19**		**1,534.66**

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	0.01	0.14	0.07	0.00	0.12	0.01	0.12	0.00	0.00	0.01		24.27		0.00		24.29
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	0.05	0.05	0.44	0.00	0.10	0.00	0.11	0.00	0.00	0.00		73.91		0.00		74.00
Total	**0.06**	**0.19**	**0.51**	**0.00**	**0.22**	**0.01**	**0.23**	**0.00**	**0.00**	**0.01**		**98.18**		**0.00**		**98.29**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	3.85	10.06	9.97	0.02		0.81	0.81		0.81	0.81	0.00	1,530.72		0.19		1,534.66
Total	**3.85**	**10.06**	**9.97**	**0.02**	**0.07**	**0.81**	**0.88**	**0.00**	**0.81**	**0.81**	**0.00**	**1,530.72**		**0.19**		**1,534.66**

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	0.01	0.14	0.07	0.00	0.12	0.01	0.12	0.00	0.00	0.01		24.27		0.00		24.29

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	0.05	0.05	0.44	0.00	0.10	0.00	0.11	0.00	0.00	0.00		73.91		0.00		74.00
Total	**0.06**	**0.19**	**0.51**	**0.00**	**0.22**	**0.01**	**0.23**	**0.00**	**0.00**	**0.01**		**98.18**		**0.00**		**98.29**

3.3 Site Preparation - 2015

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					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	3.82	23.40	17.42	0.03		1.96	1.96		1.96	1.96		2,462.41		0.34		2,469.63
Total	**3.82**	**23.40**	**17.42**	**0.03**	**0.18**	**1.96**	**2.14**	**0.00**	**1.96**	**1.96**		**2,462.41**		**0.34**		**2,469.63**

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	0.08	0.71	0.00	0.17	0.01	0.18	0.00	0.01	0.01		120.10		0.01		120.25
Total	**0.07**	**0.08**	**0.71**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**120.10**		**0.01**		**120.25**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.41		0.34		2,469.63
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.41**		**0.34**		**2,469.63**

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	0.08	0.71	0.00	0.17	0.01	0.18	0.00	0.01	0.01		120.10		0.01		120.25
Total	**0.07**	**0.08**	**0.71**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**120.10**		**0.01**		**120.25**

3.4 Grading - 2015

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					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	24.10	192.21	99.53	0.23		8.68	8.68		8.68	8.68		25,272.84		2.14		25,317.70
Total	**24.10**	**192.21**	**99.53**	**0.23**	**0.09**	**8.68**	**8.77**	**0.00**	**8.68**	**8.68**		**25,272.84**		**2.14**		**25,317.70**

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	0.23	0.25	2.18	0.00	0.52	0.02	0.54	0.01	0.02	0.02		369.55		0.02		370.01
Total	**0.23**	**0.25**	**2.18**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**369.55**		**0.02**		**370.01**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		2.14		25,317.70
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**2.14**		**25,317.70**

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	0.23	0.25	2.18	0.00	0.52	0.02	0.54	0.01	0.02	0.02		369.55		0.02		370.01
Total	**0.23**	**0.25**	**2.18**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**369.55**		**0.02**		**370.01**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.63	31.35	26.60	0.05		1.92	1.92		1.92	1.92		4,663.08		0.41		4,671.76
Total	**4.63**	**31.35**	**26.60**	**0.05**		**1.92**	**1.92**		**1.92**	**1.92**		**4,663.08**		**0.41**		**4,671.76**

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	0.49	5.55	3.56	0.01	0.37	0.18	0.55	0.01	0.17	0.18		1,086.09		0.02		1,086.60
Worker	1.41	1.53	13.41	0.03	3.48	0.12	3.61	0.05	0.11	0.16		2,407.15		0.14		2,410.01
Total	**1.90**	**7.08**	**16.97**	**0.04**	**3.85**	**0.30**	**4.16**	**0.06**	**0.28**	**0.34**		**3,493.24**		**0.16**		**3,496.61**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.41		4,671.76
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.41**		**4,671.76**

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	0.49	5.55	3.56	0.01	0.37	0.18	0.55	0.01	0.17	0.18		1,086.09		0.02		1,086.60
Worker	1.41	1.53	13.41	0.03	3.48	0.12	3.61	0.05	0.11	0.16		2,407.15		0.14		2,410.01
Total	**1.90**	**7.08**	**16.97**	**0.04**	**3.85**	**0.30**	**4.16**	**0.06**	**0.28**	**0.34**		**3,493.24**		**0.16**		**3,496.61**

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	6.58	14.01	60.72	0.11	12.50	0.64	13.13	0.17	0.62	0.79		10,022.76		0.43		10,031.78
Unmitigated	6.58	14.01	60.72	0.11	12.50	0.64	13.13	0.17	0.62	0.79		10,022.76		0.43		10,031.78
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
City Park	5.88	5.88	5.88	14,509	14,509
Congregate Care (Assisted Living)	548.00	440.00	488.00	1,939,146	1,939,146
Congregate Care (Assisted Living)	468.54	376.20	417.24	1,657,970	1,657,970
Total	1,022.42	822.08	911.12	3,611,625	3,611,625

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60

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	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
NaturalGas Unmitigated	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	4937.87	0.05	0.46	0.19	0.00		0.00	0.04		0.00	0.04		580.93		0.01	0.01	584.46
Congregate Care (Assisted Living)	5775.29	0.06	0.53	0.23	0.00		0.00	0.04		0.00	0.04		679.45		0.01	0.01	683.58
Total		**0.11**	**0.99**	**0.42**	**0.00**		**0.00**	**0.08**		**0.00**	**0.08**		**1,260.38**		**0.02**	**0.02**	**1,268.04**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00

Congregate Care (Assisted Living)	4.93787	0.05	0.46	0.19	0.00		0.00	0.04		0.00	0.04		580.93		0.01	0.01	584.46
Congregate Care (Assisted Living)	5.77529	0.06	0.53	0.23	0.00		0.00	0.04		0.00	0.04		679.45		0.01	0.01	683.58
Total		**0.11**	**0.99**	**0.42**	**0.00**		**0.00**	**0.08**		**0.00**	**0.08**		**1,260.38**		**0.02**	**0.02**	**1,268.04**

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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Unmitigated	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
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	3.18					0.00	0.00		0.00	0.00						0.00
Consumer Products	7.94					0.00	0.00		0.00	0.00						0.00

Hearth	391.34	6.96	577.97	0.55		0.00	84.09		0.00	84.08	9,557.17	8,642.12		19.02	0.65	18,798.87
Landscaping	0.99	0.37	31.41	0.00		0.00	0.17		0.00	0.17		55.78		0.06		56.98
Total	**403.45**	**7.33**	**609.38**	**0.55**		**0.00**	**84.26**		**0.00**	**84.25**	**9,557.17**	**8,697.90**		**19.08**	**0.65**	**18,855.85**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.18					0.00	0.00		0.00	0.00						0.00
Consumer Products	7.94					0.00	0.00		0.00	0.00						0.00
Hearth	391.34	6.96	577.97	0.55		0.00	84.09		0.00	84.08	9,557.17	8,642.12		19.02	0.65	18,798.87
Landscaping	0.99	0.37	31.41	0.00		0.00	0.17		0.00	0.17		55.78		0.06		56.98
Total	**403.45**	**7.33**	**609.38**	**0.55**		**0.00**	**84.26**		**0.00**	**84.25**	**9,557.17**	**8,697.90**		**19.08**	**0.65**	**18,855.85**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 4 - Construction

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	3.7	Acre
Congregate Care (Assisted Living)	200	Dwelling Unit
Congregate Care (Assisted Living)	171	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	9.87	28.30	21.13	0.03	0.69	2.36	2.55	0.01	2.36	2.36	0.00	3,052.88	0.00	0.42	0.00	3,061.69
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					
2016	12.00	15.49	19.75	0.03	0.69	1.55	1.74	0.01	1.55	1.55	0.00	3,052.88	0.00	0.42	0.00	3,061.69
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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Energy	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
Mobile	6.58	14.01	60.72	0.11	12.50	0.64	13.13	0.17	0.62	0.79		10,022.76		0.43		10,031.78
Total	**410.15**	**22.32**	**670.52**	**0.67**	**12.50**	**0.64**	**97.47**	**0.17**	**0.62**	**85.12**	**9,557.17**	**19,981.03**		**19.52**	**0.67**	**30,155.66**

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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Energy	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
Mobile	6.58	14.01	60.72	0.11	12.50	0.64	13.13	0.17	0.62	0.79		10,022.76		0.43		10,031.78
Total	**410.15**	**22.32**	**670.52**	**0.67**	**12.50**	**0.64**	**97.47**	**0.17**	**0.62**	**85.12**	**9,557.17**	**19,981.03**		**19.52**	**0.67**	**30,155.66**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.58	28.21	20.38	0.03		2.35	2.35		2.35	2.35		2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**4.58**	**28.21**	**20.38**	**0.03**		**2.35**	**2.35**		**2.35**	**2.35**		**2,917.64**		**0.41**		**2,926.29**

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	0.00	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	0.08	0.09	0.75	0.00	0.20	0.01	0.20	0.00	0.01	0.01		135.23		0.01		135.39
Total	**0.08**	**0.09**	**0.75**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**135.23**		**0.01**		**135.39**

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	2.57	15.40	19.00	0.03		1.54	1.54		1.54	1.54	0.00	2,917.64		0.41		2,926.29
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.57**	**15.40**	**19.00**	**0.03**		**1.54**	**1.54**		**1.54**	**1.54**	**0.00**	**2,917.64**		**0.41**		**2,926.29**

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	0.00	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	0.08	0.09	0.75	0.00	0.20	0.01	0.20	0.00	0.01	0.01		135.23		0.01		135.39
Total	**0.08**	**0.09**	**0.75**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**135.23**		**0.01**		**135.39**

3.3 architectural coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.85					0.00	0.00		0.00	0.00						0.00

Off-Road	0.74	4.74	3.76	0.01		0.39	0.39		0.39	0.39		562.38		0.07		563.77
Total	**9.59**	**4.74**	**3.76**	**0.01**		**0.39**	**0.39**		**0.39**	**0.39**		**562.38**		**0.07**		**563.77**

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	0.28	0.30	2.66	0.01	0.69	0.02	0.72	0.01	0.02	0.03		477.82		0.03		478.39
Total	**0.28**	**0.30**	**2.66**	**0.01**	**0.69**	**0.02**	**0.72**	**0.01**	**0.02**	**0.03**		**477.82**		**0.03**		**478.39**

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	8.85					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.07		563.77
Total	**11.72**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.07**		**563.77**

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	0.28	0.30	2.66	0.01	0.69	0.02	0.72	0.01	0.02	0.03		477.82		0.03		478.39
Total	**0.28**	**0.30**	**2.66**	**0.01**	**0.69**	**0.02**	**0.72**	**0.01**	**0.02**	**0.03**		**477.82**		**0.03**		**478.39**

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	6.58	14.01	60.72	0.11	12.50	0.64	13.13	0.17	0.62	0.79		10,022.76		0.43		10,031.78
Unmitigated	6.58	14.01	60.72	0.11	12.50	0.64	13.13	0.17	0.62	0.79		10,022.76		0.43		10,031.78
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
City Park	5.88	5.88	5.88	14,509	14,509
Congregate Care (Assisted Living)	548.00	440.00	488.00	1,939,146	1,939,146
Congregate Care (Assisted Living)	468.54	376.20	417.24	1,657,970	1,657,970
Total	1,022.42	822.08	911.12	3,611,625	3,611,625

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60

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	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
NaturalGas Unmitigated	0.12	0.99	0.42	0.01		0.00	0.08		0.00	0.08		1,260.37		0.02	0.02	1,268.04
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	4937.87	0.05	0.46	0.19	0.00		0.00	0.04		0.00	0.04		580.93		0.01	0.01	584.46
Congregate Care (Assisted Living)	5775.29	0.06	0.53	0.23	0.00		0.00	0.04		0.00	0.04		679.45		0.01	0.01	683.58
Total		**0.11**	**0.99**	**0.42**	**0.00**		**0.00**	**0.08**		**0.00**	**0.08**		**1,260.38**		**0.02**	**0.02**	**1,268.04**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	4.93787	0.05	0.46	0.19	0.00		0.00	0.04		0.00	0.04		580.93		0.01	0.01	584.46
Congregate Care (Assisted Living)	5.77529	0.06	0.53	0.23	0.00		0.00	0.04		0.00	0.04		679.45		0.01	0.01	683.58
Total		**0.11**	**0.99**	**0.42**	**0.00**		**0.00**	**0.08**		**0.00**	**0.08**		**1,260.38**		**0.02**	**0.02**	**1,268.04**

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	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
Unmitigated	403.45	7.32	609.38	0.55		0.00	84.26		0.00	84.25	9,557.17	8,697.90		19.07	0.65	18,855.84
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	3.18					0.00	0.00		0.00	0.00						0.00
Consumer Products	7.94					0.00	0.00		0.00	0.00						0.00
Hearth	391.34	6.96	577.97	0.55		0.00	84.09		0.00	84.08	9,557.17	8,642.12		19.02	0.65	18,798.87
Landscaping	0.99	0.37	31.41	0.00		0.00	0.17		0.00	0.17		55.78		0.06		56.98
Total	**403.45**	**7.33**	**609.38**	**0.55**		**0.00**	**84.26**		**0.00**	**84.25**	**9,557.17**	**8,697.90**		**19.08**	**0.65**	**18,855.85**

Mitigated

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

Architectural Coating	3.18					0.00	0.00		0.00	0.00						0.00
Consumer Products	7.94					0.00	0.00		0.00	0.00						0.00
Hearth	391.34	6.96	577.97	0.55		0.00	84.09		0.00	84.08	9,557.17	8,642.12		19.02	0.65	18,798.87
Landscaping	0.99	0.37	31.41	0.00		0.00	0.17		0.00	0.17		55.78		0.06		56.98
Total	**403.45**	**7.33**	**609.38**	**0.55**		**0.00**	**84.26**		**0.00**	**84.25**	**9,557.17**	**8,697.90**		**19.08**	**0.65**	**18,855.85**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 5 - Construction

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Place of Worship	233.05	1000sqft
City Park	2.1	Acre
Congregate Care (Assisted Living)	297	Dwelling Unit
Strip Mall	2.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013 & from 2013 traffic study (ChenRyan)

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Demolition -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	3.63	21.82	17.99	0.03	0.67	1.78	2.13	0.00	1.78	1.78	0.00	2,589.42	0.00	0.33	0.00	2,596.29
2017	21.71	162.71	94.29	0.23	4.73	7.18	7.79	0.07	7.18	7.19	0.00	25,654.77	0.00	1.95	0.00	25,695.63
2018	5.91	35.79	45.22	0.10	4.73	1.88	6.61	0.07	1.85	1.92	0.00	9,508.19	0.00	0.52	0.00	9,519.17
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					
2016	3.92	13.07	16.72	0.03	0.54	1.31	1.54	0.00	1.31	1.31	0.00	2,589.42	0.00	0.33	0.00	2,596.29
2017	18.63	118.46	126.76	0.23	4.73	7.80	8.36	0.07	7.80	7.81	0.00	25,654.77	0.00	1.95	0.00	25,695.63
2018	11.41	37.88	47.97	0.10	4.73	2.54	7.27	0.07	2.51	2.58	0.00	9,508.19	0.00	0.52	0.00	9,519.17
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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20

Energy	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
Mobile	37.13	71.89	331.67	0.54	58.36	3.08	61.44	0.81	2.99	3.80		51,054.65		2.12		51,099.21
Total	**210.15**	**76.49**	**588.94**	**0.77**	**58.36**	**3.08**	**95.35**	**0.81**	**2.99**	**37.71**	**3,825.44**	**56,454.93**		**9.82**	**0.29**	**60,577.40**

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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
Energy	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
Mobile	37.13	71.89	331.67	0.54	58.36	3.08	61.44	0.81	2.99	3.80		51,054.65		2.12		51,099.21
Total	**210.15**	**76.49**	**588.94**	**0.77**	**58.36**	**3.08**	**95.35**	**0.81**	**2.99**	**37.71**	**3,825.44**	**56,454.93**		**9.82**	**0.29**	**60,577.40**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.22	0.00	0.22	0.00	0.00	0.00						0.00
Off-Road	1.92	12.53	10.32	0.02		0.97	0.97		0.97	0.97		1,530.72		0.17		1,534.32
Total	**1.92**	**12.53**	**10.32**	**0.02**	**0.22**	**0.97**	**1.19**	**0.00**	**0.97**	**0.97**		**1,530.72**		**0.17**		**1,534.32**

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	0.04	0.44	0.20	0.00	0.35	0.02	0.37	0.00	0.01	0.02		83.15		0.00		83.19
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	0.43	0.00	0.10	0.00	0.11	0.00	0.00	0.00		78.16		0.00		78.25
Total	**0.08**	**0.48**	**0.63**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.02**		**161.31**		**0.00**		**161.44**

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					0.08	0.00	0.08	0.00	0.00	0.00						0.00
Off-Road	3.85	10.06	9.97	0.02		0.81	0.81		0.81	0.81	0.00	1,530.72		0.17		1,534.32
Total	**3.85**	**10.06**	**9.97**	**0.02**	**0.08**	**0.81**	**0.89**	**0.00**	**0.81**	**0.81**	**0.00**	**1,530.72**		**0.17**		**1,534.32**

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	0.04	0.44	0.20	0.00	0.35	0.02	0.37	0.00	0.01	0.02		83.15		0.00		83.19
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	0.43	0.00	0.10	0.00	0.11	0.00	0.00	0.00		78.16		0.00		78.25
Total	**0.08**	**0.48**	**0.63**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.02**		**161.31**		**0.00**		**161.44**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	3.56	21.75	17.30	0.03		1.78	1.78		1.78	1.78		2,462.41		0.32		2,469.13
Total	**3.56**	**21.75**	**17.30**	**0.03**	**0.18**	**1.78**	**1.96**	**0.00**	**1.78**	**1.78**		**2,462.41**		**0.32**		**2,469.13**

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	0.06	0.07	0.69	0.00	0.17	0.01	0.18	0.00	0.01	0.01		127.01		0.01		127.15
Total	**0.06**	**0.07**	**0.69**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**127.01**		**0.01**		**127.15**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.41		0.32		2,469.13
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.41**		**0.32**		**2,469.13**

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	0.06	0.07	0.69	0.00	0.17	0.01	0.18	0.00	0.01	0.01		127.01		0.01		127.15
Total	**0.06**	**0.07**	**0.69**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**127.01**		**0.01**		**127.15**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	3.32	20.22	17.19	0.03		1.61	1.61		1.61	1.61		2,462.41		0.30		2,468.68
Total	**3.32**	**20.22**	**17.19**	**0.03**	**0.18**	**1.61**	**1.79**	**0.00**	**1.61**	**1.61**		**2,462.41**		**0.30**		**2,468.68**

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	0.06	0.06	0.64	0.00	0.17	0.01	0.18	0.00	0.01	0.01		124.13		0.01		124.26
Total	**0.06**	**0.06**	**0.64**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**124.13**		**0.01**		**124.26**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.41		0.30		2,468.68
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.41**		**0.30**		**2,468.68**

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	0.06	0.06	0.64	0.00	0.17	0.01	0.18	0.00	0.01	0.01		124.13		0.01		124.26
Total	**0.06**	**0.06**	**0.64**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**124.13**		**0.01**		**124.26**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	21.53	162.52	92.33	0.23		7.17	7.17		7.17	7.17		25,272.84		1.93		25,313.29
Total	**21.53**	**162.52**	**92.33**	**0.23**	**0.09**	**7.17**	**7.26**	**0.00**	**7.17**	**7.17**		**25,272.84**		**1.93**		**25,313.29**

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	0.00	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	0.18	0.19	1.97	0.00	0.52	0.02	0.54	0.01	0.02	0.02		381.93		0.02		382.35
Total	**0.18**	**0.19**	**1.97**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**381.93**		**0.02**		**382.35**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		1.93		25,313.29
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**1.93**		**25,313.29**

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	0.00	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	0.18	0.19	1.97	0.00	0.52	0.02	0.54	0.01	0.02	0.02		381.93		0.02		382.35
Total	**0.18**	**0.19**	**1.97**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**381.93**		**0.02**		**382.35**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.23	28.54	26.41	0.05		1.69	1.69		1.69	1.69		4,663.08		0.38		4,670.98
Total	**4.23**	**28.54**	**26.41**	**0.05**		**1.69**	**1.69**		**1.69**	**1.69**		**4,663.08**		**0.38**		**4,670.98**

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	0.76	9.02	5.06	0.02	0.64	0.29	0.94	0.02	0.27	0.29		1,919.08		0.04		1,919.86
Worker	1.43	1.51	15.38	0.03	4.09	0.14	4.23	0.06	0.13	0.19		2,988.59		0.16		2,991.85
Total	**2.19**	**10.53**	**20.44**	**0.05**	**4.73**	**0.43**	**5.17**	**0.08**	**0.40**	**0.48**		**4,907.67**		**0.20**		**4,911.71**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.38		4,670.98
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.38**		**4,670.98**

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	0.76	9.02	5.06	0.02	0.64	0.29	0.94	0.02	0.27	0.29		1,919.08		0.04		1,919.86
Worker	1.43	1.51	15.38	0.03	4.09	0.14	4.23	0.06	0.13	0.19		2,988.59		0.16		2,991.85
Total	**2.19**	**10.53**	**20.44**	**0.05**	**4.73**	**0.43**	**5.17**	**0.08**	**0.40**	**0.48**		**4,907.67**		**0.20**		**4,911.71**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.85	25.89	26.24	0.05		1.46	1.46		1.46	1.46		4,663.08		0.34		4,670.27
Total	**3.85**	**25.89**	**26.24**	**0.05**		**1.46**	**1.46**		**1.46**	**1.46**		**4,663.08**		**0.34**		**4,670.27**

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	0.71	8.51	4.76	0.02	0.64	0.28	0.92	0.02	0.26	0.27		1,921.19		0.03		1,921.92

Worker	1.35	1.39	14.23	0.03	4.09	0.14	4.23	0.06	0.13	0.19		2,923.92		0.15		2,926.98
Total	**2.06**	**9.90**	**18.99**	**0.05**	**4.73**	**0.42**	**5.15**	**0.08**	**0.39**	**0.46**		**4,845.11**		**0.18**		**4,848.90**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.34		4,670.27
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.34**		**4,670.27**

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	0.71	8.51	4.76	0.02	0.64	0.28	0.92	0.02	0.26	0.27		1,921.19		0.03		1,921.92
Worker	1.35	1.39	14.23	0.03	4.09	0.14	4.23	0.06	0.13	0.19		2,923.92		0.15		2,926.98
Total	**2.06**	**9.90**	**18.99**	**0.05**	**4.73**	**0.42**	**5.15**	**0.08**	**0.39**	**0.46**		**4,845.11**		**0.18**		**4,848.90**

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	37.13	71.89	331.67	0.54	58.36	3.08	61.44	0.81	2.99	3.80		51,054.65		2.12		51,099.21
Unmitigated	37.13	71.89	331.67	0.54	58.36	3.08	61.44	0.81	2.99	3.80		51,054.65		2.12		51,099.21
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
City Park	3.34	3.34	3.34	8,235	8,235
Congregate Care (Assisted Living)	813.78	653.40	724.68	2,879,632	2,879,632
Place of Worship	2,123.09	2,416.73	8536.62	5,212,526	5,212,526
Strip Mall	110.80	105.10	51.08	161,917	161,917
Total	3,051.00	3,178.57	9,315.72	8,262,310	8,262,310

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Place of Worship	14.70	6.60	6.60	0.00	95.00	5.00
Strip Mall	14.70	6.60	6.60	16.60	64.40	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	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
NaturalGas Unmitigated	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	8576.3	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,008.98		0.02	0.02	1,015.12
Place of Worship	7527.83	0.08	0.74	0.62	0.00		0.00	0.06		0.00	0.06		885.63		0.02	0.02	891.02
Strip Mall	15.6849	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		1.85		0.00	0.00	1.86
Total		**0.17**	**1.53**	**0.96**	**0.01**		**0.00**	**0.12**		**0.00**	**0.12**		**1,896.46**		**0.04**	**0.04**	**1,908.00**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	8.5763	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,008.98		0.02	0.02	1,015.12
Place of Worship	7.52783	0.08	0.74	0.62	0.00		0.00	0.06		0.00	0.06		885.63		0.02	0.02	891.02
Strip Mall	0.0156849	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		1.85		0.00	0.00	1.86

Total		**0.17**	**1.53**	**0.96**	**0.01**		**0.00**	**0.12**		**0.00**	**0.12**		**1,896.46**		**0.04**	**0.04**	**1,908.00**

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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
Unmitigated	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
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	4.04					0.00	0.00		0.00	0.00						0.00
Consumer Products	11.40					0.00	0.00		0.00	0.00						0.00
Hearth	156.64	2.78	231.34	0.22		0.00	33.66		0.00	33.66	3,825.44	3,459.18		7.61	0.26	7,524.61
Landscaping	0.77	0.29	24.97	0.00		0.00	0.14		0.00	0.14		44.66		0.04		45.59
Total	**172.85**	**3.07**	**256.31**	**0.22**		**0.00**	**33.80**		**0.00**	**33.80**	**3,825.44**	**3,503.84**		**7.65**	**0.26**	**7,570.20**

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	4.04					0.00	0.00		0.00	0.00						0.00
Consumer Products	11.40					0.00	0.00		0.00	0.00						0.00
Hearth	156.64	2.78	231.34	0.22		0.00	33.66		0.00	33.66	3,825.44	3,459.18		7.61	0.26	7,524.61
Landscaping	0.77	0.29	24.97	0.00		0.00	0.14		0.00	0.14		44.66		0.04		45.59
Total	**172.85**	**3.07**	**256.31**	**0.22**		**0.00**	**33.80**		**0.00**	**33.80**	**3,825.44**	**3,503.84**		**7.65**	**0.26**	**7,570.20**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 5 - Construction

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Place of Worship	233.05	1000sqft
City Park	2.1	Acre
Congregate Care (Assisted Living)	297	Dwelling Unit
Strip Mall	2.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013 & from 2013 traffic study (ChenRyan)

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	12.29	26.49	20.97	0.03	0.82	2.18	2.37	0.01	2.18	2.18	0.00	3,060.87	0.00	0.39	0.00	3,069.14
2018	12.20	4.29	6.57	0.01	0.82	0.33	1.15	0.01	0.33	0.34	0.00	1,150.90	0.00	0.08	0.00	1,152.64
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					
2017	14.49	15.47	19.73	0.03	0.82	1.55	1.74	0.01	1.55	1.55	0.00	3,060.87	0.00	0.39	0.00	3,069.14
2018	14.48	5.13	6.52	0.01	0.82	0.33	1.15	0.01	0.32	0.33	0.00	1,150.90	0.00	0.08	0.00	1,152.64
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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
Energy	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
Mobile	37.13	71.89	331.67	0.54	58.36	3.08	61.44	0.81	2.99	3.80		51,054.65		2.12		51,099.21
Total	**210.15**	**76.49**	**588.94**	**0.77**	**58.36**	**3.08**	**95.35**	**0.81**	**2.99**	**37.71**	**3,825.44**	**56,454.93**		**9.82**	**0.29**	**60,577.40**

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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
Energy	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
Mobile	37.13	71.89	331.67	0.54	58.36	3.08	61.44	0.81	2.99	3.80		51,054.65		2.12		51,099.21
Total	**210.15**	**76.49**	**588.94**	**0.77**	**58.36**	**3.08**	**95.35**	**0.81**	**2.99**	**37.71**	**3,825.44**	**56,454.93**		**9.82**	**0.29**	**60,577.40**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.29	26.42	20.24	0.03		2.17	2.17		2.17	2.17		2,917.65		0.39		2,925.76
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**4.29**	**26.42**	**20.24**	**0.03**		**2.17**	**2.17**		**2.17**	**2.17**		**2,917.65**		**0.39**		**2,925.76**

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	0.74	0.00	0.20	0.01	0.20	0.00	0.01	0.01		143.22		0.01		143.38
Total	**0.07**	**0.07**	**0.74**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**143.22**		**0.01**		**143.38**

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	2.57	15.40	19.00	0.03		1.54	1.54		1.54	1.54	0.00	2,917.65		0.39		2,925.76
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.57**	**15.40**	**19.00**	**0.03**		**1.54**	**1.54**		**1.54**	**1.54**	**0.00**	**2,917.65**		**0.39**		**2,925.76**

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	0.74	0.00	0.20	0.01	0.20	0.00	0.01	0.01		143.22		0.01		143.38
Total	**0.07**	**0.07**	**0.74**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**143.22**		**0.01**		**143.38**

3.3 architectural coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.34					0.00	0.00		0.00	0.00						0.00
Off-Road	0.66	4.37	3.73	0.01		0.35	0.35		0.35	0.35		562.38		0.06		563.63
Total	**12.00**	**4.37**	**3.73**	**0.01**		**0.35**	**0.35**		**0.35**	**0.35**		**562.38**		**0.06**		**563.63**

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	0.29	0.30	3.10	0.01	0.82	0.03	0.85	0.01	0.03	0.04		601.54		0.03		602.19
Total	**0.29**	**0.30**	**3.10**	**0.01**	**0.82**	**0.03**	**0.85**	**0.01**	**0.03**	**0.04**		**601.54**		**0.03**		**602.19**

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	11.34					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.06		563.63
Total	**14.21**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.06**		**563.63**

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	0.29	0.30	3.10	0.01	0.82	0.03	0.85	0.01	0.03	0.04		601.54		0.03		602.19
Total	**0.29**	**0.30**	**3.10**	**0.01**	**0.82**	**0.03**	**0.85**	**0.01**	**0.03**	**0.04**		**601.54**		**0.03**		**602.19**

3.3 architectural coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.34					0.00	0.00		0.00	0.00						0.00
Off-Road	0.60	4.01	3.71	0.01		0.30	0.30		0.30	0.30		562.38		0.05		563.50
Total	**11.94**	**4.01**	**3.71**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**		**562.38**		**0.05**		**563.50**

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	0.27	0.28	2.86	0.01	0.82	0.03	0.85	0.01	0.03	0.04		588.52		0.03		589.14
Total	**0.27**	**0.28**	**2.86**	**0.01**	**0.82**	**0.03**	**0.85**	**0.01**	**0.03**	**0.04**		**588.52**		**0.03**		**589.14**

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	11.34					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.05		563.50
Total	**14.21**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.05**		**563.50**

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	0.27	0.28	2.86	0.01	0.82	0.03	0.85	0.01	0.03	0.04		588.52		0.03		589.14
Total	**0.27**	**0.28**	**2.86**	**0.01**	**0.82**	**0.03**	**0.85**	**0.01**	**0.03**	**0.04**		**588.52**		**0.03**		**589.14**

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	37.13	71.89	331.67	0.54	58.36	3.08	61.44	0.81	2.99	3.80		51,054.65		2.12		51,099.21
Unmitigated	37.13	71.89	331.67	0.54	58.36	3.08	61.44	0.81	2.99	3.80		51,054.65		2.12		51,099.21
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
City Park	3.34	3.34	3.34	8,235	8,235
Congregate Care (Assisted Living)	813.78	653.40	724.68	2,879,632	2,879,632
Place of Worship	2,123.09	2,416.73	8536.62	5,212,526	5,212,526
Strip Mall	110.80	105.10	51.08	161,917	161,917
Total	3,051.00	3,178.57	9,315.72	8,262,310	8,262,310

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Place of Worship	14.70	6.60	6.60	0.00	95.00	5.00
Strip Mall	14.70	6.60	6.60	16.60	64.40	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	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
NaturalGas Unmitigated	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	8576.3	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,008.98		0.02	0.02	1,015.12
Place of Worship	7527.83	0.08	0.74	0.62	0.00		0.00	0.06		0.00	0.06		885.63		0.02	0.02	891.02
Strip Mall	15.6849	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		1.85		0.00	0.00	1.86
Total		**0.17**	**1.53**	**0.96**	**0.01**		**0.00**	**0.12**		**0.00**	**0.12**		**1,896.46**		**0.04**	**0.04**	**1,908.00**

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					

City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	8.5763	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,008.98		0.02	0.02	1,015.12
Place of Worship	7.52783	0.08	0.74	0.62	0.00		0.00	0.06		0.00	0.06		885.63		0.02	0.02	891.02
Strip Mall	0.0156849	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		1.85		0.00	0.00	1.86
Total		**0.17**	**1.53**	**0.96**	**0.01**		**0.00**	**0.12**		**0.00**	**0.12**		**1,896.46**		**0.04**	**0.04**	**1,908.00**

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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
Unmitigated	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
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	4.04					0.00	0.00		0.00	0.00						0.00
Consumer Products	11.40					0.00	0.00		0.00	0.00						0.00
Hearth	156.64	2.78	231.34	0.22		0.00	33.66		0.00	33.66	3,825.44	3,459.18		7.61	0.26	7,524.61

Landscaping	0.77	0.29	24.97	0.00		0.00	0.14		0.00	0.14		44.66		0.04		45.59
Total	**172.85**	**3.07**	**256.31**	**0.22**		**0.00**	**33.80**		**0.00**	**33.80**	**3,825.44**	**3,503.84**		**7.65**	**0.26**	**7,570.20**

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	4.04					0.00	0.00		0.00	0.00						0.00
Consumer Products	11.40					0.00	0.00		0.00	0.00						0.00
Hearth	156.64	2.78	231.34	0.22		0.00	33.66		0.00	33.66	3,825.44	3,459.18		7.61	0.26	7,524.61
Landscaping	0.77	0.29	24.97	0.00		0.00	0.14		0.00	0.14		44.66		0.04		45.59
Total	**172.85**	**3.07**	**256.31**	**0.22**		**0.00**	**33.80**		**0.00**	**33.80**	**3,825.44**	**3,503.84**		**7.65**	**0.26**	**7,570.20**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 5 - Construction

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Place of Worship	233.05	1000sqft
City Park	2.1	Acre
Congregate Care (Assisted Living)	297	Dwelling Unit
Strip Mall	2.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013 & from 2013 traffic study (ChenRyan)

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Demolition -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	3.63	21.83	17.95	0.03	0.67	1.78	2.13	0.00	1.78	1.78	0.00	2,579.62	0.00	0.33	0.00	2,586.47
2017	21.73	162.73	94.18	0.23	4.73	7.18	7.79	0.07	7.18	7.19	0.00	25,625.21	0.00	1.95	0.00	25,666.06
2018	6.06	35.97	45.18	0.10	4.73	1.89	6.62	0.07	1.85	1.93	0.00	9,264.78	0.00	0.52	0.00	9,275.65
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					
2016	3.93	13.07	16.69	0.03	0.54	1.31	1.54	0.00	1.31	1.31	0.00	2,579.62	0.00	0.33	0.00	2,586.47
2017	18.65	118.47	126.65	0.23	4.73	7.80	8.36	0.07	7.80	7.81	0.00	25,625.21	0.00	1.95	0.00	25,666.06
2018	11.57	38.06	47.93	0.10	4.73	2.55	7.28	0.07	2.51	2.58	0.00	9,264.78	0.00	0.52	0.00	9,275.65
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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20

Energy	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
Mobile	38.81	74.79	336.47	0.51	58.36	3.12	61.48	0.81	3.02	3.83		47,810.33		2.19		47,856.37
Total	**211.83**	**79.39**	**593.74**	**0.74**	**58.36**	**3.12**	**95.39**	**0.81**	**3.02**	**37.74**	**3,825.44**	**53,210.61**		**9.89**	**0.29**	**57,334.56**

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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
Energy	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
Mobile	38.81	74.79	336.47	0.51	58.36	3.12	61.48	0.81	3.02	3.83		47,810.33		2.19		47,856.37
Total	**211.83**	**79.39**	**593.74**	**0.74**	**58.36**	**3.12**	**95.39**	**0.81**	**3.02**	**37.74**	**3,825.44**	**53,210.61**		**9.89**	**0.29**	**57,334.56**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.22	0.00	0.22	0.00	0.00	0.00						0.00
Off-Road	1.92	12.53	10.32	0.02		0.97	0.97		0.97	0.97		1,530.72		0.17		1,534.32
Total	**1.92**	**12.53**	**10.32**	**0.02**	**0.22**	**0.97**	**1.19**	**0.00**	**0.97**	**0.97**		**1,530.72**		**0.17**		**1,534.32**

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	0.04	0.45	0.23	0.00	0.35	0.02	0.37	0.00	0.01	0.02		82.69		0.00		82.73
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	0.05	0.40	0.00	0.10	0.00	0.11	0.00	0.00	0.00		72.12		0.00		72.21
Total	**0.08**	**0.50**	**0.63**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.02**		**154.81**		**0.00**		**154.94**

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					0.08	0.00	0.08	0.00	0.00	0.00						0.00
Off-Road	3.85	10.06	9.97	0.02		0.81	0.81		0.81	0.81	0.00	1,530.72		0.17		1,534.32
Total	**3.85**	**10.06**	**9.97**	**0.02**	**0.08**	**0.81**	**0.89**	**0.00**	**0.81**	**0.81**	**0.00**	**1,530.72**		**0.17**		**1,534.32**

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	0.04	0.45	0.23	0.00	0.35	0.02	0.37	0.00	0.01	0.02		82.69		0.00		82.73
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	0.05	0.40	0.00	0.10	0.00	0.11	0.00	0.00	0.00		72.12		0.00		72.21
Total	**0.08**	**0.50**	**0.63**	**0.00**	**0.45**	**0.02**	**0.48**	**0.00**	**0.01**	**0.02**		**154.81**		**0.00**		**154.94**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	3.56	21.75	17.30	0.03		1.78	1.78		1.78	1.78		2,462.41		0.32		2,469.13
Total	**3.56**	**21.75**	**17.30**	**0.03**	**0.18**	**1.78**	**1.96**	**0.00**	**1.78**	**1.78**		**2,462.41**		**0.32**		**2,469.13**

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	0.65	0.00	0.17	0.01	0.18	0.00	0.01	0.01		117.20		0.01		117.34
Total	**0.07**	**0.07**	**0.65**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**117.20**		**0.01**		**117.34**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.41		0.32		2,469.13
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.41**		**0.32**		**2,469.13**

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	0.65	0.00	0.17	0.01	0.18	0.00	0.01	0.01		117.20		0.01		117.34
Total	**0.07**	**0.07**	**0.65**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**117.20**		**0.01**		**117.34**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.18	0.00	0.18	0.00	0.00	0.00						0.00
Off-Road	3.32	20.22	17.19	0.03		1.61	1.61		1.61	1.61		2,462.41		0.30		2,468.68
Total	**3.32**	**20.22**	**17.19**	**0.03**	**0.18**	**1.61**	**1.79**	**0.00**	**1.61**	**1.61**		**2,462.41**		**0.30**		**2,468.68**

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	0.06	0.07	0.60	0.00	0.17	0.01	0.18	0.00	0.01	0.01		114.52		0.01		114.65
Total	**0.06**	**0.07**	**0.60**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**114.52**		**0.01**		**114.65**

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					0.07	0.00	0.07	0.00	0.00	0.00						0.00
Off-Road	2.17	13.00	16.03	0.03		1.30	1.30		1.30	1.30	0.00	2,462.41		0.30		2,468.68
Total	**2.17**	**13.00**	**16.03**	**0.03**	**0.07**	**1.30**	**1.37**	**0.00**	**1.30**	**1.30**	**0.00**	**2,462.41**		**0.30**		**2,468.68**

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	0.06	0.07	0.60	0.00	0.17	0.01	0.18	0.00	0.01	0.01		114.52		0.01		114.65
Total	**0.06**	**0.07**	**0.60**	**0.00**	**0.17**	**0.01**	**0.18**	**0.00**	**0.01**	**0.01**		**114.52**		**0.01**		**114.65**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.09	0.00	0.09	0.00	0.00	0.00						0.00
Off-Road	21.53	162.52	92.33	0.23		7.17	7.17		7.17	7.17		25,272.84		1.93		25,313.29
Total	**21.53**	**162.52**	**92.33**	**0.23**	**0.09**	**7.17**	**7.26**	**0.00**	**7.17**	**7.17**		**25,272.84**		**1.93**		**25,313.29**

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	0.00	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	0.20	0.21	1.85	0.00	0.52	0.02	0.54	0.01	0.02	0.02		352.38		0.02		352.78
Total	**0.20**	**0.21**	**1.85**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**352.38**		**0.02**		**352.78**

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					0.03	0.00	0.03	0.00	0.00	0.00						0.00
Off-Road	18.45	118.26	124.80	0.23		7.78	7.78		7.78	7.78	0.00	25,272.84		1.93		25,313.29
Total	**18.45**	**118.26**	**124.80**	**0.23**	**0.03**	**7.78**	**7.81**	**0.00**	**7.78**	**7.78**	**0.00**	**25,272.84**		**1.93**		**25,313.29**

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	0.00	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	0.20	0.21	1.85	0.00	0.52	0.02	0.54	0.01	0.02	0.02		352.38		0.02		352.78
Total	**0.20**	**0.21**	**1.85**	**0.00**	**0.52**	**0.02**	**0.54**	**0.01**	**0.02**	**0.02**		**352.38**		**0.02**		**352.78**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.23	28.54	26.41	0.05		1.69	1.69		1.69	1.69		4,663.08		0.38		4,670.98
Total	**4.23**	**28.54**	**26.41**	**0.05**		**1.69**	**1.69**		**1.69**	**1.69**		**4,663.08**		**0.38**		**4,670.98**

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	0.80	9.10	5.88	0.02	0.64	0.30	0.94	0.02	0.28	0.29		1,902.71		0.04		1,903.53
Worker	1.55	1.65	14.49	0.03	4.09	0.14	4.23	0.06	0.13	0.19		2,757.34		0.15		2,760.47
Total	**2.35**	**10.75**	**20.37**	**0.05**	**4.73**	**0.44**	**5.17**	**0.08**	**0.41**	**0.48**		**4,660.05**		**0.19**		**4,664.00**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.38		4,670.98
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.38**		**4,670.98**

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	0.80	9.10	5.88	0.02	0.64	0.30	0.94	0.02	0.28	0.29		1,902.71		0.04		1,903.53
Worker	1.55	1.65	14.49	0.03	4.09	0.14	4.23	0.06	0.13	0.19		2,757.34		0.15		2,760.47
Total	**2.35**	**10.75**	**20.37**	**0.05**	**4.73**	**0.44**	**5.17**	**0.08**	**0.41**	**0.48**		**4,660.05**		**0.19**		**4,664.00**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.85	25.89	26.24	0.05		1.46	1.46		1.46	1.46		4,663.08		0.34		4,670.27
Total	**3.85**	**25.89**	**26.24**	**0.05**		**1.46**	**1.46**		**1.46**	**1.46**		**4,663.08**		**0.34**		**4,670.27**

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	0.76	8.56	5.57	0.02	0.64	0.28	0.93	0.02	0.26	0.28		1,904.54		0.04		1,905.31

Worker	1.46	1.52	13.38	0.03	4.09	0.14	4.23	0.06	0.13	0.19		2,697.16		0.14		2,700.07
Total	**2.22**	**10.08**	**18.95**	**0.05**	**4.73**	**0.42**	**5.16**	**0.08**	**0.39**	**0.47**		**4,601.70**		**0.18**		**4,605.38**

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	9.35	27.97	28.99	0.05		2.12	2.12		2.12	2.12	0.00	4,663.08		0.34		4,670.27
Total	**9.35**	**27.97**	**28.99**	**0.05**		**2.12**	**2.12**		**2.12**	**2.12**	**0.00**	**4,663.08**		**0.34**		**4,670.27**

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	0.76	8.56	5.57	0.02	0.64	0.28	0.93	0.02	0.26	0.28		1,904.54		0.04		1,905.31
Worker	1.46	1.52	13.38	0.03	4.09	0.14	4.23	0.06	0.13	0.19		2,697.16		0.14		2,700.07
Total	**2.22**	**10.08**	**18.95**	**0.05**	**4.73**	**0.42**	**5.16**	**0.08**	**0.39**	**0.47**		**4,601.70**		**0.18**		**4,605.38**

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	38.81	74.79	336.47	0.51	58.36	3.12	61.48	0.81	3.02	3.83		47,810.33		2.19		47,856.37
Unmitigated	38.81	74.79	336.47	0.51	58.36	3.12	61.48	0.81	3.02	3.83		47,810.33		2.19		47,856.37
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
City Park	3.34	3.34	3.34	8,235	8,235
Congregate Care (Assisted Living)	813.78	653.40	724.68	2,879,632	2,879,632
Place of Worship	2,123.09	2,416.73	8536.62	5,212,526	5,212,526
Strip Mall	110.80	105.10	51.08	161,917	161,917
Total	3,051.00	3,178.57	9,315.72	8,262,310	8,262,310

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Place of Worship	14.70	6.60	6.60	0.00	95.00	5.00
Strip Mall	14.70	6.60	6.60	16.60	64.40	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	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
NaturalGas Unmitigated	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	8576.3	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,008.98		0.02	0.02	1,015.12
Place of Worship	7527.83	0.08	0.74	0.62	0.00		0.00	0.06		0.00	0.06		885.63		0.02	0.02	891.02
Strip Mall	15.6849	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		1.85		0.00	0.00	1.86
Total		**0.17**	**1.53**	**0.96**	**0.01**		**0.00**	**0.12**		**0.00**	**0.12**		**1,896.46**		**0.04**	**0.04**	**1,908.00**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	8.5763	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,008.98		0.02	0.02	1,015.12
Place of Worship	7.52783	0.08	0.74	0.62	0.00		0.00	0.06		0.00	0.06		885.63		0.02	0.02	891.02
Strip Mall	0.0156849	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		1.85		0.00	0.00	1.86

Total		**0.17**	**1.53**	**0.96**	**0.01**		**0.00**	**0.12**		**0.00**	**0.12**		**1,896.46**		**0.04**	**0.04**	**1,908.00**

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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
Unmitigated	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
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	4.04					0.00	0.00		0.00	0.00						0.00
Consumer Products	11.40					0.00	0.00		0.00	0.00						0.00
Hearth	156.64	2.78	231.34	0.22		0.00	33.66		0.00	33.66	3,825.44	3,459.18		7.61	0.26	7,524.61
Landscaping	0.77	0.29	24.97	0.00		0.00	0.14		0.00	0.14		44.66		0.04		45.59
Total	**172.85**	**3.07**	**256.31**	**0.22**		**0.00**	**33.80**		**0.00**	**33.80**	**3,825.44**	**3,503.84**		**7.65**	**0.26**	**7,570.20**

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	4.04					0.00	0.00		0.00	0.00						0.00
Consumer Products	11.40					0.00	0.00		0.00	0.00						0.00
Hearth	156.64	2.78	231.34	0.22		0.00	33.66		0.00	33.66	3,825.44	3,459.18		7.61	0.26	7,524.61
Landscaping	0.77	0.29	24.97	0.00		0.00	0.14		0.00	0.14		44.66		0.04		45.59
Total	**172.85**	**3.07**	**256.31**	**0.22**		**0.00**	**33.80**		**0.00**	**33.80**	**3,825.44**	**3,503.84**		**7.65**	**0.26**	**7,570.20**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Lilac Ranch - Phase 5 - Construction

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Place of Worship	233.05	1000sqft
City Park	2.1	Acre
Congregate Care (Assisted Living)	297	Dwelling Unit
Strip Mall	2.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Land Use - per specific plan summary table 01/2013 & from 2013 traffic study (ChenRyan)

Trips and VMT - per SANDAG

Grading - max grading

Architectural Coating - per SDAPCD, rule 67, ROG reductions

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	12.31	26.50	20.93	0.03	0.82	2.18	2.37	0.01	2.18	2.18	0.00	3,049.79	0.00	0.39	0.00	3,058.05
2018	12.23	4.31	6.40	0.01	0.82	0.33	1.15	0.01	0.33	0.34	0.00	1,105.26	0.00	0.08	0.00	1,106.97
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					
2017	14.52	15.48	19.69	0.03	0.82	1.55	1.74	0.01	1.55	1.55	0.00	3,049.79	0.00	0.39	0.00	3,058.05
2018	14.50	5.16	6.35	0.01	0.82	0.33	1.15	0.01	0.32	0.33	0.00	1,105.26	0.00	0.08	0.00	1,106.97
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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
Energy	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
Mobile	38.81	74.79	336.47	0.51	58.36	3.12	61.48	0.81	3.02	3.83		47,810.33		2.19		47,856.37
Total	**211.83**	**79.39**	**593.74**	**0.74**	**58.36**	**3.12**	**95.39**	**0.81**	**3.02**	**37.74**	**3,825.44**	**53,210.61**		**9.89**	**0.29**	**57,334.56**

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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
Energy	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
Mobile	38.81	74.79	336.47	0.51	58.36	3.12	61.48	0.81	3.02	3.83		47,810.33		2.19		47,856.37
Total	**211.83**	**79.39**	**593.74**	**0.74**	**58.36**	**3.12**	**95.39**	**0.81**	**3.02**	**37.74**	**3,825.44**	**53,210.61**		**9.89**	**0.29**	**57,334.56**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Water Exposed Area

3.2 paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.29	26.42	20.24	0.03		2.17	2.17		2.17	2.17		2,917.65		0.39		2,925.76
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**4.29**	**26.42**	**20.24**	**0.03**		**2.17**	**2.17**		**2.17**	**2.17**		**2,917.65**		**0.39**		**2,925.76**

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	0.08	0.69	0.00	0.20	0.01	0.20	0.00	0.01	0.01		132.14		0.01		132.29
Total	**0.07**	**0.08**	**0.69**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**132.14**		**0.01**		**132.29**

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	2.57	15.40	19.00	0.03		1.54	1.54		1.54	1.54	0.00	2,917.65		0.39		2,925.76
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.57**	**15.40**	**19.00**	**0.03**		**1.54**	**1.54**		**1.54**	**1.54**	**0.00**	**2,917.65**		**0.39**		**2,925.76**

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	0.08	0.69	0.00	0.20	0.01	0.20	0.00	0.01	0.01		132.14		0.01		132.29
Total	**0.07**	**0.08**	**0.69**	**0.00**	**0.20**	**0.01**	**0.20**	**0.00**	**0.01**	**0.01**		**132.14**		**0.01**		**132.29**

3.3 architectural coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.34					0.00	0.00		0.00	0.00						0.00
Off-Road	0.66	4.37	3.73	0.01		0.35	0.35		0.35	0.35		562.38		0.06		563.63
Total	**12.00**	**4.37**	**3.73**	**0.01**		**0.35**	**0.35**		**0.35**	**0.35**		**562.38**		**0.06**		**563.63**

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	0.31	0.33	2.92	0.01	0.82	0.03	0.85	0.01	0.03	0.04		554.99		0.03		555.62
Total	**0.31**	**0.33**	**2.92**	**0.01**	**0.82**	**0.03**	**0.85**	**0.01**	**0.03**	**0.04**		**554.99**		**0.03**		**555.62**

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	11.34					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.06		563.63
Total	**14.21**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.06**		**563.63**

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	0.31	0.33	2.92	0.01	0.82	0.03	0.85	0.01	0.03	0.04		554.99		0.03		555.62
Total	**0.31**	**0.33**	**2.92**	**0.01**	**0.82**	**0.03**	**0.85**	**0.01**	**0.03**	**0.04**		**554.99**		**0.03**		**555.62**

3.3 architectural coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.34					0.00	0.00		0.00	0.00						0.00
Off-Road	0.60	4.01	3.71	0.01		0.30	0.30		0.30	0.30		562.38		0.05		563.50
Total	**11.94**	**4.01**	**3.71**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**		**562.38**		**0.05**		**563.50**

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	0.29	0.31	2.69	0.01	0.82	0.03	0.85	0.01	0.03	0.04		542.88		0.03		543.46
Total	**0.29**	**0.31**	**2.69**	**0.01**	**0.82**	**0.03**	**0.85**	**0.01**	**0.03**	**0.04**		**542.88**		**0.03**		**543.46**

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	11.34					0.00	0.00		0.00	0.00						0.00
Off-Road	2.87	4.85	3.66	0.01		0.30	0.30		0.30	0.30	0.00	562.38		0.05		563.50
Total	**14.21**	**4.85**	**3.66**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**562.38**		**0.05**		**563.50**

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	0.29	0.31	2.69	0.01	0.82	0.03	0.85	0.01	0.03	0.04		542.88		0.03		543.46
Total	**0.29**	**0.31**	**2.69**	**0.01**	**0.82**	**0.03**	**0.85**	**0.01**	**0.03**	**0.04**		**542.88**		**0.03**		**543.46**

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	38.81	74.79	336.47	0.51	58.36	3.12	61.48	0.81	3.02	3.83		47,810.33		2.19		47,856.37
Unmitigated	38.81	74.79	336.47	0.51	58.36	3.12	61.48	0.81	3.02	3.83		47,810.33		2.19		47,856.37
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
City Park	3.34	3.34	3.34	8,235	8,235
Congregate Care (Assisted Living)	813.78	653.40	724.68	2,879,632	2,879,632
Place of Worship	2,123.09	2,416.73	8536.62	5,212,526	5,212,526
Strip Mall	110.80	105.10	51.08	161,917	161,917
Total	3,051.00	3,178.57	9,315.72	8,262,310	8,262,310

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Place of Worship	14.70	6.60	6.60	0.00	95.00	5.00
Strip Mall	14.70	6.60	6.60	16.60	64.40	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	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
NaturalGas Unmitigated	0.17	1.53	0.96	0.01		0.00	0.12		0.00	0.12		1,896.45		0.04	0.03	1,907.99
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	8576.3	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,008.98		0.02	0.02	1,015.12
Place of Worship	7527.83	0.08	0.74	0.62	0.00		0.00	0.06		0.00	0.06		885.63		0.02	0.02	891.02
Strip Mall	15.6849	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		1.85		0.00	0.00	1.86
Total		**0.17**	**1.53**	**0.96**	**0.01**		**0.00**	**0.12**		**0.00**	**0.12**		**1,896.46**		**0.04**	**0.04**	**1,908.00**

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					

City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Congregate Care (Assisted Living)	8.5763	0.09	0.79	0.34	0.01		0.00	0.06		0.00	0.06		1,008.98		0.02	0.02	1,015.12
Place of Worship	7.52783	0.08	0.74	0.62	0.00		0.00	0.06		0.00	0.06		885.63		0.02	0.02	891.02
Strip Mall	0.0156849	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		1.85		0.00	0.00	1.86
Total		**0.17**	**1.53**	**0.96**	**0.01**		**0.00**	**0.12**		**0.00**	**0.12**		**1,896.46**		**0.04**	**0.04**	**1,908.00**

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	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
Unmitigated	172.85	3.07	256.31	0.22		0.00	33.79		0.00	33.79	3,825.44	3,503.83		7.66	0.26	7,570.20
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	4.04					0.00	0.00		0.00	0.00						0.00
Consumer Products	11.40					0.00	0.00		0.00	0.00						0.00
Hearth	156.64	2.78	231.34	0.22		0.00	33.66		0.00	33.66	3,825.44	3,459.18		7.61	0.26	7,524.61

Landscaping	0.77	0.29	24.97	0.00		0.00	0.14		0.00	0.14		44.66		0.04		45.59
Total	**172.85**	**3.07**	**256.31**	**0.22**		**0.00**	**33.80**		**0.00**	**33.80**	**3,825.44**	**3,503.84**		**7.65**	**0.26**	**7,570.20**

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	4.04					0.00	0.00		0.00	0.00						0.00
Consumer Products	11.40					0.00	0.00		0.00	0.00						0.00
Hearth	156.64	2.78	231.34	0.22		0.00	33.66		0.00	33.66	3,825.44	3,459.18		7.61	0.26	7,524.61
Landscaping	0.77	0.29	24.97	0.00		0.00	0.14		0.00	0.14		44.66		0.04		45.59
Total	**172.85**	**3.07**	**256.31**	**0.22**		**0.00**	**33.80**		**0.00**	**33.80**	**3,825.44**	**3,503.84**		**7.65**	**0.26**	**7,570.20**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ROAD CONSTRUCTION EMISSIONS MODEL
CONSTRUCTION OUTPUT FILES

Road Construction Emissions Model, Version 7.1.1

Emission Estimates for -> Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	CO2 (lbs/day)
Grubbing/Land Clearing	0.8	3.5	3.3	27.2	0.2	27.0	5.8	0.2	5.6	613.4
Grading/Excavation	1.0	4.4	11.4	27.4	0.4	27.0	5.9	0.3	5.6	2,073.2
Drainage/Utilities/Sub-Grade	0.8	3.5	3.4	27.2	0.2	27.0	5.8	0.2	5.6	617.3
Paving	0.8	3.5	2.7	0.2	0.2	-	0.2	0.2	-	585.1
Maximum (pounds/day)	1.0	4.4	11.4	27.4	0.4	27.0	5.9	0.3	5.6	2,073.2
Total (tons/construction project)	0.0	0.1	0.2	0.5	0.0	0.5	0.1	0.0	0.1	29.0

Notes: Project Start Year -> 2015
Project Length (months) -> 2
Total Project Area (acres) -> 3
Maximum Area Disturbed/Day (acres) -> 3
Total Soil Imported/Exported (yd^3/day)-> 260

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	Total PM10 (kgs/day)	Exhaust PM10 (kgs/day)	Fugitive Dust PM10 (kgs/day)	Total PM2.5 (kgs/day)	Exhaust PM2.5 (kgs/day)	Fugitive Dust PM2.5 (kgs/day)	CO2 (kgs/day)
Grubbing/Land Clearing	0.4	1.6	1.5	12.4	0.1	12.3	2.6	0.1	2.6	278.8
Grading/Excavation	0.5	2.0	5.2	12.5	0.2	12.3	2.7	0.1	2.6	942.4
Drainage/Utilities/Sub-Grade	0.4	1.6	1.5	12.4	0.1	12.3	2.6	0.1	2.6	280.6
Paving	0.4	1.6	1.2	0.1	0.1	-	0.1	0.1	-	266.0
Maximum (kilograms/day)	0.5	2.0	5.2	12.5	0.2	12.3	2.7	0.1	2.6	942.4
Total (megagrams/construction project)	0.0	0.1	0.1	0.5	0.0	0.5	0.1	0.0	0.1	26.3

Notes: Project Start Year -> 2015
Project Length (months) -> 2
Total Project Area (hectares) -> 1
Maximum Area Disturbed/Day (hectares) -> 1
Total Soil Imported/Exported ($meters^3$/day)-> 199

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sume of exhaust and fugitive dust emissions shown in columns K and L.

Road Construction Emissions Model

Version 7.1.1

Data Entry Worksheet

Note: Required data input sections have a yellow background.
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.
The user is required to enter information in cells C10 through C25.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Input Type

Project Name		
Construction Start Year	2015	Enter a Year between 2009 and 2025 (inclusive)
Project Type	2	1 New Road Construction 2 Road Widening 3 Bridge/Overpass Construction
Project Construction Time	2.0	months
Predominant Soil/Site Type: Enter 1, 2, or 3	2	1. Sand Gravel 2. Weathered Rock-Earth 3. Blasted Rock
Project Length	1	mile
Total Project Area	2.7	acres
Maximum Area Disturbed/Day	2.7	acres
Water Trucks Used?	1	1. Yes 2. No
Soil Imported	70.0	yd^3/day
Soil Exported	190.0	yd^3/day
Average Truck Capacity	20.0	yd^3 (assume 20 if unknown)

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells C34 through C37.

Construction Periods	User Override of Construction Months	Program Calculated Months	2005	%	2006	%	2007	%
Grubbing/Land Clearing		0.20	0.00	0.00	0.00	0.00	0.00	0.00
Grading/Excavation		0.90	0.00	0.00	0.00	0.00	0.00	0.00
Drainage/Utilities/Sub-Grade		0.60	0.00	0.00	0.00	0.00	0.00	0.00
Paving		0.30	0.00	0.00	0.00	0.00	0.00	0.00
Totals	0.00	2.00						

Hauling emission default values can be overridden in cells C45 through C46.

Soil Hauling Emissions

User Input	User Override of Soil Hauling Defaults	Default Values
Miles/round trip		30
Round trips/day		13
Vehicle miles traveled/day (calculated)		390

Hauling Emissions	ROG	NOx	CO	PM10	PM2.5	CO2
Emission rate (grams/mile)	0.25	9.41	1.09	0.22	0.15	1694.67
Emission rate (grams/trip)	0.00	0.00	0.00	0.00	0.00	0.00
Pounds per day	0.2	8.1	0.9	0.2	0.1	1455.8
Tons per contruction period	0.00	0.08	0.01	0.00	0.00	14.41

Worker commute default values can be overridden in cells C60 through C65.

Worker Commute Emissions

	User Override of Worker Commute Default Values	Default Values
Miles/ one-way trip		20
One-way trips/day		2
No. of employees: Grubbing/Land Clearing		5
No. of employees: Grading/Excavation		8
No. of employees: Drainage/Utilities/Sub-Grade		8
No. of employees: Paving		8

	ROG	NOx	CO	PM10	PM2.5	CO2
Emission rate - Grubbing/Land Clearing (grams/mile)	0.164	0.219	1.956	0.047	0.020	443.518
Emission rate - Grading/Excavation (grams/mile)	0.164	0.219	1.956	0.047	0.020	443.518
Emission rate - Draining/Utilities/Sub-Grade (gr/mile)	0.164	0.219	1.956	0.047	0.020	443.518
Emission rate - Paving (grams/mile)	0.164	0.219	1.956	0.047	0.020	443.518
Emission rate - Grubbing/Land Clearing (grams/trip)	0.558	0.363	4.666	0.004	0.003	95.528
Emission rate - Grading/Excavation (grams/trip)	0.558	0.363	4.666	0.004	0.003	95.528
Emission rate - Draining/Utilities/Sub-Grade (gr/trip)	0.558	0.363	4.666	0.004	0.003	95.528
Emission rate - Paving (grams/trip)	0.558	0.363	4.666	0.004	0.003	95.528
Pounds per day - Grubbing/Land Clearing	0.097	0.113	1.067	0.021	0.009	199.591
Tons per const. Period - Grub/Land Clear	0.000	0.000	0.002	0.000	0.000	0.439
Pounds per day - Grading/Excavation	0.097	0.113	1.067	0.021	0.009	199.591
Tons per const. Period - Grading/Excavation	0.001	0.001	0.011	0.000	0.000	1.976
Pounds per day - Drainage/Utilities/Sub-Grade	0.097	0.113	1.067	0.021	0.009	199.591
Tons per const. Period - Drain/Util/Sub-Grade	0.001	0.001	0.007	0.000	0.000	1.317
Pounds per day - Paving	0.133	0.113	1.067	0.021	0.009	297.282
Tons per const. Period - Paving	0.000	0.000	0.004	0.000	0.000	0.981
tons per construction period	0.002	0.002	0.023	0.000	0.000	4.713

Water truck default values can be overriden in cells C91 through C93 and E91 through E93.

Water Truck Emissions	User Override of Default # Water Trucks	Program Estimate of Number of Water Trucks	User Override of Truck Miles Traveled/Day	Default Values Miles Traveled/Day
Grubbing/Land Clearing - Exhaust		1		40
Grading/Excavation - Exhaust		1		40
Drainage/Utilities/Subgrade		1		40

	ROG	NOx	CO	PM10	PM2.5	CO2
Emission rate - Grubbing/Land Clearing (grams/mile)	0.25	9.41	1.09	0.22	0.15	1694.67
Emission rate - Grading/Excavation (grams/mile)	0.25	9.41	1.09	0.22	0.15	1694.67
Emission rate - Draining/Utilities/Sub-Grade (gr/mile)	0.25	9.41	1.09	0.22	0.15	1694.67
Pounds per day - Grubbing/Land Clearing	0.02	0.83	0.10	0.02	0.01	149.31
Tons per const. Period - Grub/Land Clear	0.00	0.01	0.00	0.00	0.00	1.48
Pound per day - Grading/Excavation	0.02	0.83	0.10	0.02	0.01	149.31
Tons per const. Period - Grading/Excavation	0.00	0.01	0.00	0.00	0.00	1.48
Pound per day - Drainage/Utilities/Subgrade	0.02	0.83	0.10	0.02	0.01	149.31
Tons per const. Period - Drainage/Utilities/Subgrade	0.00	0.01	0.00	0.00	0.00	0.99

Fugitive dust default values can be overridden in cells C110 through C112.

Fugitive Dust	User Override of Max Acreage Disturbed/Day	Default Maximum Acreage/Day	PM10 pounds/day	PM10 tons/per period	PM2.5 pounds/day	PM2.5 tons/per period
Fugitive Dust - Grubbing/Land Clearing		2.7	27.0	0.1	5.6	0.0
Fugitive Dust - Grading/Excavation		2.7	27.0	0.3	5.6	0.1
Fugitive Dust - Drainage/Utilities/Subgrade		2.7	27.0	0.2	5.6	0.0

Off-Road Equipment Emissions

Grubbing/Land Clearing	Default Number of Vehicles		ROG	CO	NOx	PM10	PM2.5	CO2
Override of Default Number of Vehicles	*Program-estimate*	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00	0.00
1.00		Crawler Tractors	0.01	0.05	0.11	0.00	0.00	9.15
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00
		Graders	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00	0.00	0.00
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
0.00	1	Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00
	1	Scrapers	0.01	0.02	0.06	0.00	0.00	5.37
	2	Signal Boards	0.64	2.23	2.18	0.17	0.16	250.02
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00
		Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00	0.00
	Grubbing/Land Clearing	pounds per day	0.7	2.3	2.3	0.2	0.2	264.5
	Grubbing/Land Clearing	tons per phase	0.0	0.0	0.0	0.0	0.0	0.6

Grading/Excavation	Default Number of Vehicles		ROG	CO	NOx	PM10	PM2.5	CO2
Override of Default Number of Vehicles	*Program-estimate*	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00
	0	Cranes	0.00	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00
	1	Excavators	0.00	0.01	0.02	0.00	0.00	2.32
		Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00
	1	Graders	0.01	0.02	0.06	0.00	0.00	3.94
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00
	0	Other Construction Equipment	0.00	0.02	0.05	0.00	0.00	4.05
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00	0.00	0.00
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00
	1	Rubber Tired Loaders	0.00	0.01	0.03	0.00	0.00	2.83
	1	Scrapers	0.01	0.02	0.06	0.00	0.00	5.37
	2	Signal Boards	0.64	2.23	2.18	0.17	0.16	250.02
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00
		Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00	0.00
	Grading/Excavation	pounds per day	0.7	2.3	2.4	0.2	0.2	268.5
	Grading	tons per phase	0.0	0.0	0.0	0.0	0.0	2.7

Drainage/Utilities/Subgrade	Default Number of Vehicles		ROG	CO	NOx	PM10	PM2.5	CO2
Override of Default Number of Vehicles	*Program-estimate*		pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00
	1	Graders	0.01	0.02	0.06	0.00	0.00	3.94
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Pavers	0.00	0.00	0.00	0.00	0.00	0.00
		Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00
	1	Plate Compactors	0.00	0.01	0.01	0.00	0.00	1.19
		Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00	0.00
		Rollers	0.00	0.00	0.00	0.00	0.00	0.00
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00
	1	Scrapers	0.01	0.02	0.06	0.00	0.00	5.37
	2	Signal Boards	0.64	2.23	2.18	0.17	0.16	250.02
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00
		Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00
	1	Trenchers	0.01	0.04	0.11	0.01	0.01	7.86
		Welders	0.00	0.00	0.00	0.00	0.00	0.00
	Drainage	pounds per day	0.7	2.3	2.4	0.2	0.2	268.4
	Drainage	tons per phase	0.0	0.0	0.0	0.0	0.0	1.8

Paving	Default Number of Vehicles		ROG	CO	NOx	PM10	PM2.5	CO2
Override of Default Number of Vehicles	*Program-estimate*	Type	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day	pounds/day
		Aerial Lifts	0.00	0.00	0.00	0.00	0.00	0.00
		Air Compressors	0.00	0.00	0.00	0.00	0.00	0.00
		Bore/Drill Rigs	0.00	0.00	0.00	0.00	0.00	0.00
		Cement and Mortar Mixers	0.00	0.00	0.00	0.00	0.00	0.00
		Concrete/Industrial Saws	0.00	0.00	0.00	0.00	0.00	0.00
		Cranes	0.00	0.00	0.00	0.00	0.00	0.00
		Crawler Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Crushing/Proc. Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Excavators	0.00	0.00	0.00	0.00	0.00	0.00
		Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Generator Sets	0.00	0.00	0.00	0.00	0.00	0.00
		Graders	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Tractors	0.00	0.00	0.00	0.00	0.00	0.00
		Off-Highway Trucks	0.00	0.00	0.00	0.00	0.00	0.00
		Other Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Other Material Handling Equipment	0.00	0.00	0.00	0.00	0.00	0.00
	1	Pavers	0.01	0.07	0.12	0.01	0.01	11.39
	1	Paving Equipment	0.02	0.15	0.23	0.01	0.01	24.11
		Plate Compactors	0.00	0.00	0.00	0.00	0.00	0.00
		Pressure Washers	0.00	0.00	0.00	0.00	0.00	0.00
		Pumps	0.00	0.00	0.00	0.00	0.00	0.00
	2	Rollers	0.00	0.01	0.03	0.00	0.00	2.30
		Rough Terrain Forklifts	0.00	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Dozers	0.00	0.00	0.00	0.00	0.00	0.00
		Rubber Tired Loaders	0.00	0.00	0.00	0.00	0.00	0.00
		Scrapers	0.00	0.00	0.00	0.00	0.00	0.00
	2	Signal Boards	0.64	2.23	2.18	0.17	0.16	250.02
		Skid Steer Loaders	0.00	0.00	0.00	0.00	0.00	0.00
		Surfacing Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Sweepers/Scrubbers	0.00	0.00	0.00	0.00	0.00	0.00
		Tractors/Loaders/Backhoes	0.00	0.00	0.00	0.00	0.00	0.00
		Trenchers	0.00	0.00	0.00	0.00	0.00	0.00
		Welders	0.00	0.00	0.00	0.00	0.00	0.00
	Paving	pounds per day	0.7	2.5	2.6	0.2	0.2	287.8
	Paving	tons per phase	0.0	0.0	0.0	0.0	0.0	0.9
Total Emissions all Phases (tons per construction period) =>			0.0	0.1	0.1	0.0	0.0	6.0

Equipment default values for horsepower and hours/day can be overridden in cells C289 through C322 and E289 through E322.

Equipment		Default Values Horsepower		Default Values Hours/day
Aerial Lifts		63		8
Air Compressors		106		8
Bore/Drill Rigs		206		8
Cement and Mortar Mixers		10		8
Concrete/Industrial Saws		64		8
Cranes		226		8
Crawler Tractors		208		8
Crushing/Proc. Equipment		142		8
Excavators		163		8
Forklifts		89		8
Generator Sets		66		8
Graders		175		8
Off-Highway Tractors		123		8
Off-Highway Trucks		400		8
Other Construction Equipment		172		8
Other General Industrial Equipment		88		8
Other Material Handling Equipment		167		8
Pavers		126		8
Paving Equipment		131		8
Plate Compactors		8		8
Pressure Washers		26		8
Pumps		53		8
Rollers		81		8
Rough Terrain Forklifts		100		8
Rubber Tired Dozers		255		8
Rubber Tired Loaders		200		8
Scrapers		362		8
Signal Boards		20		8
Skid Steer Loaders		65		8
Surfacing Equipment		254		8
Sweepers/Scrubbers		64		8
Tractors/Loaders/Backhoes		98		8
Trenchers		81		8
Welders		45		8

0

END OF DATA ENTRY SHEET

With Blasting Emissions

Phase 1

Unmitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
1	Grading - 2014	463.0	6.8	469.7	97.0	6.7	103.7	18.29	236.4321	411.5532	10.1541

Mitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
1	Grading - 2014	43.7	5.6	49.4	9.0	5.5	14.5	13.5815	175.8842	425.516	10.1541

Phases 1 and 4

Unmitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
1	Building Construction - 2015	2.0	1.7	3.7	0.0	1.7	1.7	4.5002	29.1846	28.2994	0.0535
1	Architectural Coating - 2015	0.3	0.3	0.6	0.0	0.3	0.3	15.7027	3.5838	3.986	0.0067
4	Site Preparation - 20115	0.4	1.3	1.7	0.0	1.3	1.3	2.6294	15.748	12.4214	0.0201
4	Grading - 2015	436.0	5.8	441.8	91.4	5.8	97.3	16.357	214.0107	403.9851	10.1541
Total		438.6	9.2	447.8	91.5	9.1	100.6	39.2	262.5	448.7	10.2

Mitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
1	Building Construction - 2015	2.0	1.7	3.6	0.0	1.6	1.7	7.3745	24.8899	29.7533	0.0535
1	Architectural Coating - 2015	0.3	0.2	0.5	0.0	0.2	0.2	17.0829	3.3895	3.8922	0.0067
4	Site Preparation - 20115	0.2	0.9	1.1	0.0	0.9	0.9	1.5239	8.78	11.4901	0.0201
4	Grading - 2015	16.7	5.2	22.0	3.4	5.2	8.6	12.5715	164.4642	420.916	10.1541
Total		19.3	8.0	27.3	3.4	8.0	11.4	38.6	201.5	466.1	10.2

Phases 2 & 4

Unmitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
2	Site Preparation - 2016	0.4	1.2	1.5	0.0	1.2	1.2	2.4452	14.6425	12.281	0.0201
2	Grading - 2016	436.0	5.3	441.4	91.4	5.3	96.7	15.4526	203.7129	401.2289	10.1541
4	Building Construction - 2016	3.9	1.6	5.4	0.1	1.6	1.6	4.8621	27.8945	35.122	0.0735
4	Architectural Coating - 2016	0.7	0.3	1.0	0.0	0.3	0.3	9.6058	3.4558	5.3392	0.0167
Total		440.8	8.4	449.3	91.5	8.3	99.8	32.4	249.7	454.0	10.3

Mitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
2	Site Preparation - 2016	0.2	0.9	1.1	0.0	0.9	0.9	1.5139	8.78	11.4301	0.0201
2	Grading - 2016	16.7	5.2	22.0	3.4	5.2	8.6	12.5515	164.4442	420.746	10.1541
4	Building Construction - 2016	3.9	1.7	5.6	0.1	1.7	1.8	8.0245	25.6299	36.7233	0.0735
4	Architectural Coating - 2016	0.7	0.2	0.9	0.0	0.2	0.2	11.0329	3.5295	5.2722	0.0167
Total		21.5	8.1	29.6	3.5	8.0	11.5	33.1	202.4	474.2	10.3

With Blasting Emissions

Phases 2 & 5

Unmitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
2	Building Construction - 2017	4.1	1.5	5.6	0.1	1.5	1.5	4.6841	27.4118	35.1547	0.0735
2	Architectural Coating - 2017	0.7	0.3	1.0	0.0	0.3	0.3	28.4922	3.1979	5.1991	0.0167
5	Site Preparation - 2017	0.4	1.1	1.4	0.0	1.1	1.1	2.2844	13.6074	12.1573	0.0201
5	Grading - 2017	436.0	4.8	440.8	91.4	4.8	96.2	14.6051	194.0784	398.8311	10.1541
Total		441.1	7.7	448.8	91.5	7.6	99.1	50.1	238.3	451.3	10.3

Mitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
2	Building Construction - 2017	4.1	1.8	5.9	0.1	1.8	1.8	8.1145	27.0299	36.8833	0.0735
2	Architectural Coating - 2017	0.7	0.2	0.9	0.0	0.2	0.2	29.9729	3.5195	5.1522	0.0167
5	Site Preparation - 2017	0.2	0.9	1.1	0.0	0.9	0.9	1.5139	8.77	11.3801	0.0201
5	Grading - 2017	16.7	5.2	22.0	3.4	5.2	8.6	12.5415	164.4242	420.586	10.1541
Total		21.8	8.2	29.9	3.5	8.1	11.6	52.1	203.7	474.0	10.3

Phases 3 & 5

Unmitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
3	Site Preparation - 2017	0.4	1.1	1.4	0.0	1.1	1.1	2.2844	13.6074	12.1573	0.0201
3	Grading - 2017	436.0	4.8	440.8	91.4	4.8	96.2	14.6051	194.0784	398.8311	10.1541
5	Building Construction - 2017	4.7	1.6	6.3	0.1	1.5	1.6	5.0241	29.6518	38.1347	0.0835
5	Architectural Coating - 2017	0.8	0.3	1.1	0.0	0.3	0.3	12.0722	3.2279	5.5991	0.0167
Total		441.9	7.7	449.6	91.5	7.7	99.2	34.0	240.6	454.7	10.3

Mitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
3	Site Preparation - 2017	0.2	0.9	1.1	0.0	0.9	0.9	1.5139	8.77	11.3801	0.0201
3	Grading - 2017	16.7	5.2	22.0	3.4	5.2	8.6	12.5415	164.4242	420.586	10.1541
5	Building Construction - 2017	4.7	1.9	6.6	0.1	1.8	1.9	8.4545	29.2699	39.8633	0.0835
5	Architectural Coating - 2017	0.8	0.2	1.1	0.0	0.2	0.2	13.5529	3.5495	5.5522	0.0167
Total		22.5	8.2	30.7	3.5	8.2	11.7	36.1	206.0	477.4	10.3

Without Blasting Emissions

Phase 1

Unmitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
1	Grading - 2014	463.0	6.8	469.7	97.0	6.7	103.7	18.29	151.4321	76.5532	0.1541

Mitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
1	Grading - 2014	43.7	5.6	49.4	9.0	5.5	14.5	13.5815	90.8842	90.516	0.1541

Phases 1 and 4

Unmitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
1	Building Construction - 2015	2.0	1.7	3.7	0.0	1.7	1.7	4.5002	29.1846	28.2994	0.0535
1	Architectural Coating - 2015	0.3	0.3	0.6	0.0	0.3	0.3	15.7027	3.5838	3.986	0.0067
4	Site Preparation - 20115	0.4	1.3	1.7	0.0	1.3	1.3	2.6294	15.748	12.4214	0.0201
4	Grading - 2015	436.0	5.8	441.8	91.4	5.8	97.3	16.357	129.0107	68.9851	0.1541
Total		438.6	9.2	447.8	91.5	9.1	100.6	39.2	177.5	113.7	0.2

Mitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
1	Building Construction - 2015	2.0	1.7	3.6	0.0	1.6	1.7	7.3745	24.8899	29.7533	0.0535
1	Architectural Coating - 2015	0.3	0.2	0.5	0.0	0.2	0.2	17.0829	3.3895	3.8922	0.0067
4	Site Preparation - 20115	0.2	0.9	1.1	0.0	0.9	0.9	1.5239	8.78	11.4901	0.0201
4	Grading - 2015	16.7	5.2	22.0	3.4	5.2	8.6	12.5715	79.4642	85.916	0.1541
Total		19.3	8.0	27.3	3.4	8.0	11.4	38.6	116.5	131.1	0.2

Phases 2 & 4

Unmitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
2	Site Preparation - 2016	0.4	1.2	1.5	0.0	1.2	1.2	2.4452	14.6425	12.281	0.0201
2	Grading - 2016	436.0	5.3	441.4	91.4	5.3	96.7	15.4526	118.7129	66.2289	0.1541
4	Building Construction - 2016	3.9	1.6	5.4	0.1	1.6	1.6	4.8621	27.8945	35.122	0.0735
4	Architectural Coating - 2016	0.7	0.3	1.0	0.0	0.3	0.3	9.6058	3.4558	5.3392	0.0167
Total		440.8	8.4	449.3	91.5	8.3	99.8	32.4	164.7	119.0	0.3

Mitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
2	Site Preparation - 2016	0.2	0.9	1.1	0.0	0.9	0.9	1.5139	8.78	11.4301	0.0201
2	Grading - 2016	16.7	5.2	22.0	3.4	5.2	8.6	12.5515	79.4442	85.746	0.1541
4	Building Construction - 2016	3.9	1.7	5.6	0.1	1.7	1.8	8.0245	25.6299	36.7233	0.0735
4	Architectural Coating - 2016	0.7	0.2	0.9	0.0	0.2	0.2	11.0329	3.5295	5.2722	0.0167
Total		21.5	8.1	29.6	3.5	8.0	11.5	33.1	117.4	139.2	0.3

Without Blasting Emissions

Phases 2 & 5

Unmitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
2	Building Construction - 2017	4.1	1.5	5.6	0.1	1.5	1.5	4.6841	27.4118	35.1547	0.0735
2	Architectural Coating - 2017	0.7	0.3	1.0	0.0	0.3	0.3	28.4922	3.1979	5.1991	0.0167
5	Site Preparation - 2017	0.4	1.1	1.4	0.0	1.1	1.1	2.2844	13.6074	12.1573	0.0201
5	Grading - 2017	436.0	4.8	440.8	91.4	4.8	96.2	14.6051	109.0784	63.8311	0.1541
Total		441.1	7.7	448.8	91.5	7.6	99.1	50.1	153.3	116.3	0.3

Mitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
2	Building Construction - 2017	4.1	1.8	5.9	0.1	1.8	1.8	8.1145	27.0299	36.8833	0.0735
2	Architectural Coating - 2017	0.7	0.2	0.9	0.0	0.2	0.2	29.9729	3.5195	5.1522	0.0167
5	Site Preparation - 2017	0.2	0.9	1.1	0.0	0.9	0.9	1.5139	8.77	11.3801	0.0201
5	Grading - 2017	16.7	5.2	22.0	3.4	5.2	8.6	12.5415	79.4242	85.586	0.1541
Total		21.8	8.2	29.9	3.5	8.1	11.6	52.1	118.7	139.0	0.3

Phases 3 & 5

Unmitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
3	Site Preparation - 2017	0.4	1.1	1.4	0.0	1.1	1.1	2.2844	13.6074	12.1573	0.0201
3	Grading - 2017	436.0	4.8	440.8	91.4	4.8	96.2	14.6051	109.0784	63.8311	0.1541
5	Building Construction - 2017	4.7	1.6	6.3	0.1	1.5	1.6	5.0241	29.6518	38.1347	0.0835
5	Architectural Coating - 2017	0.8	0.3	1.1	0.0	0.3	0.3	12.0722	3.2279	5.5991	0.0167
Total		441.9	7.7	449.6	91.5	7.7	99.2	34.0	155.6	119.7	0.3

Mitigated Construction

Project Phase	Construction Phase	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	ROG	NOx	CO	SO2
3	Site Preparation - 2017	0.2	0.9	1.1	0.0	0.9	0.9	1.5139	8.77	11.3801	0.0201
3	Grading - 2017	16.7	5.2	22.0	3.4	5.2	8.6	12.5415	79.4242	85.586	0.1541
5	Building Construction - 2017	4.7	1.9	6.6	0.1	1.8	1.9	8.4545	29.2699	39.8633	0.0835
5	Architectural Coating - 2017	0.8	0.2	1.1	0.0	0.2	0.2	13.5529	3.5495	5.5522	0.0167
Total		22.5	8.2	30.7	3.5	8.2	11.7	36.1	121.0	142.4	0.3

AERSCREEN OUTPUT FILES

```
 AERSCREEN 11126 / AERMOD  1206
02/18/13

07:04:30

 TITLE: LILAC HRA


-----------------------------------------------------------------------
-----
 ****************************  VOLUME PARAMETERS
****************************

-----------------------------------------------------------------------
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 SOURCE EMISSION RATE:            0.0431 g/s                 0.342 lb/hr
 VOLUME HEIGHT:                    12.00 meters              39.37 feet
 INITIAL LATERAL DIMENSION:       650.00 meters            2132.55 feet
 INITIAL VERTICAL DIMENSION:      650.00 meters            2132.55 feet
 RURAL OR URBAN:                   RURAL

 FLAGPOLE RECEPTOR HEIGHT:          1.52 meters               4.99 feet

 INITIAL PROBE DISTANCE =          5000. meters             16404. feet



-----------------------------------------------------------------------
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 ***********************  BUILDING DOWNWASH PARAMETERS
**********************

-----------------------------------------------------------------------
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                BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES


 **************************  PROBE ANALYSIS  **************************
                  25 meter receptor spacing: 1399. meters - 5000. meters


      Zo       ROUGHNESS       1-HR CONC   DIST      TEMPORAL
      SECTOR     LENGTH         (ug/m3)     (m)       PERIOD

-----------------------------------------------------------------------
       1*         0.010         2.017      1398.5      WIN
 * = worst case flow sector



-----------------------------------------------------------------------
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 **********************  MAKEMET METEOROLOGY PARAMETERS
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 MIN/MAX TEMPERATURE:    276.0 / 304.4 (K)

 MINIMUM WIND SPEED:       0.5 m/s

 ANEMOMETER HEIGHT:     10.000 meters

 SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

 DOMINANT SURFACE PROFILE: Cultivated Land
 DOMINANT CLIMATE TYPE:    Dry Conditions
 DOMINANT SEASON:          Winter

 ALBEDO:                  0.60
 BOWEN RATIO:             2.00
 ROUGHNESS LENGTH:       0.010 (meters)


        METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT
        -------------------------------------------------------------

  YR MO DY JDY HR
  -- -- -- --- --
  10 01 01   1 12

     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
REF WS
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - -
   1.89  0.039  0.100  0.020   18.   18.     -2.8 0.010   2.00   0.60
0.50

     HT  REF TA     HT
 - - - - - - - - - - -
   10.0   276.0    2.0


        METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT
        --------------------------------------------------------------

  YR MO DY JDY HR
  -- -- -- --- --
  10 01 01   1 12

     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
REF WS
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - -
   1.89  0.039  0.100  0.020   18.   18.     -2.8 0.010   2.00   0.60
0.50

     HT  REF TA     HT
 - - - - - - - - - - -
   10.0   276.0    2.0



----------------------------------------------------------------------
```

********** AERSCREEN AUTOMATED DISTANCES
****

OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1398.50	2.017	3200.00	1.795
1400.00	2.016	3225.00	1.793
1425.00	2.012	3250.00	1.790
1450.00	2.008	3275.00	1.788
1475.00	2.004	3300.00	1.785
1500.00	2.000	3325.00	1.783
1525.00	1.996	3350.00	1.780
1550.00	1.992	3375.00	1.778
1575.00	1.988	3400.00	1.775
1600.00	1.984	3425.00	1.773
1625.00	1.980	3450.00	1.770
1650.00	1.976	3475.00	1.768
1675.00	1.973	3500.00	1.765
1700.00	1.969	3525.00	1.763
1725.00	1.966	3550.00	1.761
1750.00	1.962	3575.00	1.758
1775.00	1.958	3600.00	1.756
1800.00	1.955	3625.00	1.753
1825.00	1.952	3650.00	1.751
1850.00	1.948	3675.00	1.748
1875.00	1.945	3700.00	1.746
1900.00	1.941	3725.00	1.744
1925.00	1.938	3750.00	1.741
1950.00	1.935	3775.00	1.739
1975.00	1.932	3800.00	1.737
2000.00	1.928	3825.00	1.734
2025.00	1.925	3850.00	1.732
2050.00	1.922	3875.00	1.730
2075.00	1.919	3900.00	1.727
2100.00	1.916	3925.00	1.725
2125.00	1.913	3950.00	1.723
2150.00	1.910	3975.00	1.720
2175.00	1.907	4000.00	1.718
2200.00	1.904	4025.00	1.716
2225.00	1.901	4050.00	1.713
2250.00	1.898	4075.00	1.711
2275.00	1.895	4100.00	1.709
2300.00	1.892	4125.00	1.706
2325.00	1.889	4150.00	1.704
2350.00	1.886	4175.00	1.702
2375.00	1.883	4200.00	1.699
2400.00	1.880	4225.00	1.697
2425.00	1.877	4250.00	1.695
2450.00	1.875	4275.00	1.693
2475.00	1.872	4300.00	1.690
2500.00	1.869	4325.00	1.688
2525.00	1.866	4350.00	1.686
2550.00	1.863	4375.00	1.684

2575.00	1.861	4400.00	1.681
2600.00	1.858	4425.00	1.679
2625.00	1.855	4450.00	1.677
2650.00	1.852	4475.00	1.675
2675.00	1.850	4500.00	1.672
2700.00	1.847	4525.00	1.670
2725.00	1.844	4550.00	1.668
2750.00	1.842	4575.00	1.666
2775.00	1.839	4600.00	1.663
2800.00	1.836	4625.00	1.661
2825.00	1.834	4650.00	1.659
2850.00	1.831	4675.00	1.657
2875.00	1.828	4700.00	1.655
2900.00	1.826	4725.00	1.652
2925.00	1.823	4750.00	1.650
2950.00	1.821	4775.00	1.648
2975.00	1.818	4800.00	1.646
3000.00	1.815	4825.00	1.644
3025.00	1.813	4850.00	1.641
3050.00	1.810	4875.00	1.639
3075.00	1.808	4900.00	1.637
3100.00	1.805	4925.00	1.635
3125.00	1.803	4950.00	1.633
3150.00	1.800	4975.00	1.631
3175.00	1.798	5000.00	1.628

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	2.017	2.017	1.815	1.210	0.2017

DISTANCE FROM SOURCE 1398.50 meters

IMPACT AT THE AMBIENT BOUNDARY	2.017	2.017	1.815	1.210	0.2017

DISTANCE FROM SOURCE 1398.50 meters

DPM Calculaitons

	Run 1	Run 2	Total	reduced by 33%
Phase 1	0.74	0.07	0.81	0.5427
Phase 2	0.75	0.07	0.82	0.5494
Phase 3	1.72	0.19	1.91	1.2797
Phase 4	0.81	0.1	0.91	0.6097
Phase 5	0.69	0.07	0.76	0.5092
Total			**5.21**	**3.4907**
Mean Annual Emission			**0.521**	**0.34907**

Annual PM Exhaust Generation

Annual Tons/Year	Pounds/year	lbs/day	lbs/hr	g/day	sec/day	g/sec
0.34907	698.14	2.74E+00	3.42E-01	1,242	28,800	4.31E-02

Health Risk Calculation

	Equation Inputs	
Cair	2.02E+00	$\mu g/m^3$
DBR	302	
A	1	
EF	350	
ED	10	
AT	25,550	
URF	3.00E-04	
Dose $_{inhilation}$	0.00008344	8.34E-05
Risk	0.000000025	2.50E-08
RELi	5	
Hazard Quotient	4.03E-01	

CALLEEMOD OPERATION OUTPUT FILES

6153: Lilac Ranch - operational - Phase A

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	3.2	Acre
Single Family Housing	350	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Off-road Equipment -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Land Use - per client

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	1.03	6.27	5.55	0.01	0.33	0.40	0.73	0.01	0.40	0.41	0.00	819.59	819.59	0.08	0.00	821.38
2012	0.95	5.85	5.33	0.01	0.33	0.37	0.70	0.01	0.37	0.37	0.00	817.87	817.87	0.08	0.00	819.52
2013	0.88	5.42	5.11	0.01	0.33	0.33	0.66	0.01	0.33	0.34	0.00	813.16	813.16	0.07	0.00	814.67
2014	0.81	5.02	4.91	0.01	0.33	0.30	0.63	0.01	0.30	0.30	0.00	808.56	808.56	0.07	0.00	809.95
2015	0.19	1.17	1.22	0.00	0.08	0.07	0.15	0.00	0.07	0.07	0.00	206.30	206.30	0.02	0.00	206.63
Total	**3.86**	**23.73**	**22.12**	**0.04**	**1.40**	**1.47**	**2.87**	**0.04**	**1.47**	**1.49**	**0.00**	**3,465.48**	**3,465.48**	**0.32**	**0.00**	**3,472.15**

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	1.03	6.27	5.55	0.01	0.02	0.40	0.42	0.01	0.40	0.41	0.00	819.59	819.59	0.08	0.00	821.38
2012	0.95	5.85	5.33	0.01	0.02	0.37	0.39	0.01	0.37	0.37	0.00	817.87	817.87	0.08	0.00	819.52
2013	0.88	5.42	5.11	0.01	0.02	0.33	0.35	0.01	0.33	0.34	0.00	813.16	813.16	0.07	0.00	814.67
2014	0.81	5.02	4.91	0.01	0.02	0.30	0.31	0.01	0.30	0.30	0.00	808.56	808.56	0.07	0.00	809.95
2015	0.19	1.17	1.22	0.00	0.00	0.07	0.07	0.00	0.07	0.07	0.00	206.30	206.30	0.02	0.00	206.63
Total	**3.86**	**23.73**	**22.12**	**0.04**	**0.08**	**1.47**	**1.54**	**0.04**	**1.47**	**1.49**	**0.00**	**3,465.48**	**3,465.48**	**0.32**	**0.00**	**3,472.15**

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	3.31	0.03	2.67	0.00		0.00	0.07		0.00	0.07	0.00	748.62	748.62	0.02	0.01	753.24
Energy	0.07	0.62	0.26	0.00		0.00	0.05		0.00	0.05	0.00	1,507.06	1,507.06	0.04	0.02	1,515.49
Mobile	3.61	7.72	36.40	0.06	6.49	0.38	6.87	0.10	0.37	0.47	0.00	5,492.11	5,492.11	0.23	0.00	5,496.97
Waste						0.00	0.00		0.00	0.00	83.37	0.00	83.37	4.93	0.00	186.83
Water						0.00	0.00		0.00	0.00	0.00	176.99	176.99	0.70	0.02	197.86
Total	**6.99**	**8.37**	**39.33**	**0.06**	**6.49**	**0.38**	**6.99**	**0.10**	**0.37**	**0.59**	**83.37**	**7,924.78**	**8,008.15**	**5.92**	**0.05**	**8,150.39**

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	3.31	0.03	2.67	0.00		0.00	0.07		0.00	0.07	0.00	748.62	748.62	0.02	0.01	753.24
Energy	0.06	0.49	0.21	0.00		0.00	0.04		0.00	0.04	0.00	1,306.79	1,306.79	0.04	0.02	1,314.05
Mobile	3.54	7.55	35.63	0.06	6.33	0.37	6.70	0.10	0.36	0.46	0.00	5,353.29	5,353.29	0.23	0.00	5,358.04
Waste						0.00	0.00		0.00	0.00	66.69	0.00	66.69	3.94	0.00	149.46
Water						0.00	0.00		0.00	0.00	0.00	134.43	134.43	0.56	0.02	151.10
Total	**6.91**	**8.07**	**38.51**	**0.06**	**6.33**	**0.37**	**6.81**	**0.10**	**0.36**	**0.57**	**66.69**	**7,543.13**	**7,609.82**	**4.79**	**0.05**	**7,725.89**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Building - 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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	**0.79**	**5.23**	**3.12**	**0.01**		**0.36**	**0.36**		**0.36**	**0.36**	**0.00**	**476.40**	**476.40**	**0.06**	**0.00**	**477.75**

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	0.08	0.85	0.56	0.00	0.04	0.03	0.06	0.00	0.03	0.03	0.00	107.48	107.48	0.00	0.00	107.56
Worker	0.16	0.19	1.86	0.00	0.29	0.01	0.30	0.00	0.01	0.01	0.00	235.71	235.71	0.02	0.00	236.07
Total	**0.24**	**1.04**	**2.42**	**0.00**	**0.33**	**0.04**	**0.36**	**0.00**	**0.04**	**0.04**	**0.00**	**343.19**	**343.19**	**0.02**	**0.00**	**343.63**

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	**0.79**	**5.23**	**3.12**	**0.01**		**0.36**	**0.36**		**0.36**	**0.36**	**0.00**	**476.40**	**476.40**	**0.06**	**0.00**	**477.75**

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	0.08	0.85	0.56	0.00	0.00	0.03	0.03	0.00	0.03	0.03	0.00	107.48	107.48	0.00	0.00	107.56
Worker	0.16	0.19	1.86	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	235.71	235.71	0.02	0.00	236.07
Total	**0.24**	**1.04**	**2.42**	**0.00**	**0.01**	**0.04**	**0.05**	**0.00**	**0.04**	**0.04**	**0.00**	**343.19**	**343.19**	**0.02**	**0.00**	**343.63**

3.2 Building - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	**0.73**	**4.87**	**3.10**	**0.01**		**0.33**	**0.33**		**0.33**	**0.33**	**0.00**	**478.23**	**478.23**	**0.06**	**0.00**	**479.48**

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	0.07	0.79	0.52	0.00	0.04	0.03	0.06	0.00	0.02	0.03	0.00	108.10	108.10	0.00	0.00	108.17
Worker	0.15	0.18	1.71	0.00	0.29	0.01	0.30	0.00	0.01	0.01	0.00	231.55	231.55	0.02	0.00	231.87
Total	**0.22**	**0.97**	**2.23**	**0.00**	**0.33**	**0.04**	**0.36**	**0.00**	**0.03**	**0.04**	**0.00**	**339.65**	**339.65**	**0.02**	**0.00**	**340.04**

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	**0.73**	**4.87**	**3.10**	**0.01**		**0.33**	**0.33**		**0.33**	**0.33**	**0.00**	**478.23**	**478.23**	**0.06**	**0.00**	**479.48**

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	0.07	0.79	0.52	0.00	0.00	0.03	0.03	0.00	0.02	0.03	0.00	108.10	108.10	0.00	0.00	108.17
Worker	0.15	0.18	1.71	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	231.55	231.55	0.02	0.00	231.87
Total	**0.22**	**0.97**	**2.23**	**0.00**	**0.01**	**0.04**	**0.05**	**0.00**	**0.03**	**0.04**	**0.00**	**339.65**	**339.65**	**0.02**	**0.00**	**340.04**

3.2 Building - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	**0.67**	**4.52**	**3.06**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.38**

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	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	0.07	0.74	0.49	0.00	0.04	0.02	0.06	0.00	0.02	0.02	0.00	108.28	108.28	0.00	0.00	108.35
Worker	0.14	0.16	1.57	0.00	0.29	0.01	0.30	0.00	0.01	0.02	0.00	226.65	226.65	0.01	0.00	226.95
Total	**0.21**	**0.90**	**2.06**	**0.00**	**0.33**	**0.03**	**0.36**	**0.00**	**0.03**	**0.04**	**0.00**	**334.93**	**334.93**	**0.01**	**0.00**	**335.30**

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	**0.67**	**4.52**	**3.06**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.38**

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	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	0.07	0.74	0.49	0.00	0.00	0.02	0.03	0.00	0.02	0.02	0.00	108.28	108.28	0.00	0.00	108.35
Worker	0.14	0.16	1.57	0.00	0.01	0.01	0.02	0.00	0.01	0.02	0.00	226.65	226.65	0.01	0.00	226.95
Total	**0.21**	**0.90**	**2.06**	**0.00**	**0.01**	**0.03**	**0.05**	**0.00**	**0.03**	**0.04**	**0.00**	**334.93**	**334.93**	**0.01**	**0.00**	**335.30**

3.2 Building - 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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	**0.62**	**4.18**	**3.03**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.28**

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	0.06	0.68	0.45	0.00	0.04	0.02	0.06	0.00	0.02	0.02	0.00	108.47	108.47	0.00	0.00	108.53
Worker	0.13	0.15	1.44	0.00	0.29	0.01	0.30	0.00	0.01	0.02	0.00	221.86	221.86	0.01	0.00	222.15
Total	**0.19**	**0.83**	**1.89**	**0.00**	**0.33**	**0.03**	**0.36**	**0.00**	**0.03**	**0.04**	**0.00**	**330.33**	**330.33**	**0.01**	**0.00**	**330.68**

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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	**0.62**	**4.18**	**3.03**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.28**

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	0.06	0.68	0.45	0.00	0.00	0.02	0.03	0.00	0.02	0.02	0.00	108.47	108.47	0.00	0.00	108.53
Worker	0.13	0.15	1.44	0.00	0.01	0.01	0.02	0.00	0.01	0.02	0.00	221.86	221.86	0.01	0.00	222.15
Total	**0.19**	**0.83**	**1.89**	**0.00**	**0.01**	**0.03**	**0.05**	**0.00**	**0.03**	**0.04**	**0.00**	**330.33**	**330.33**	**0.01**	**0.00**	**330.68**

3.2 Building - 2015

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	0.15	0.98	0.77	0.00		0.06	0.06		0.06	0.06	0.00	122.76	122.76	0.01	0.00	123.01
Total	**0.15**	**0.98**	**0.77**	**0.00**		**0.06**	**0.06**		**0.06**	**0.06**	**0.00**	**122.76**	**122.76**	**0.01**	**0.00**	**123.01**

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	0.16	0.11	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.00	27.89	27.89	0.00	0.00	27.90
Worker	0.03	0.04	0.34	0.00	0.07	0.00	0.08	0.00	0.00	0.00	0.00	55.65	55.65	0.00	0.00	55.72
Total	**0.04**	**0.20**	**0.45**	**0.00**	**0.08**	**0.01**	**0.09**	**0.00**	**0.01**	**0.01**	**0.00**	**83.54**	**83.54**	**0.00**	**0.00**	**83.62**

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	0.15	0.98	0.77	0.00		0.06	0.06		0.06	0.06	0.00	122.76	122.76	0.01	0.00	123.01
Total	**0.15**	**0.98**	**0.77**	**0.00**		**0.06**	**0.06**		**0.06**	**0.06**	**0.00**	**122.76**	**122.76**	**0.01**	**0.00**	**123.01**

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	0.16	0.11	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	27.89	27.89	0.00	0.00	27.90
Worker	0.03	0.04	0.34	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	55.65	55.65	0.00	0.00	55.72
Total	**0.04**	**0.20**	**0.45**	**0.00**	**0.00**	**0.01**	**0.02**	**0.00**	**0.01**	**0.01**	**0.00**	**83.54**	**83.54**	**0.00**	**0.00**	**83.62**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Integrate Below Market Rate Housing

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	3.54	7.55	35.63	0.06	6.33	0.37	6.70	0.10	0.36	0.46	0.00	5,353.29	5,353.29	0.23	0.00	5,358.04
Unmitigated	3.61	7.72	36.40	0.06	6.49	0.38	6.87	0.10	0.37	0.47	0.00	5,492.11	5,492.11	0.23	0.00	5,496.97
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
City Park	5.09	5.09	5.09	12,548	12,224
Single Family Housing	3,349.50	3,528.00	3069.50	12,341,703	12,022,793
Total	3,354.59	3,533.09	3,074.59	12,354,251	12,035,017

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
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	744.73	744.73	0.03	0.01	748.57
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	794.74	794.74	0.03	0.01	798.83
NaturalGas Mitigated	0.06	0.49	0.21	0.00		0.00	0.04		0.00	0.04	0.00	562.06	562.06	0.01	0.01	565.48
NaturalGas Unmitigated	0.07	0.62	0.26	0.00		0.00	0.05		0.00	0.05	0.00	712.32	712.32	0.01	0.01	716.66
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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Single Family Housing	1.33484e+007	0.07	0.62	0.26	0.00		0.00	0.05		0.00	0.05	0.00	712.32	712.32	0.01	0.01	716.66
Total		**0.07**	**0.62**	**0.26**	**0.00**		**0.00**	**0.05**		**0.00**	**0.05**	**0.00**	**712.32**	**712.32**	**0.01**	**0.01**	**716.66**

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					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Single Family Housing	1.05326e+007	0.06	0.49	0.21	0.00		0.00	0.04		0.00	0.04	0.00	562.06	562.06	0.01	0.01	565.48
Total		**0.06**	**0.49**	**0.21**	**0.00**		**0.00**	**0.04**		**0.00**	**0.04**	**0.00**	**562.06**	**562.06**	**0.01**	**0.01**	**565.48**

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			
City Park	0					0.00	0.00	0.00	0.00
Single Family Housing	2.24401e+006					794.74	0.03	0.01	798.83
Total						**794.74**	**0.03**	**0.01**	**798.83**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
City Park	0					0.00	0.00	0.00	0.00
Single Family Housing	2.10282e+006					744.73	0.03	0.01	748.57
Total						**744.73**	**0.03**	**0.01**	**748.57**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Non-Residential Interior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	3.31	0.03	2.67	0.00		0.00	0.07		0.00	0.07	0.00	748.62	748.62	0.02	0.01	753.24
Unmitigated	3.31	0.03	2.67	0.00		0.00	0.07		0.00	0.07	0.00	748.62	748.62	0.02	0.01	753.24

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	0.69					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	2.46					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.08	0.00	0.00	0.00		0.00	0.05		0.00	0.05	0.00	744.33	744.33	0.01	0.01	748.86
Landscaping	0.08	0.03	2.66	0.00		0.00	0.01		0.00	0.01	0.00	4.29	4.29	0.00	0.00	4.39
Total	**3.31**	**0.03**	**2.66**	**0.00**		**0.00**	**0.06**		**0.00**	**0.06**	**0.00**	**748.62**	**748.62**	**0.01**	**0.01**	**753.25**

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	0.69					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	2.46					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.08	0.00	0.00	0.00		0.00	0.05		0.00	0.05	0.00	744.33	744.33	0.01	0.01	748.86
Landscaping	0.08	0.03	2.66	0.00		0.00	0.01		0.00	0.01	0.00	4.29	4.29	0.00	0.00	4.39
Total	**3.31**	**0.03**	**2.66**	**0.00**		**0.00**	**0.06**		**0.00**	**0.06**	**0.00**	**748.62**	**748.62**	**0.01**	**0.01**	**753.25**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					134.43	0.56	0.02	151.10
Unmitigated					176.99	0.70	0.02	197.86
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			
City Park	0 / 3.81274					15.00	0.00	0.00	15.08
Single Family Housing	22.8039 / 14.3764					161.98	0.70	0.02	182.79
Total						**176.98**	**0.70**	**0.02**	**197.87**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
City Park	0 / 2.66892					10.50	0.00	0.00	10.56
Single Family Housing	18.2431 / 10.0635					123.93	0.56	0.02	140.54
Total						**134.43**	**0.56**	**0.02**	**151.10**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					66.69	3.94	0.00	149.46
Unmitigated					83.37	4.93	0.00	186.83
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			
City Park	0.28					0.06	0.00	0.00	0.13
Single Family Housing	410.41					83.31	4.92	0.00	186.70
Total						**83.37**	**4.92**	**0.00**	**186.83**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
City Park	0.224					0.05	0.00	0.00	0.10
Single Family Housing	328.328					66.65	3.94	0.00	149.36

Total						**66.70**	**3.94**	**0.00**	**149.46**

9.0 Vegetation

6153: Lilac Ranch - operational - Phase B

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
City Park	6.9	Acre
Apartments Low Rise	171	Dwelling Unit
Congregate Care (Assisted Living)	200	Dwelling Unit
Single Family Housing	350	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Off-road Equipment -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Land Use - per client

Woodstoves - per client

Area Coating - per client

Energy Use - 10% reduction, energy star

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	1.45	7.61	10.11	0.02	0.98	0.46	1.44	0.02	0.45	0.47	0.00	1,435.28	1,435.28	0.12	0.00	1,437.90
2012	1.34	7.08	9.52	0.02	0.98	0.42	1.41	0.02	0.42	0.43	0.00	1,425.39	1,425.39	0.12	0.00	1,427.81
2013	1.24	6.56	8.97	0.02	0.98	0.38	1.37	0.02	0.38	0.39	0.00	1,410.50	1,410.50	0.11	0.00	1,412.72
2014	1.14	6.07	8.45	0.02	0.98	0.35	1.33	0.02	0.34	0.36	0.00	1,395.96	1,395.96	0.10	0.00	1,398.01
2015	1.05	5.56	7.99	0.02	0.98	0.31	1.30	0.02	0.31	0.32	0.00	1,380.50	1,380.50	0.09	0.00	1,382.40
2016	0.98	5.09	7.59	0.02	0.98	0.28	1.27	0.02	0.28	0.29	0.00	1,364.50	1,364.50	0.08	0.00	1,366.25
2017	0.90	4.65	7.19	0.02	0.98	0.25	1.23	0.02	0.25	0.26	0.00	1,344.55	1,344.55	0.08	0.00	1,346.16
2018	0.84	4.28	6.89	0.02	0.98	0.23	1.21	0.02	0.22	0.24	0.00	1,335.93	1,335.93	0.07	0.00	1,337.42
2019	0.78	3.93	6.62	0.02	0.98	0.20	1.19	0.02	0.20	0.22	0.00	1,323.38	1,323.38	0.07	0.00	1,324.77
2020	0.73	3.64	6.41	0.02	0.99	0.18	1.17	0.02	0.18	0.19	0.00	1,316.89	1,316.89	0.06	0.00	1,318.19
2021	0.69	3.34	6.22	0.02	0.98	0.16	1.15	0.02	0.16	0.18	0.00	1,307.06	1,307.06	0.06	0.00	1,308.27
2022	0.57	2.73	5.32	0.01	0.87	0.13	1.00	0.01	0.13	0.14	0.00	1,143.29	1,143.29	0.05	0.00	1,144.30
Total	**11.71**	**60.54**	**91.28**	**0.23**	**11.66**	**3.35**	**15.07**	**0.23**	**3.32**	**3.49**	**0.00**	**16,183.23**	**16,183.23**	**1.01**	**0.00**	**16,204.20**

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	1.45	7.61	10.11	0.02	0.05	0.46	0.50	0.02	0.45	0.47	0.00	1,435.28	1,435.28	0.12	0.00	1,437.90
2012	1.34	7.08	9.52	0.02	0.05	0.42	0.47	0.02	0.42	0.43	0.00	1,425.39	1,425.39	0.12	0.00	1,427.81
2013	1.24	6.56	8.97	0.02	0.05	0.38	0.43	0.02	0.38	0.39	0.00	1,410.50	1,410.50	0.11	0.00	1,412.72
2014	1.14	6.07	8.45	0.02	0.05	0.35	0.39	0.02	0.34	0.36	0.00	1,395.96	1,395.96	0.10	0.00	1,398.01
2015	1.05	5.56	7.99	0.02	0.05	0.31	0.36	0.02	0.31	0.32	0.00	1,380.50	1,380.50	0.09	0.00	1,382.40
2016	0.98	5.09	7.59	0.02	0.05	0.28	0.33	0.02	0.28	0.29	0.00	1,364.50	1,364.50	0.08	0.00	1,366.25
2017	0.90	4.65	7.19	0.02	0.05	0.25	0.30	0.02	0.25	0.26	0.00	1,344.55	1,344.55	0.08	0.00	1,346.16
2018	0.84	4.28	6.89	0.02	0.05	0.23	0.27	0.02	0.22	0.24	0.00	1,335.93	1,335.93	0.07	0.00	1,337.42
2019	0.78	3.93	6.62	0.02	0.05	0.20	0.25	0.02	0.20	0.22	0.00	1,323.38	1,323.38	0.07	0.00	1,324.77
2020	0.73	3.64	6.41	0.02	0.05	0.18	0.23	0.02	0.18	0.19	0.00	1,316.89	1,316.89	0.06	0.00	1,318.19
2021	0.69	3.34	6.22	0.02	0.05	0.16	0.21	0.02	0.16	0.18	0.00	1,307.06	1,307.06	0.06	0.00	1,308.27
2022	0.57	2.73	5.32	0.01	0.04	0.13	0.17	0.01	0.13	0.14	0.00	1,143.29	1,143.29	0.05	0.00	1,144.30
Total	**11.71**	**60.54**	**91.28**	**0.23**	**0.59**	**3.35**	**3.91**	**0.23**	**3.32**	**3.49**	**0.00**	**16,183.23**	**16,183.23**	**1.01**	**0.00**	**16,204.20**

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	5.29	0.06	5.49	0.00		0.00	0.11		0.00	0.11	0.00	1,117.07	1,117.07	0.03	0.02	1,124.00
Energy	0.10	0.84	0.36	0.01		0.00	0.07		0.00	0.07	0.00	2,214.84	2,214.84	0.06	0.04	2,227.16
Mobile	5.40	11.55	54.45	0.10	9.72	0.57	10.28	0.16	0.55	0.70	0.00	8,216.55	8,216.55	0.35	0.00	8,223.82
Waste						0.00	0.00		0.00	0.00	136.44	0.00	136.44	8.06	0.00	305.78
Water						0.00	0.00		0.00	0.00	0.00	366.03	366.03	1.45	0.04	409.05
Total	**10.79**	**12.45**	**60.30**	**0.11**	**9.72**	**0.57**	**10.46**	**0.16**	**0.55**	**0.88**	**136.44**	**11,914.49**	**12,050.93**	**9.95**	**0.10**	**12,289.81**

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	5.29	0.06	5.49	0.00		0.00	0.11		0.00	0.11	0.00	1,117.07	1,117.07	0.03	0.02	1,124.00
Energy	0.08	0.67	0.28	0.00		0.00	0.05		0.00	0.05	0.00	1,938.14	1,938.14	0.06	0.03	1,948.84
Mobile	5.30	11.30	53.31	0.09	9.47	0.55	10.02	0.15	0.54	0.69	0.00	8,008.87	8,008.87	0.34	0.00	8,015.98
Waste						0.00	0.00		0.00	0.00	109.15	0.00	109.15	6.45	0.00	244.62
Water						0.00	0.00		0.00	0.00	0.00	277.94	277.94	1.16	0.03	312.28
Total	**10.67**	**12.03**	**59.08**	**0.09**	**9.47**	**0.55**	**10.18**	**0.15**	**0.54**	**0.85**	**109.15**	**11,342.02**	**11,451.17**	**8.04**	**0.08**	**11,645.72**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Building - 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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	**0.79**	**5.23**	**3.12**	**0.01**		**0.36**	**0.36**		**0.36**	**0.36**	**0.00**	**476.40**	**476.40**	**0.06**	**0.00**	**477.75**

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	0.17	1.77	1.17	0.00	0.07	0.06	0.13	0.00	0.06	0.06	0.00	223.68	223.68	0.01	0.00	223.84
Worker	0.49	0.60	5.81	0.01	0.91	0.03	0.94	0.01	0.03	0.05	0.00	735.20	735.20	0.05	0.00	736.31
Total	**0.66**	**2.37**	**6.98**	**0.01**	**0.98**	**0.09**	**1.07**	**0.01**	**0.09**	**0.11**	**0.00**	**958.88**	**958.88**	**0.06**	**0.00**	**960.15**

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	**0.79**	**5.23**	**3.12**	**0.01**		**0.36**	**0.36**		**0.36**	**0.36**	**0.00**	**476.40**	**476.40**	**0.06**	**0.00**	**477.75**

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	0.17	1.77	1.17	0.00	0.01	0.06	0.07	0.00	0.06	0.06	0.00	223.68	223.68	0.01	0.00	223.84
Worker	0.49	0.60	5.81	0.01	0.04	0.03	0.07	0.01	0.03	0.05	0.00	735.20	735.20	0.05	0.00	736.31
Total	**0.66**	**2.37**	**6.98**	**0.01**	**0.05**	**0.09**	**0.14**	**0.01**	**0.09**	**0.11**	**0.00**	**958.88**	**958.88**	**0.06**	**0.00**	**960.15**

3.2 Building - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	**0.73**	**4.87**	**3.10**	**0.01**		**0.33**	**0.33**		**0.33**	**0.33**	**0.00**	**478.23**	**478.23**	**0.06**	**0.00**	**479.48**

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	0.15	1.65	1.09	0.00	0.07	0.06	0.13	0.00	0.05	0.05	0.00	224.96	224.96	0.01	0.00	225.10
Worker	0.46	0.55	5.34	0.01	0.91	0.04	0.94	0.01	0.03	0.05	0.00	722.20	722.20	0.05	0.00	723.22
Total	**0.61**	**2.20**	**6.43**	**0.01**	**0.98**	**0.10**	**1.07**	**0.01**	**0.08**	**0.10**	**0.00**	**947.16**	**947.16**	**0.06**	**0.00**	**948.32**

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48

Total	**0.73**	**4.87**	**3.10**	**0.01**		**0.33**	**0.33**		**0.33**	**0.33**	**0.00**	**478.23**	**478.23**	**0.06**	**0.00**	**479.48**

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	0.15	1.65	1.09	0.00	0.01	0.06	0.06	0.00	0.05	0.05	0.00	224.96	224.96	0.01	0.00	225.10
Worker	0.46	0.55	5.34	0.01	0.04	0.04	0.07	0.01	0.03	0.05	0.00	722.20	722.20	0.05	0.00	723.22
Total	**0.61**	**2.20**	**6.43**	**0.01**	**0.05**	**0.10**	**0.13**	**0.01**	**0.08**	**0.10**	**0.00**	**947.16**	**947.16**	**0.06**	**0.00**	**948.32**

3.2 Building - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	**0.67**	**4.52**	**3.06**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.38**

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	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	0.14	1.53	1.01	0.00	0.07	0.05	0.13	0.00	0.05	0.05	0.00	225.35	225.35	0.01	0.00	225.48
Worker	0.42	0.51	4.90	0.01	0.91	0.04	0.94	0.01	0.03	0.05	0.00	706.92	706.92	0.05	0.00	707.87

Total	**0.56**	**2.04**	**5.91**	**0.01**	**0.98**	**0.09**	**1.07**	**0.01**	**0.08**	**0.10**	**0.00**	**932.27**	**932.27**	**0.06**	**0.00**	**933.35**

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	**0.67**	**4.52**	**3.06**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.38**

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	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	0.14	1.53	1.01	0.00	0.01	0.05	0.06	0.00	0.05	0.05	0.00	225.35	225.35	0.01	0.00	225.48
Worker	0.42	0.51	4.90	0.01	0.04	0.04	0.07	0.01	0.03	0.05	0.00	706.92	706.92	0.05	0.00	707.87
Total	**0.56**	**2.04**	**5.91**	**0.01**	**0.05**	**0.09**	**0.13**	**0.01**	**0.08**	**0.10**	**0.00**	**932.27**	**932.27**	**0.06**	**0.00**	**933.35**

3.2 Building - 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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	**0.62**	**4.18**	**3.03**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.28**

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	0.13	1.42	0.93	0.00	0.07	0.05	0.12	0.00	0.04	0.05	0.00	225.73	225.73	0.01	0.00	225.85
Worker	0.39	0.47	4.49	0.01	0.91	0.04	0.94	0.01	0.03	0.05	0.00	692.00	692.00	0.04	0.00	692.88
Total	**0.52**	**1.89**	**5.42**	**0.01**	**0.98**	**0.09**	**1.06**	**0.01**	**0.07**	**0.10**	**0.00**	**917.73**	**917.73**	**0.05**	**0.00**	**918.73**

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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	**0.62**	**4.18**	**3.03**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.28**

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	0.13	1.42	0.93	0.00	0.01	0.05	0.05	0.00	0.04	0.05	0.00	225.73	225.73	0.01	0.00	225.85
Worker	0.39	0.47	4.49	0.01	0.04	0.04	0.07	0.01	0.03	0.05	0.00	692.00	692.00	0.04	0.00	692.88
Total	**0.52**	**1.89**	**5.42**	**0.01**	**0.05**	**0.09**	**0.12**	**0.01**	**0.07**	**0.10**	**0.00**	**917.73**	**917.73**	**0.05**	**0.00**	**918.73**

3.2 Building - 2015

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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	**0.57**	**3.80**	**3.00**	**0.01**		**0.23**	**0.23**		**0.23**	**0.23**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.20**

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	0.12	1.32	0.87	0.00	0.07	0.04	0.12	0.00	0.04	0.04	0.00	226.06	226.06	0.01	0.00	226.18
Worker	0.36	0.43	4.13	0.01	0.91	0.04	0.95	0.01	0.03	0.05	0.00	676.21	676.21	0.04	0.00	677.02
Total	**0.48**	**1.75**	**5.00**	**0.01**	**0.98**	**0.08**	**1.07**	**0.01**	**0.07**	**0.09**	**0.00**	**902.27**	**902.27**	**0.05**	**0.00**	**903.20**

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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	**0.57**	**3.80**	**3.00**	**0.01**		**0.23**	**0.23**		**0.23**	**0.23**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.20**

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	0.12	1.32	0.87	0.00	0.01	0.04	0.05	0.00	0.04	0.04	0.00	226.06	226.06	0.01	0.00	226.18
Worker	0.36	0.43	4.13	0.01	0.04	0.04	0.07	0.01	0.03	0.05	0.00	676.21	676.21	0.04	0.00	677.02
Total	**0.48**	**1.75**	**5.00**	**0.01**	**0.05**	**0.08**	**0.12**	**0.01**	**0.07**	**0.09**	**0.00**	**902.27**	**902.27**	**0.05**	**0.00**	**903.20**

3.2 Building - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11
Total	**0.52**	**3.46**	**2.97**	**0.01**		**0.21**	**0.21**		**0.21**	**0.21**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**479.11**

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	0.11	1.24	0.81	0.00	0.07	0.04	0.11	0.00	0.04	0.04	0.00	226.39	226.39	0.01	0.00	226.49
Worker	0.34	0.39	3.81	0.01	0.91	0.04	0.95	0.01	0.03	0.05	0.00	659.88	659.88	0.04	0.00	660.64
Total	**0.45**	**1.63**	**4.62**	**0.01**	**0.98**	**0.08**	**1.06**	**0.01**	**0.07**	**0.09**	**0.00**	**886.27**	**886.27**	**0.05**	**0.00**	**887.13**

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	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11
Total	**0.52**	**3.46**	**2.97**	**0.01**		**0.21**	**0.21**		**0.21**	**0.21**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**479.11**

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	0.11	1.24	0.81	0.00	0.01	0.04	0.05	0.00	0.04	0.04	0.00	226.39	226.39	0.01	0.00	226.49
Worker	0.34	0.39	3.81	0.01	0.04	0.04	0.07	0.01	0.03	0.05	0.00	659.88	659.88	0.04	0.00	660.64
Total	**0.45**	**1.63**	**4.62**	**0.01**	**0.05**	**0.08**	**0.12**	**0.01**	**0.07**	**0.09**	**0.00**	**886.27**	**886.27**	**0.05**	**0.00**	**887.13**

3.2 Building - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20
Total	**0.48**	**3.13**	**2.94**	**0.01**		**0.18**	**0.18**		**0.18**	**0.18**	**0.00**	**476.40**	**476.40**	**0.04**	**0.00**	**477.20**

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	0.11	1.16	0.76	0.00	0.07	0.04	0.11	0.00	0.04	0.04	0.00	225.81	225.81	0.00	0.00	225.91

Worker	0.32	0.36	3.49	0.01	0.91	0.04	0.94	0.01	0.03	0.05	0.00	642.34	642.34	0.03	0.00	643.05
Total	**0.43**	**1.52**	**4.25**	**0.01**	**0.98**	**0.08**	**1.05**	**0.01**	**0.07**	**0.09**	**0.00**	**868.15**	**868.15**	**0.03**	**0.00**	**868.96**

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	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20
Total	**0.48**	**3.13**	**2.94**	**0.01**		**0.18**	**0.18**		**0.18**	**0.18**	**0.00**	**476.40**	**476.40**	**0.04**	**0.00**	**477.20**

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	0.11	1.16	0.76	0.00	0.01	0.04	0.04	0.00	0.04	0.04	0.00	225.81	225.81	0.00	0.00	225.91
Worker	0.32	0.36	3.49	0.01	0.04	0.04	0.07	0.01	0.03	0.05	0.00	642.34	642.34	0.03	0.00	643.05
Total	**0.43**	**1.52**	**4.25**	**0.01**	**0.05**	**0.08**	**0.11**	**0.01**	**0.07**	**0.09**	**0.00**	**868.15**	**868.15**	**0.03**	**0.00**	**868.96**

3.2 Building - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97
Total	**0.44**	**2.84**	**2.93**	**0.01**		**0.16**	**0.16**		**0.16**	**0.16**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**478.97**

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	0.10	1.10	0.72	0.00	0.07	0.04	0.11	0.00	0.03	0.04	0.00	226.94	226.94	0.00	0.00	227.03
Worker	0.30	0.33	3.24	0.01	0.91	0.04	0.95	0.01	0.03	0.05	0.00	630.76	630.76	0.03	0.00	631.42
Total	**0.40**	**1.43**	**3.96**	**0.01**	**0.98**	**0.08**	**1.06**	**0.01**	**0.06**	**0.09**	**0.00**	**857.70**	**857.70**	**0.03**	**0.00**	**858.45**

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	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97
Total	**0.44**	**2.84**	**2.93**	**0.01**		**0.16**	**0.16**		**0.16**	**0.16**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**478.97**

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	0.10	1.10	0.72	0.00	0.01	0.04	0.04	0.00	0.03	0.04	0.00	226.94	226.94	0.00	0.00	227.03
Worker	0.30	0.33	3.24	0.01	0.04	0.04	0.07	0.01	0.03	0.05	0.00	630.76	630.76	0.03	0.00	631.42
Total	**0.40**	**1.43**	**3.96**	**0.01**	**0.05**	**0.08**	**0.11**	**0.01**	**0.06**	**0.09**	**0.00**	**857.70**	**857.70**	**0.03**	**0.00**	**858.45**

3.2 Building - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.40	2.57	2.92	0.01		0.13	0.13		0.13	0.13	0.00	478.23	478.23	0.03	0.00	478.91
Total	**0.40**	**2.57**	**2.92**	**0.01**		**0.13**	**0.13**		**0.13**	**0.13**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.91**

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	0.09	1.05	0.68	0.00	0.07	0.03	0.11	0.00	0.03	0.03	0.00	227.22	227.22	0.00	0.00	227.30
Worker	0.29	0.31	3.02	0.01	0.91	0.04	0.95	0.01	0.03	0.05	0.00	617.93	617.93	0.03	0.00	618.56
Total	**0.38**	**1.36**	**3.70**	**0.01**	**0.98**	**0.07**	**1.06**	**0.01**	**0.06**	**0.08**	**0.00**	**845.15**	**845.15**	**0.03**	**0.00**	**845.86**

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	0.40	2.57	2.92	0.01		0.13	0.13		0.13	0.13	0.00	478.23	478.23	0.03	0.00	478.91
Total	**0.40**	**2.57**	**2.92**	**0.01**		**0.13**	**0.13**		**0.13**	**0.13**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.91**

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	0.09	1.05	0.68	0.00	0.01	0.03	0.04	0.00	0.03	0.03	0.00	227.22	227.22	0.00	0.00	227.30
Worker	0.29	0.31	3.02	0.01	0.04	0.04	0.07	0.01	0.03	0.05	0.00	617.93	617.93	0.03	0.00	618.56
Total	**0.38**	**1.36**	**3.70**	**0.01**	**0.05**	**0.07**	**0.11**	**0.01**	**0.06**	**0.08**	**0.00**	**845.15**	**845.15**	**0.03**	**0.00**	**845.86**

3.2 Building - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.37	2.34	2.91	0.01		0.11	0.11		0.11	0.11	0.00	480.06	480.06	0.03	0.00	480.68
Total	**0.37**	**2.34**	**2.91**	**0.01**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**480.06**	**480.06**	**0.03**	**0.00**	**480.68**

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	0.09	1.01	0.65	0.00	0.07	0.03	0.11	0.00	0.03	0.03	0.00	228.32	228.32	0.00	0.00	228.41
Worker	0.28	0.29	2.85	0.01	0.91	0.04	0.95	0.01	0.03	0.05	0.00	608.51	608.51	0.03	0.00	609.10
Total	**0.37**	**1.30**	**3.50**	**0.01**	**0.98**	**0.07**	**1.06**	**0.01**	**0.06**	**0.08**	**0.00**	**836.83**	**836.83**	**0.03**	**0.00**	**837.51**

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	0.37	2.34	2.91	0.01		0.11	0.11		0.11	0.11	0.00	480.06	480.06	0.03	0.00	480.68
Total	**0.37**	**2.34**	**2.91**	**0.01**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**480.06**	**480.06**	**0.03**	**0.00**	**480.68**

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	0.09	1.01	0.65	0.00	0.01	0.03	0.04	0.00	0.03	0.03	0.00	228.32	228.32	0.00	0.00	228.41
Worker	0.28	0.29	2.85	0.01	0.04	0.04	0.07	0.01	0.03	0.05	0.00	608.51	608.51	0.03	0.00	609.10
Total	**0.37**	**1.30**	**3.50**	**0.01**	**0.05**	**0.07**	**0.11**	**0.01**	**0.06**	**0.08**	**0.00**	**836.83**	**836.83**	**0.03**	**0.00**	**837.51**

3.2 Building - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.33	2.10	2.88	0.01		0.10	0.10		0.10	0.10	0.00	478.23	478.23	0.03	0.00	478.79
Total	**0.33**	**2.10**	**2.88**	**0.01**		**0.10**	**0.10**		**0.10**	**0.10**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.79**

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	0.09	0.97	0.62	0.00	0.07	0.03	0.11	0.00	0.03	0.03	0.00	227.68	227.68	0.00	0.00	227.76
Worker	0.27	0.27	2.72	0.01	0.91	0.04	0.95	0.01	0.03	0.05	0.00	601.15	601.15	0.03	0.00	601.72
Total	**0.36**	**1.24**	**3.34**	**0.01**	**0.98**	**0.07**	**1.06**	**0.01**	**0.06**	**0.08**	**0.00**	**828.83**	**828.83**	**0.03**	**0.00**	**829.48**

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	0.33	2.10	2.88	0.01		0.10	0.10		0.10	0.10	0.00	478.23	478.23	0.03	0.00	478.79
Total	**0.33**	**2.10**	**2.88**	**0.01**		**0.10**	**0.10**		**0.10**	**0.10**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.79**

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	0.09	0.97	0.62	0.00	0.01	0.03	0.04	0.00	0.03	0.03	0.00	227.68	227.68	0.00	0.00	227.76
Worker	0.27	0.27	2.72	0.01	0.04	0.04	0.08	0.01	0.03	0.05	0.00	601.15	601.15	0.03	0.00	601.72
Total	**0.36**	**1.24**	**3.34**	**0.01**	**0.05**	**0.07**	**0.12**	**0.01**	**0.06**	**0.08**	**0.00**	**828.83**	**828.83**	**0.03**	**0.00**	**829.48**

3.2 Building - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.27	1.68	2.53	0.00		0.07	0.07		0.07	0.07	0.00	421.43	421.43	0.02	0.00	421.89

Total	**0.27**	**1.68**	**2.53**	**0.00**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**421.43**	**421.43**	**0.02**	**0.00**	**421.89**

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	0.07	0.82	0.52	0.00	0.06	0.03	0.09	0.00	0.03	0.03	0.00	200.81	200.81	0.00	0.00	200.88
Worker	0.23	0.23	2.27	0.01	0.80	0.03	0.83	0.01	0.03	0.04	0.00	521.05	521.05	0.02	0.00	521.53
Total	**0.30**	**1.05**	**2.79**	**0.01**	**0.86**	**0.06**	**0.92**	**0.01**	**0.06**	**0.07**	**0.00**	**721.86**	**721.86**	**0.02**	**0.00**	**722.41**

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	0.27	1.68	2.53	0.00		0.07	0.07		0.07	0.07	0.00	421.43	421.43	0.02	0.00	421.89
Total	**0.27**	**1.68**	**2.53**	**0.00**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**421.43**	**421.43**	**0.02**	**0.00**	**421.89**

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	0.07	0.82	0.52	0.00	0.01	0.03	0.03	0.00	0.03	0.03	0.00	200.81	200.81	0.00	0.00	200.88
Worker	0.23	0.23	2.27	0.01	0.03	0.03	0.07	0.01	0.03	0.04	0.00	521.05	521.05	0.02	0.00	521.53

Total	**0.30**	**1.05**	**2.79**	**0.01**	**0.04**	**0.06**	**0.10**	**0.01**	**0.06**	**0.07**	**0.00**	**721.86**	**721.86**	**0.02**	**0.00**	**722.41**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Integrate Below Market Rate Housing

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	5.30	11.30	53.31	0.09	9.47	0.55	10.02	0.15	0.54	0.69	0.00	8,008.87	8,008.87	0.34	0.00	8,015.98
Unmitigated	5.40	11.55	54.45	0.10	9.72	0.57	10.28	0.16	0.55	0.70	0.00	8,216.55	8,216.55	0.35	0.00	8,223.82
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
Apartments Low Rise	1,126.89	1,224.36	1037.97	4,174,758	4,066,882
City Park	10.97	10.97	10.97	27,057	26,358
Congregate Care (Assisted Living)	548.00	440.00	488.00	1,939,146	1,889,039
Single Family Housing	3,349.50	3,528.00	3069.50	12,341,703	12,022,793
Total	5,035.36	5,203.33	4,606.44	18,482,664	18,005,071

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
Apartments Low Rise	16.80	7.10	7.90	41.60	18.80	39.60
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	1,165.72	1,165.72	0.04	0.02	1,171.72
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	1,237.53	1,237.53	0.05	0.02	1,243.90
NaturalGas Mitigated	0.08	0.67	0.28	0.00		0.00	0.05		0.00	0.05	0.00	772.42	772.42	0.01	0.01	777.12
NaturalGas Unmitigated	0.10	0.84	0.36	0.01		0.00	0.07		0.00	0.07	0.00	977.31	977.31	0.02	0.02	983.25
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					

Apartments Low Rise	2.8576e+006	0.02	0.13	0.06	0.00		0.00	0.01		0.00	0.01	0.00	152.49	152.49	0.00	0.00	153.42
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Congregate Care (Assisted Living)	2.10798e+006	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	112.49	112.49	0.00	0.00	113.17
Single Family Housing	1.33484e+007	0.07	0.62	0.26	0.00		0.00	0.05		0.00	0.05	0.00	712.32	712.32	0.01	0.01	716.66
Total		**0.10**	**0.85**	**0.36**	**0.00**		**0.00**	**0.07**		**0.00**	**0.07**	**0.00**	**977.30**	**977.30**	**0.01**	**0.01**	**983.25**

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					
Apartments Low Rise	2.26171e+006	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	120.69	120.69	0.00	0.00	121.43
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Congregate Care (Assisted Living)	1.68035e+006	0.01	0.08	0.03	0.00		0.00	0.01		0.00	0.01	0.00	89.67	89.67	0.00	0.00	90.22
Single Family Housing	1.05326e+007	0.06	0.49	0.21	0.00		0.00	0.04		0.00	0.04	0.00	562.06	562.06	0.01	0.01	565.48
Total		**0.08**	**0.67**	**0.28**	**0.00**		**0.00**	**0.06**		**0.00**	**0.06**	**0.00**	**772.42**	**772.42**	**0.01**	**0.01**	**777.13**

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			
Apartments Low Rise	600665					212.73	0.01	0.00	213.83
City Park	0					0.00	0.00	0.00	0.00
Congregate Care (Assisted Living)	649600					230.06	0.01	0.00	231.25
Single Family Housing	2.24401e+006					794.74	0.03	0.01	798.83
Total						**1,237.53**	**0.05**	**0.01**	**1,243.91**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	561614					198.90	0.01	0.00	199.93
City Park	0					0.00	0.00	0.00	0.00
Congregate Care (Assisted Living)	627074					222.08	0.01	0.00	223.23
Single Family Housing	2.10282e+006					744.73	0.03	0.01	748.57
Total						**1,165.71**	**0.05**	**0.01**	**1,171.73**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Non-Residential Interior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	5.29	0.06	5.49	0.00		0.00	0.11		0.00	0.11	0.00	1,117.07	1,117.07	0.03	0.02	1,124.00
Unmitigated	5.29	0.06	5.49	0.00		0.00	0.11		0.00	0.11	0.00	1,117.07	1,117.07	0.03	0.02	1,124.00
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	1.10					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	3.91					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.11	0.00	0.01	0.00		0.00	0.08		0.00	0.08	0.00	1,108.22	1,108.22	0.02	0.02	1,114.97
Landscaping	0.17	0.06	5.49	0.00		0.00	0.03		0.00	0.03	0.00	8.84	8.84	0.01	0.00	9.03
Total	**5.29**	**0.06**	**5.50**	**0.00**		**0.00**	**0.11**		**0.00**	**0.11**	**0.00**	**1,117.06**	**1,117.06**	**0.03**	**0.02**	**1,124.00**

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	1.10					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	3.91					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.11	0.00	0.01	0.00		0.00	0.08		0.00	0.08	0.00	1,108.22	1,108.22	0.02	0.02	1,114.97
Landscaping	0.17	0.06	5.49	0.00		0.00	0.03		0.00	0.03	0.00	8.84	8.84	0.01	0.00	9.03
Total	**5.29**	**0.06**	**5.50**	**0.00**		**0.00**	**0.11**		**0.00**	**0.11**	**0.00**	**1,117.06**	**1,117.06**	**0.03**	**0.02**	**1,124.00**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr				MT/yr			
Mitigated					277.94	1.16	0.03	312.28
Unmitigated					366.03	1.45	0.04	409.05
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			
Apartments Low Rise	11.1413 / 7.02389					79.14	0.34	0.01	89.30
City Park	0 / 8.22122					32.35	0.00	0.00	32.51
Congregate Care (Assisted Living)	13.0308 / 8.21507					92.56	0.40	0.01	104.45
Single Family Housing	22.8039 / 14.3764					161.98	0.70	0.02	182.79
Total						**366.03**	**1.44**	**0.04**	**409.05**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	8.91307 / 4.91672					60.55	0.27	0.01	68.66
City Park	0 / 5.75485					22.64	0.00	0.00	22.76
Congregate Care (Assisted Living)	10.4246 / 5.75055					70.82	0.32	0.01	80.31
Single Family Housing	18.2431 / 10.0635					123.93	0.56	0.02	140.54
Total						**277.94**	**1.15**	**0.04**	**312.27**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					109.15	6.45	0.00	244.62
Unmitigated					136.44	8.06	0.00	305.78
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			
Apartments Low Rise	78.66					15.97	0.94	0.00	35.78
City Park	0.59					0.12	0.01	0.00	0.27
Congregate Care (Assisted Living)	182.5					37.05	2.19	0.00	83.02
Single Family Housing	410.41					83.31	4.92	0.00	186.70
Total						**136.45**	**8.06**	**0.00**	**305.77**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			

Apartments Low Rise	62.928					12.77	0.75	0.00	28.63
City Park	0.472					0.10	0.01	0.00	0.21
Congregate Care (Assisted Living)	146					29.64	1.75	0.00	66.42
Single Family Housing	328.328					66.65	3.94	0.00	149.36
Total						**109.16**	**6.45**	**0.00**	**244.62**

9.0 Vegetation

6153: Lilac Ranch - operational - Phase C

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Office Park	28.5	1000sqft
User Defined Industrial	0.6	User Defined Unit
City Park	9.7	Acre
Hotel	50	Room
Apartments Low Rise	171	Dwelling Unit
Condo/Townhouse	270	Dwelling Unit
Congregate Care (Assisted Living)	200	Dwelling Unit
Single Family Housing	546	Dwelling Unit
Strip Mall	55	1000sqft

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Off-road Equipment -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Land Use - per client

Woodstoves - per client

Area Coating - per client

Energy Use - 10% reduction, energy star

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	2.04	9.96	16.25	0.02	1.82	0.55	2.37	0.03	0.54	0.57	0.00	2,290.64	2,290.64	0.18	0.00	2,294.35
2012	1.89	9.27	15.18	0.03	1.83	0.51	2.34	0.03	0.50	0.53	0.00	2,271.06	2,271.06	0.16	0.00	2,274.49
2013	1.74	8.58	14.17	0.03	1.83	0.47	2.30	0.03	0.46	0.49	0.00	2,243.62	2,243.62	0.15	0.00	2,246.79
2014	1.61	7.94	13.22	0.03	1.83	0.43	2.26	0.03	0.41	0.45	0.00	2,216.83	2,216.83	0.14	0.00	2,219.76
2015	1.49	7.29	12.39	0.03	1.83	0.39	2.22	0.03	0.38	0.41	0.00	2,188.34	2,188.34	0.13	0.00	2,191.05
2016	1.38	6.72	11.66	0.03	1.83	0.36	2.19	0.03	0.35	0.38	0.00	2,158.85	2,158.85	0.12	0.00	2,161.36
2017	1.28	6.17	10.94	0.02	1.82	0.32	2.15	0.03	0.31	0.34	0.00	2,123.43	2,123.43	0.11	0.00	2,125.74
2018	1.20	5.71	10.38	0.03	1.83	0.30	2.13	0.03	0.29	0.32	0.00	2,106.17	2,106.17	0.10	0.00	2,108.32
2019	1.12	5.29	9.88	0.03	1.83	0.27	2.10	0.03	0.26	0.29	0.00	2,083.04	2,083.04	0.10	0.00	2,085.05
2020	1.06	4.93	9.50	0.03	1.84	0.25	2.09	0.03	0.24	0.27	0.00	2,069.72	2,069.72	0.09	0.00	2,071.60
2021	1.00	4.57	9.17	0.03	1.83	0.23	2.06	0.03	0.22	0.25	0.00	2,052.98	2,052.98	0.08	0.00	2,054.75
2022	0.84	3.77	7.78	0.02	1.61	0.19	1.80	0.03	0.18	0.20	0.00	1,793.43	1,793.43	0.07	0.00	1,794.91
Total	**16.65**	**80.20**	**140.52**	**0.33**	**21.73**	**4.27**	**26.01**	**0.36**	**4.14**	**4.50**	**0.00**	**25,598.11**	**25,598.11**	**1.43**	**0.00**	**25,628.17**

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	2.04	9.96	16.25	0.02	0.08	0.55	0.64	0.03	0.54	0.57	0.00	2,290.64	2,290.64	0.18	0.00	2,294.35
2012	1.89	9.27	15.18	0.03	0.08	0.51	0.60	0.03	0.50	0.53	0.00	2,271.06	2,271.06	0.16	0.00	2,274.49
2013	1.74	8.58	14.17	0.03	0.08	0.47	0.55	0.03	0.46	0.49	0.00	2,243.62	2,243.62	0.15	0.00	2,246.79
2014	1.61	7.94	13.22	0.03	0.08	0.43	0.51	0.03	0.41	0.45	0.00	2,216.83	2,216.83	0.14	0.00	2,219.76
2015	1.49	7.29	12.39	0.03	0.08	0.39	0.48	0.03	0.38	0.41	0.00	2,188.34	2,188.34	0.13	0.00	2,191.05
2016	1.38	6.72	11.66	0.03	0.08	0.36	0.44	0.03	0.35	0.38	0.00	2,158.85	2,158.85	0.12	0.00	2,161.36
2017	1.28	6.17	10.94	0.02	0.08	0.32	0.41	0.03	0.31	0.34	0.00	2,123.43	2,123.43	0.11	0.00	2,125.74
2018	1.20	5.71	10.38	0.03	0.09	0.30	0.38	0.03	0.29	0.32	0.00	2,106.17	2,106.17	0.10	0.00	2,108.32
2019	1.12	5.29	9.88	0.03	0.09	0.27	0.36	0.03	0.26	0.29	0.00	2,083.04	2,083.04	0.10	0.00	2,085.05
2020	1.06	4.93	9.50	0.03	0.09	0.25	0.33	0.03	0.24	0.27	0.00	2,069.72	2,069.72	0.09	0.00	2,071.60
2021	1.00	4.57	9.17	0.03	0.09	0.23	0.31	0.03	0.22	0.25	0.00	2,052.98	2,052.98	0.08	0.00	2,054.75
2022	0.84	3.77	7.78	0.02	0.07	0.19	0.26	0.03	0.18	0.20	0.00	1,793.43	1,793.43	0.07	0.00	1,794.91
Total	**16.65**	**80.20**	**140.52**	**0.33**	**0.99**	**4.27**	**5.27**	**0.36**	**4.14**	**4.50**	**0.00**	**25,598.11**	**25,598.11**	**1.43**	**0.00**	**25,628.17**

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	9.41	0.10	9.01	0.00		0.00	0.16		0.00	0.15	0.00	1,550.59	1,550.59	0.04	0.03	1,560.25
Energy	0.20	1.75	0.85	0.01		0.00	0.14		0.00	0.14	0.00	4,906.75	4,906.75	0.15	0.08	4,933.88
Mobile	11.27	23.71	112.16	0.19	19.48	1.14	20.62	0.31	1.11	1.42	0.00	16,524.40	16,524.40	0.70	0.00	16,539.19

Waste						0.00	0.00		0.00	0.00	231.05	0.00	231.05	13.65	0.00	517.81
Water						0.00	0.00		0.00	0.00	0.00	665.54	665.54	2.70	0.08	745.80
Total	**20.88**	**25.56**	**122.02**	**0.20**	**19.48**	**1.14**	**20.92**	**0.31**	**1.11**	**1.71**	**231.05**	**23,647.28**	**23,878.33**	**17.24**	**0.19**	**24,296.93**

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	9.41	0.10	9.01	0.00		0.00	0.16		0.00	0.15	0.00	1,550.59	1,550.59	0.04	0.03	1,560.25
Energy	0.16	1.38	0.68	0.01		0.00	0.11		0.00	0.11	0.00	4,274.29	4,274.29	0.13	0.07	4,297.78
Mobile	11.06	23.21	109.86	0.19	18.97	1.11	20.09	0.30	1.08	1.38	0.00	16,108.11	16,108.11	0.69	0.00	16,122.56
Waste						0.00	0.00		0.00	0.00	184.84	0.00	184.84	10.92	0.00	414.25
Water						0.00	0.00		0.00	0.00	0.00	506.44	506.44	2.16	0.06	570.51
Total	**20.63**	**24.69**	**119.55**	**0.20**	**18.97**	**1.11**	**20.36**	**0.30**	**1.08**	**1.64**	**184.84**	**22,439.43**	**22,624.27**	**13.94**	**0.16**	**22,965.35**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Building - 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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	**0.79**	**5.23**	**3.12**	**0.01**		**0.36**	**0.36**		**0.36**	**0.36**	**0.00**	**476.40**	**476.40**	**0.06**	**0.00**	**477.75**

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	0.34	3.62	2.39	0.00	0.15	0.12	0.27	0.00	0.11	0.12	0.00	456.08	456.08	0.02	0.00	456.40
Worker	0.91	1.11	10.74	0.01	1.67	0.06	1.74	0.03	0.06	0.08	0.00	1,358.16	1,358.16	0.10	0.00	1,360.20
Total	**1.25**	**4.73**	**13.13**	**0.01**	**1.82**	**0.18**	**2.01**	**0.03**	**0.17**	**0.20**	**0.00**	**1,814.24**	**1,814.24**	**0.12**	**0.00**	**1,816.60**

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	**0.79**	**5.23**	**3.12**	**0.01**		**0.36**	**0.36**		**0.36**	**0.36**	**0.00**	**476.40**	**476.40**	**0.06**	**0.00**	**477.75**

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	0.34	3.62	2.39	0.00	0.01	0.12	0.14	0.00	0.11	0.12	0.00	456.08	456.08	0.02	0.00	456.40
Worker	0.91	1.11	10.74	0.01	0.07	0.06	0.14	0.03	0.06	0.08	0.00	1,358.16	1,358.16	0.10	0.00	1,360.20
Total	**1.25**	**4.73**	**13.13**	**0.01**	**0.08**	**0.18**	**0.28**	**0.03**	**0.17**	**0.20**	**0.00**	**1,814.24**	**1,814.24**	**0.12**	**0.00**	**1,816.60**

3.2 Building - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	**0.73**	**4.87**	**3.10**	**0.01**		**0.33**	**0.33**		**0.33**	**0.33**	**0.00**	**478.23**	**478.23**	**0.06**	**0.00**	**479.48**

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	0.31	3.37	2.21	0.00	0.15	0.11	0.26	0.00	0.11	0.11	0.00	458.68	458.68	0.01	0.00	458.98
Worker	0.84	1.02	9.87	0.01	1.68	0.06	1.74	0.03	0.06	0.09	0.00	1,334.15	1,334.15	0.09	0.00	1,336.03
Total	**1.15**	**4.39**	**12.08**	**0.01**	**1.83**	**0.17**	**2.00**	**0.03**	**0.17**	**0.20**	**0.00**	**1,792.83**	**1,792.83**	**0.10**	**0.00**	**1,795.01**

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	**0.73**	**4.87**	**3.10**	**0.01**		**0.33**	**0.33**		**0.33**	**0.33**	**0.00**	**478.23**	**478.23**	**0.06**	**0.00**	**479.48**

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	0.31	3.37	2.21	0.00	0.01	0.11	0.13	0.00	0.11	0.11	0.00	458.68	458.68	0.01	0.00	458.98
Worker	0.84	1.02	9.87	0.01	0.07	0.06	0.14	0.03	0.06	0.09	0.00	1,334.15	1,334.15	0.09	0.00	1,336.03
Total	**1.15**	**4.39**	**12.08**	**0.01**	**0.08**	**0.17**	**0.27**	**0.03**	**0.17**	**0.20**	**0.00**	**1,792.83**	**1,792.83**	**0.10**	**0.00**	**1,795.01**

3.2 Building - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	**0.67**	**4.52**	**3.06**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.38**

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	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	0.29	3.12	2.06	0.00	0.15	0.11	0.26	0.00	0.10	0.10	0.00	459.47	459.47	0.01	0.00	459.75
Worker	0.78	0.94	9.05	0.01	1.68	0.07	1.75	0.03	0.06	0.09	0.00	1,305.91	1,305.91	0.08	0.00	1,307.66
Total	**1.07**	**4.06**	**11.11**	**0.01**	**1.83**	**0.18**	**2.01**	**0.03**	**0.16**	**0.19**	**0.00**	**1,765.38**	**1,765.38**	**0.09**	**0.00**	**1,767.41**

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	**0.67**	**4.52**	**3.06**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.38**

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	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	0.29	3.12	2.06	0.00	0.01	0.11	0.12	0.00	0.10	0.10	0.00	459.47	459.47	0.01	0.00	459.75
Worker	0.78	0.94	9.05	0.01	0.07	0.07	0.14	0.03	0.06	0.09	0.00	1,305.91	1,305.91	0.08	0.00	1,307.66
Total	**1.07**	**4.06**	**11.11**	**0.01**	**0.08**	**0.18**	**0.26**	**0.03**	**0.16**	**0.19**	**0.00**	**1,765.38**	**1,765.38**	**0.09**	**0.00**	**1,767.41**

3.2 Building - 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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	**0.62**	**4.18**	**3.03**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.28**

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	0.27	2.90	1.91	0.00	0.15	0.10	0.25	0.00	0.09	0.09	0.00	460.25	460.25	0.01	0.00	460.50
Worker	0.72	0.86	8.29	0.01	1.68	0.07	1.75	0.03	0.06	0.09	0.00	1,278.35	1,278.35	0.08	0.00	1,279.98
Total	**0.99**	**3.76**	**10.20**	**0.01**	**1.83**	**0.17**	**2.00**	**0.03**	**0.15**	**0.18**	**0.00**	**1,738.60**	**1,738.60**	**0.09**	**0.00**	**1,740.48**

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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	**0.62**	**4.18**	**3.03**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.28**

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	0.27	2.90	1.91	0.00	0.01	0.10	0.11	0.00	0.09	0.09	0.00	460.25	460.25	0.01	0.00	460.50
Worker	0.72	0.86	8.29	0.01	0.07	0.07	0.14	0.03	0.06	0.09	0.00	1,278.35	1,278.35	0.08	0.00	1,279.98
Total	**0.99**	**3.76**	**10.20**	**0.01**	**0.08**	**0.17**	**0.25**	**0.03**	**0.15**	**0.18**	**0.00**	**1,738.60**	**1,738.60**	**0.09**	**0.00**	**1,740.48**

3.2 Building - 2015

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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	**0.57**	**3.80**	**3.00**	**0.01**		**0.23**	**0.23**		**0.23**	**0.23**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.20**

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	0.25	2.70	1.77	0.00	0.15	0.09	0.24	0.00	0.08	0.09	0.00	460.94	460.94	0.01	0.00	461.17
Worker	0.67	0.79	7.62	0.01	1.68	0.07	1.75	0.03	0.06	0.09	0.00	1,249.18	1,249.18	0.07	0.00	1,250.68
Total	**0.92**	**3.49**	**9.39**	**0.01**	**1.83**	**0.16**	**1.99**	**0.03**	**0.14**	**0.18**	**0.00**	**1,710.12**	**1,710.12**	**0.08**	**0.00**	**1,711.85**

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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20

Total	**0.57**	**3.80**	**3.00**	**0.01**		**0.23**	**0.23**		**0.23**	**0.23**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.20**

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	0.25	2.70	1.77	0.00	0.01	0.09	0.10	0.00	0.08	0.09	0.00	460.94	460.94	0.01	0.00	461.17
Worker	0.67	0.79	7.62	0.01	0.07	0.07	0.14	0.03	0.06	0.09	0.00	1,249.18	1,249.18	0.07	0.00	1,250.68
Total	**0.92**	**3.49**	**9.39**	**0.01**	**0.08**	**0.16**	**0.24**	**0.03**	**0.14**	**0.18**	**0.00**	**1,710.12**	**1,710.12**	**0.08**	**0.00**	**1,711.85**

3.2 Building - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11
Total	**0.52**	**3.46**	**2.97**	**0.01**		**0.21**	**0.21**		**0.21**	**0.21**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**479.11**

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	0.23	2.53	1.65	0.00	0.15	0.08	0.23	0.00	0.08	0.08	0.00	461.60	461.60	0.01	0.00	461.81
Worker	0.63	0.73	7.03	0.01	1.68	0.07	1.75	0.03	0.06	0.09	0.00	1,219.02	1,219.02	0.07	0.00	1,220.43

Total	**0.86**	**3.26**	**8.68**	**0.01**	**1.83**	**0.15**	**1.98**	**0.03**	**0.14**	**0.17**	**0.00**	**1,680.62**	**1,680.62**	**0.08**	**0.00**	**1,682.24**

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	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11
Total	**0.52**	**3.46**	**2.97**	**0.01**		**0.21**	**0.21**		**0.21**	**0.21**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**479.11**

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	0.23	2.53	1.65	0.00	0.01	0.08	0.10	0.00	0.08	0.08	0.00	461.60	461.60	0.01	0.00	461.81
Worker	0.63	0.73	7.03	0.01	0.07	0.07	0.14	0.03	0.06	0.09	0.00	1,219.02	1,219.02	0.07	0.00	1,220.43
Total	**0.86**	**3.26**	**8.68**	**0.01**	**0.08**	**0.15**	**0.24**	**0.03**	**0.14**	**0.17**	**0.00**	**1,680.62**	**1,680.62**	**0.08**	**0.00**	**1,682.24**

3.2 Building - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20
Total	**0.48**	**3.13**	**2.94**	**0.01**		**0.18**	**0.18**		**0.18**	**0.18**	**0.00**	**476.40**	**476.40**	**0.04**	**0.00**	**477.20**

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	0.22	2.37	1.55	0.00	0.15	0.08	0.23	0.00	0.07	0.08	0.00	460.41	460.41	0.01	0.00	460.61
Worker	0.59	0.67	6.45	0.01	1.67	0.07	1.74	0.03	0.06	0.09	0.00	1,186.62	1,186.62	0.06	0.00	1,187.92
Total	**0.81**	**3.04**	**8.00**	**0.01**	**1.82**	**0.15**	**1.97**	**0.03**	**0.13**	**0.17**	**0.00**	**1,647.03**	**1,647.03**	**0.07**	**0.00**	**1,648.53**

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	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20
Total	**0.48**	**3.13**	**2.94**	**0.01**		**0.18**	**0.18**		**0.18**	**0.18**	**0.00**	**476.40**	**476.40**	**0.04**	**0.00**	**477.20**

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	0.22	2.37	1.55	0.00	0.01	0.08	0.09	0.00	0.07	0.08	0.00	460.41	460.41	0.01	0.00	460.61
Worker	0.59	0.67	6.45	0.01	0.07	0.07	0.14	0.03	0.06	0.09	0.00	1,186.62	1,186.62	0.06	0.00	1,187.92
Total	**0.81**	**3.04**	**8.00**	**0.01**	**0.08**	**0.15**	**0.23**	**0.03**	**0.13**	**0.17**	**0.00**	**1,647.03**	**1,647.03**	**0.07**	**0.00**	**1,648.53**

3.2 Building - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97
Total	**0.44**	**2.84**	**2.93**	**0.01**		**0.16**	**0.16**		**0.16**	**0.16**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**478.97**

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	0.20	2.25	1.47	0.00	0.15	0.07	0.22	0.00	0.07	0.07	0.00	462.71	462.71	0.01	0.00	462.90
Worker	0.56	0.62	5.98	0.01	1.68	0.07	1.75	0.03	0.06	0.09	0.00	1,165.22	1,165.22	0.06	0.00	1,166.45
Total	**0.76**	**2.87**	**7.45**	**0.01**	**1.83**	**0.14**	**1.97**	**0.03**	**0.13**	**0.16**	**0.00**	**1,627.93**	**1,627.93**	**0.07**	**0.00**	**1,629.35**

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	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97
Total	**0.44**	**2.84**	**2.93**	**0.01**		**0.16**	**0.16**		**0.16**	**0.16**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**478.97**

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	0.20	2.25	1.47	0.00	0.01	0.07	0.09	0.00	0.07	0.07	0.00	462.71	462.71	0.01	0.00	462.90
Worker	0.56	0.62	5.98	0.01	0.07	0.07	0.14	0.03	0.06	0.09	0.00	1,165.22	1,165.22	0.06	0.00	1,166.45
Total	**0.76**	**2.87**	**7.45**	**0.01**	**0.08**	**0.14**	**0.23**	**0.03**	**0.13**	**0.16**	**0.00**	**1,627.93**	**1,627.93**	**0.07**	**0.00**	**1,629.35**

3.2 Building - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.40	2.57	2.92	0.01		0.13	0.13		0.13	0.13	0.00	478.23	478.23	0.03	0.00	478.91
Total	**0.40**	**2.57**	**2.92**	**0.01**		**0.13**	**0.13**		**0.13**	**0.13**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.91**

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	0.19	2.14	1.38	0.00	0.15	0.07	0.22	0.00	0.07	0.07	0.00	463.28	463.28	0.01	0.00	463.46
Worker	0.53	0.58	5.58	0.01	1.68	0.07	1.75	0.03	0.06	0.09	0.00	1,141.52	1,141.52	0.05	0.00	1,142.68
Total	**0.72**	**2.72**	**6.96**	**0.01**	**1.83**	**0.14**	**1.97**	**0.03**	**0.13**	**0.16**	**0.00**	**1,604.80**	**1,604.80**	**0.06**	**0.00**	**1,606.14**

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	0.40	2.57	2.92	0.01		0.13	0.13		0.13	0.13	0.00	478.23	478.23	0.03	0.00	478.91
Total	**0.40**	**2.57**	**2.92**	**0.01**		**0.13**	**0.13**		**0.13**	**0.13**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.91**

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	0.19	2.14	1.38	0.00	0.01	0.07	0.08	0.00	0.07	0.07	0.00	463.28	463.28	0.01	0.00	463.46
Worker	0.53	0.58	5.58	0.01	0.07	0.07	0.14	0.03	0.06	0.09	0.00	1,141.52	1,141.52	0.05	0.00	1,142.68
Total	**0.72**	**2.72**	**6.96**	**0.01**	**0.08**	**0.14**	**0.22**	**0.03**	**0.13**	**0.16**	**0.00**	**1,604.80**	**1,604.80**	**0.06**	**0.00**	**1,606.14**

3.2 Building - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.37	2.34	2.91	0.01		0.11	0.11		0.11	0.11	0.00	480.06	480.06	0.03	0.00	480.68
Total	**0.37**	**2.34**	**2.91**	**0.01**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**480.06**	**480.06**	**0.03**	**0.00**	**480.68**

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	0.18	2.05	1.32	0.00	0.15	0.07	0.22	0.00	0.06	0.07	0.00	465.54	465.54	0.01	0.00	465.71

Worker	0.51	0.54	5.26	0.01	1.69	0.07	1.75	0.03	0.06	0.09	0.00	1,124.12	1,124.12	0.05	0.00	1,125.21
Total	**0.69**	**2.59**	**6.58**	**0.01**	**1.84**	**0.14**	**1.97**	**0.03**	**0.12**	**0.16**	**0.00**	**1,589.66**	**1,589.66**	**0.06**	**0.00**	**1,590.92**

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	0.37	2.34	2.91	0.01		0.11	0.11		0.11	0.11	0.00	480.06	480.06	0.03	0.00	480.68
Total	**0.37**	**2.34**	**2.91**	**0.01**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**480.06**	**480.06**	**0.03**	**0.00**	**480.68**

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	0.18	2.05	1.32	0.00	0.01	0.07	0.08	0.00	0.06	0.07	0.00	465.54	465.54	0.01	0.00	465.71
Worker	0.51	0.54	5.26	0.01	0.07	0.07	0.14	0.03	0.06	0.09	0.00	1,124.12	1,124.12	0.05	0.00	1,125.21
Total	**0.69**	**2.59**	**6.58**	**0.01**	**0.08**	**0.14**	**0.22**	**0.03**	**0.12**	**0.16**	**0.00**	**1,589.66**	**1,589.66**	**0.06**	**0.00**	**1,590.92**

3.2 Building - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.33	2.10	2.88	0.01		0.10	0.10		0.10	0.10	0.00	478.23	478.23	0.03	0.00	478.79
Total	**0.33**	**2.10**	**2.88**	**0.01**		**0.10**	**0.10**		**0.10**	**0.10**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.79**

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	0.17	1.97	1.26	0.00	0.15	0.06	0.21	0.00	0.06	0.06	0.00	464.22	464.22	0.01	0.00	464.38
Worker	0.49	0.51	5.03	0.01	1.68	0.07	1.75	0.03	0.06	0.09	0.00	1,110.53	1,110.53	0.05	0.00	1,111.58
Total	**0.66**	**2.48**	**6.29**	**0.01**	**1.83**	**0.13**	**1.96**	**0.03**	**0.12**	**0.15**	**0.00**	**1,574.75**	**1,574.75**	**0.06**	**0.00**	**1,575.96**

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	0.33	2.10	2.88	0.01		0.10	0.10		0.10	0.10	0.00	478.23	478.23	0.03	0.00	478.79
Total	**0.33**	**2.10**	**2.88**	**0.01**		**0.10**	**0.10**		**0.10**	**0.10**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.79**

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	0.17	1.97	1.26	0.00	0.01	0.06	0.08	0.00	0.06	0.06	0.00	464.22	464.22	0.01	0.00	464.38
Worker	0.49	0.51	5.03	0.01	0.07	0.07	0.14	0.03	0.06	0.09	0.00	1,110.53	1,110.53	0.05	0.00	1,111.58
Total	**0.66**	**2.48**	**6.29**	**0.01**	**0.08**	**0.13**	**0.22**	**0.03**	**0.12**	**0.15**	**0.00**	**1,574.75**	**1,574.75**	**0.06**	**0.00**	**1,575.96**

3.2 Building - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.27	1.68	2.53	0.00		0.07	0.07		0.07	0.07	0.00	421.43	421.43	0.02	0.00	421.89
Total	**0.27**	**1.68**	**2.53**	**0.00**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**421.43**	**421.43**	**0.02**	**0.00**	**421.89**

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	0.15	1.68	1.06	0.00	0.13	0.06	0.19	0.00	0.05	0.05	0.00	409.45	409.45	0.01	0.00	409.58
Worker	0.42	0.42	4.19	0.01	1.48	0.06	1.54	0.02	0.06	0.08	0.00	962.56	962.56	0.04	0.00	963.44
Total	**0.57**	**2.10**	**5.25**	**0.01**	**1.61**	**0.12**	**1.73**	**0.02**	**0.11**	**0.13**	**0.00**	**1,372.01**	**1,372.01**	**0.05**	**0.00**	**1,373.02**

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	0.27	1.68	2.53	0.00		0.07	0.07		0.07	0.07	0.00	421.43	421.43	0.02	0.00	421.89
Total	**0.27**	**1.68**	**2.53**	**0.00**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**421.43**	**421.43**	**0.02**	**0.00**	**421.89**

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	0.15	1.68	1.06	0.00	0.01	0.06	0.07	0.00	0.05	0.05	0.00	409.45	409.45	0.01	0.00	409.58
Worker	0.42	0.42	4.19	0.01	0.06	0.06	0.12	0.02	0.06	0.08	0.00	962.56	962.56	0.04	0.00	963.44
Total	**0.57**	**2.10**	**5.25**	**0.01**	**0.07**	**0.12**	**0.19**	**0.02**	**0.11**	**0.13**	**0.00**	**1,372.01**	**1,372.01**	**0.05**	**0.00**	**1,373.02**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Integrate Below Market Rate Housing

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	11.06	23.21	109.86	0.19	18.97	1.11	20.09	0.30	1.08	1.38	0.00	16,108.11	16,108.11	0.69	0.00	16,122.56
Unmitigated	11.27	23.71	112.16	0.19	19.48	1.14	20.62	0.31	1.11	1.42	0.00	16,524.40	16,524.40	0.70	0.00	16,539.19
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
Apartments Low Rise	1,126.89	1,224.36	1037.97	4,174,758	4,066,882

City Park	15.42	15.42	15.42	38,036	37,053
Condo/Townhouse	1,779.30	1,933.20	1638.90	6,591,722	6,421,392
Congregate Care (Assisted Living)	548.00	440.00	488.00	1,939,146	1,889,039
Hotel	408.50	409.50	297.50	789,173	768,781
Office Park	325.47	46.74	21.66	701,428	683,304
Single Family Housing	5,225.22	5,503.68	4788.42	19,253,057	18,755,558
Strip Mall	2,437.60	2,312.20	1123.65	3,562,168	3,470,122
User Defined Industrial	0.00	0.00	0.00		
Total	11,866.40	11,885.10	9,411.52	37,049,489	36,092,130

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
Apartments Low Rise	16.80	7.10	7.90	41.60	18.80	39.60
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Condo/Townhouse	16.80	7.10	7.90	41.60	18.80	39.60
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Hotel	14.70	6.60	6.60	19.40	61.60	19.00
Office Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60
Strip Mall	14.70	6.60	6.60	16.60	64.40	19.00
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	2,691.21	2,691.21	0.10	0.04	2,705.06
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	2,904.35	2,904.35	0.11	0.04	2,919.30
NaturalGas Mitigated	0.16	1.38	0.68	0.01		0.00	0.11		0.00	0.11	0.00	1,583.08	1,583.08	0.03	0.03	1,592.72
NaturalGas Unmitigated	0.20	1.75	0.85	0.01		0.00	0.14		0.00	0.14	0.00	2,002.39	2,002.39	0.04	0.04	2,014.58
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					
Apartments Low Rise	2.8576e+006	0.02	0.13	0.06	0.00		0.00	0.01		0.00	0.01	0.00	152.49	152.49	0.00	0.00	153.42
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	6.23075e+006	0.03	0.29	0.12	0.00		0.00	0.02		0.00	0.02	0.00	332.50	332.50	0.01	0.01	334.52
Congregate Care (Assisted Living)	2.10798e+006	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	112.49	112.49	0.00	0.00	113.17
Hotel	4.41771e+006	0.02	0.22	0.18	0.00		0.00	0.02		0.00	0.02	0.00	235.75	235.75	0.00	0.00	237.18
Office Park	959880	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	51.22	51.22	0.00	0.00	51.53
Single Family Housing	2.08235e+007	0.11	0.96	0.41	0.01		0.00	0.08		0.00	0.08	0.00	1,111.22	1,111.22	0.02	0.02	1,117.99
Strip Mall	125950	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	6.72	6.72	0.00	0.00	6.76
User Defined Industrial	0	0.00	0.00	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**	**1.76**	**0.86**	**0.01**		**0.00**	**0.14**		**0.00**	**0.14**	**0.00**	**2,002.39**	**2,002.39**	**0.03**	**0.03**	**2,014.57**

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					

Apartments Low Rise	2.26171e+006	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	120.69	120.69	0.00	0.00	121.43
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	4.90128e+006	0.03	0.23	0.10	0.00		0.00	0.02		0.00	0.02	0.00	261.55	261.55	0.01	0.00	263.14
Congregate Care (Assisted Living)	1.68035e+006	0.01	0.08	0.03	0.00		0.00	0.01		0.00	0.01	0.00	89.67	89.67	0.00	0.00	90.22
Hotel	3.51475e+006	0.02	0.17	0.14	0.00		0.00	0.01		0.00	0.01	0.00	187.56	187.56	0.00	0.00	188.70
Office Park	767505	0.00	0.04	0.03	0.00		0.00	0.00		0.00	0.00	0.00	40.96	40.96	0.00	0.00	41.21
Single Family Housing	1.64308e+007	0.09	0.76	0.32	0.00		0.00	0.06		0.00	0.06	0.00	876.81	876.81	0.02	0.02	882.15
Strip Mall	109450	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	5.84	5.84	0.00	0.00	5.88
User Defined Industrial	0	0.00	0.00	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		**0.16**	**1.39**	**0.66**	**0.00**		**0.00**	**0.11**		**0.00**	**0.11**	**0.00**	**1,583.08**	**1,583.08**	**0.03**	**0.02**	**1,592.73**

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			
Apartments Low Rise	600665					212.73	0.01	0.00	213.83
City Park	0					0.00	0.00	0.00	0.00
Condo/Townhouse	1.11671e+006					395.50	0.01	0.01	397.53
Congregate Care (Assisted Living)	649600					230.06	0.01	0.00	231.25
Hotel	1.05923e+006					375.14	0.01	0.01	377.07
Office Park	501600					177.65	0.01	0.00	178.56
Single Family Housing	3.50066e+006					1,239.79	0.05	0.02	1,246.18
Strip Mall	772200					273.48	0.01	0.00	274.89
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						**2,904.35**	**0.11**	**0.04**	**2,919.31**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	561614					198.90	0.01	0.00	199.93
City Park	0					0.00	0.00	0.00	0.00
Condo/Townhouse	1.05119e+006					372.29	0.01	0.01	374.21
Congregate Care (Assisted Living)	627074					222.08	0.01	0.00	223.23
Hotel	934798					331.07	0.01	0.00	332.77
Office Park	444272					157.34	0.01	0.00	158.15
Single Family Housing	3.28039e+006					1,161.79	0.04	0.02	1,167.77
Strip Mall	699490					247.73	0.01	0.00	249.01
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						**2,691.20**	**0.10**	**0.03**	**2,705.07**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Non-Residential Interior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	9.41	0.10	9.01	0.00		0.00	0.16		0.00	0.15	0.00	1,550.59	1,550.59	0.04	0.03	1,560.25
Unmitigated	9.41	0.10	9.01	0.00		0.00	0.16		0.00	0.15	0.00	1,550.59	1,550.59	0.04	0.03	1,560.25

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	1.92					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	7.05					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.16	0.00	0.01	0.00		0.00	0.11		0.00	0.11	0.00	1,536.03	1,536.03	0.03	0.03	1,545.38
Landscaping	0.28	0.10	9.00	0.00		0.00	0.05		0.00	0.05	0.00	14.56	14.56	0.01	0.00	14.87
Total	**9.41**	**0.10**	**9.01**	**0.00**		**0.00**	**0.16**		**0.00**	**0.16**	**0.00**	**1,550.59**	**1,550.59**	**0.04**	**0.03**	**1,560.25**

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	1.92					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	7.05					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.16	0.00	0.01	0.00		0.00	0.11		0.00	0.11	0.00	1,536.03	1,536.03	0.03	0.03	1,545.38
Landscaping	0.28	0.10	9.00	0.00		0.00	0.05		0.00	0.05	0.00	14.56	14.56	0.01	0.00	14.87
Total	**9.41**	**0.10**	**9.01**	**0.00**		**0.00**	**0.16**		**0.00**	**0.16**	**0.00**	**1,550.59**	**1,550.59**	**0.04**	**0.03**	**1,560.25**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					506.44	2.16	0.06	570.51
Unmitigated					665.54	2.70	0.08	745.80
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			
Apartments Low Rise	11.1413 / 7.02389					79.14	0.34	0.01	89.30
City Park	0 / 11.5574					45.48	0.00	0.00	45.71
Condo/Townhouse	17.5916 / 11.0903					124.96	0.54	0.02	141.01
Congregate Care (Assisted Living)	13.0308 / 8.21507					92.56	0.40	0.01	104.45
Hotel	1.26834 / 0.140927					6.42	0.04	0.00	7.56
Office Park	5.06541 / 3.10461					35.63	0.16	0.00	40.25
Single Family Housing	35.5741 / 22.4271					252.69	1.10	0.03	285.14
Strip Mall	4.07399 / 2.49696					28.66	0.13	0.00	32.37
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						**665.54**	**2.71**	**0.07**	**745.79**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	8.91307 / 4.91672					60.55	0.27	0.01	68.66
City Park	0 / 8.09016					31.83	0.00	0.00	32.00
Condo/Townhouse	14.0733 / 7.76324					95.60	0.43	0.01	108.42
Congregate Care (Assisted Living)	10.4246 / 5.75055					70.82	0.32	0.01	80.31
Hotel	1.01467 / 0.0986485					5.08	0.03	0.00	5.99
Office Park	4.05233 / 2.17323					27.28	0.12	0.00	30.97
Single Family Housing	28.4593 / 15.699					193.33	0.88	0.02	219.25
Strip Mall	3.25919 / 1.74787					21.94	0.10	0.00	24.91
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						**506.43**	**2.15**	**0.05**	**570.51**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					184.84	10.92	0.00	414.25
Unmitigated					231.05	13.65	0.00	517.81
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			
Apartments Low Rise	78.66					15.97	0.94	0.00	35.78
City Park	0.83					0.17	0.01	0.00	0.38
Condo/Townhouse	124.2					25.21	1.49	0.00	56.50
Congregate Care (Assisted Living)	182.5					37.05	2.19	0.00	83.02
Hotel	27.38					5.56	0.33	0.00	12.46
Office Park	26.51					5.38	0.32	0.00	12.06
Single Family Housing	640.42					130.00	7.68	0.00	291.34
Strip Mall	57.75					11.72	0.69	0.00	26.27
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						**231.06**	**13.65**	**0.00**	**517.81**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	62.928					12.77	0.75	0.00	28.63
City Park	0.664					0.13	0.01	0.00	0.30
Condo/Townhouse	99.36					20.17	1.19	0.00	45.20
Congregate Care (Assisted Living)	146					29.64	1.75	0.00	66.42
Hotel	21.904					4.45	0.26	0.00	9.96
Office Park	21.208					4.31	0.25	0.00	9.65
Single Family Housing	512.336					104.00	6.15	0.00	233.07
Strip Mall	46.2					9.38	0.55	0.00	21.02
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						**184.85**	**10.91**	**0.00**	**414.25**

9.0 Vegetation

6153: Lilac Ranch - operational - Phase D

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Office Park	28.5	1000sqft
User Defined Educational	10.7	User Defined Unit
User Defined Industrial	0.6	User Defined Unit
City Park	11.8	Acre
Hotel	50	Room
Apartments Low Rise	468	Dwelling Unit
Condo/Townhouse	270	Dwelling Unit
Congregate Care (Assisted Living)	200	Dwelling Unit
Single Family Housing	546	Dwelling Unit
Strip Mall	57.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			
			40		

1.3 User Entered Comments

Project Characteristics -

Off-road Equipment -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Land Use - per client

Woodstoves - per client

Area Coating - per client

Energy Use - 10% reduction, energy star

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	2.58	12.05	21.94	0.03	2.61	0.63	3.25	0.04	0.61	0.66	0.00	3,079.53	3,079.53	0.23	0.00	3,084.26
2012	2.39	11.22	20.42	0.03	2.62	0.59	3.21	0.04	0.57	0.61	0.00	3,050.75	3,050.75	0.21	0.00	3,055.14
2013	2.21	10.38	18.98	0.03	2.62	0.54	3.16	0.04	0.52	0.57	0.00	3,011.49	3,011.49	0.19	0.00	3,015.54
2014	2.04	9.61	17.65	0.03	2.62	0.50	3.12	0.04	0.48	0.52	0.00	2,973.17	2,973.17	0.18	0.00	2,976.91
2015	1.89	8.84	16.46	0.03	2.62	0.46	3.08	0.04	0.44	0.48	0.00	2,932.41	2,932.41	0.16	0.00	2,935.87
2016	1.76	8.16	15.42	0.03	2.62	0.42	3.04	0.04	0.41	0.45	0.00	2,890.21	2,890.21	0.15	0.00	2,893.42
2017	1.63	7.51	14.41	0.03	2.61	0.39	3.00	0.04	0.37	0.42	0.00	2,840.29	2,840.29	0.14	0.00	2,843.25
2018	1.53	6.98	13.61	0.03	2.62	0.36	2.98	0.04	0.34	0.39	0.00	2,814.83	2,814.83	0.13	0.00	2,817.60
2019	1.43	6.49	12.90	0.03	2.62	0.33	2.95	0.04	0.32	0.36	0.00	2,781.74	2,781.74	0.12	0.00	2,784.33
2020	1.36	6.08	12.36	0.03	2.63	0.31	2.94	0.04	0.29	0.34	0.00	2,761.93	2,761.93	0.12	0.00	2,764.36
2021	1.29	5.67	11.89	0.03	2.62	0.29	2.91	0.04	0.27	0.32	0.00	2,738.74	2,738.74	0.11	0.00	2,741.04
2022	1.23	5.32	11.38	0.03	2.61	0.27	2.88	0.04	0.25	0.30	0.00	2,702.84	2,702.84	0.10	0.00	2,705.01

2023	1.18	5.02	10.94	0.03	2.61	0.25	2.86	0.04	0.24	0.28	0.00	2,679.58	2,679.58	0.10	0.00	2,681.65
2024	1.14	4.81	10.64	0.03	2.63	0.24	2.87	0.04	0.23	0.27	0.00	2,679.04	2,679.04	0.10	0.00	2,681.04
2025	1.09	4.58	10.28	0.03	2.62	0.23	2.85	0.04	0.22	0.26	0.00	2,649.87	2,649.87	0.09	0.00	2,651.76
2026	1.09	4.58	10.28	0.03	2.62	0.23	2.85	0.04	0.22	0.26	0.00	2,649.87	2,649.87	0.09	0.00	2,651.76
2027	1.09	4.58	10.28	0.03	2.62	0.23	2.85	0.04	0.22	0.26	0.00	2,649.87	2,649.87	0.09	0.00	2,651.76
2028	0.90	3.77	8.46	0.03	2.16	0.19	2.35	0.04	0.18	0.22	0.00	2,182.84	2,182.84	0.07	0.00	2,184.40
Total	**27.83**	**125.65**	**248.30**	**0.54**	**46.68**	**6.46**	**53.15**	**0.72**	**6.18**	**6.97**	**0.00**	**50,069.00**	**50,069.00**	**2.38**	**0.00**	**50,119.10**

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	2.58	12.05	21.94	0.03	0.12	0.63	0.76	0.04	0.61	0.66	0.00	3,079.53	3,079.53	0.23	0.00	3,084.26
2012	2.39	11.22	20.42	0.03	0.12	0.59	0.71	0.04	0.57	0.61	0.00	3,050.75	3,050.75	0.21	0.00	3,055.14
2013	2.21	10.38	18.98	0.03	0.12	0.54	0.67	0.04	0.52	0.57	0.00	3,011.49	3,011.49	0.19	0.00	3,015.54
2014	2.04	9.61	17.65	0.03	0.12	0.50	0.62	0.04	0.48	0.52	0.00	2,973.17	2,973.17	0.18	0.00	2,976.91
2015	1.89	8.84	16.46	0.03	0.12	0.46	0.58	0.04	0.44	0.48	0.00	2,932.41	2,932.41	0.16	0.00	2,935.87
2016	1.76	8.16	15.42	0.03	0.12	0.42	0.54	0.04	0.41	0.45	0.00	2,890.21	2,890.21	0.15	0.00	2,893.42
2017	1.63	7.51	14.41	0.03	0.12	0.39	0.51	0.04	0.37	0.42	0.00	2,840.29	2,840.29	0.14	0.00	2,843.25
2018	1.53	6.98	13.61	0.03	0.12	0.36	0.48	0.04	0.34	0.39	0.00	2,814.83	2,814.83	0.13	0.00	2,817.60
2019	1.43	6.49	12.90	0.03	0.12	0.33	0.45	0.04	0.32	0.36	0.00	2,781.74	2,781.74	0.12	0.00	2,784.33
2020	1.36	6.08	12.36	0.03	0.12	0.31	0.43	0.04	0.29	0.34	0.00	2,761.93	2,761.93	0.12	0.00	2,764.36
2021	1.29	5.67	11.89	0.03	0.12	0.29	0.41	0.04	0.27	0.32	0.00	2,738.74	2,738.74	0.11	0.00	2,741.04
2022	1.23	5.32	11.38	0.03	0.12	0.27	0.39	0.04	0.25	0.30	0.00	2,702.84	2,702.84	0.10	0.00	2,705.01
2023	1.18	5.02	10.94	0.03	0.12	0.25	0.37	0.04	0.24	0.28	0.00	2,679.58	2,679.58	0.10	0.00	2,681.65
2024	1.14	4.81	10.64	0.03	0.12	0.24	0.36	0.04	0.23	0.27	0.00	2,679.04	2,679.04	0.10	0.00	2,681.04
2025	1.09	4.58	10.28	0.03	0.12	0.23	0.35	0.04	0.22	0.26	0.00	2,649.87	2,649.87	0.09	0.00	2,651.76
2026	1.09	4.58	10.28	0.03	0.12	0.23	0.35	0.04	0.22	0.26	0.00	2,649.87	2,649.87	0.09	0.00	2,651.76

2027	1.09	4.58	10.28	0.03	0.12	0.23	0.35	0.04	0.22	0.26	0.00	2,649.87	2,649.87	0.09	0.00	2,651.76
2028	0.90	3.77	8.46	0.03	0.10	0.19	0.29	0.04	0.18	0.22	0.00	2,182.84	2,182.84	0.07	0.00	2,184.40
Total	**27.83**	**125.65**	**248.30**	**0.54**	**2.14**	**6.46**	**8.62**	**0.72**	**6.18**	**6.97**	**0.00**	**50,069.00**	**50,069.00**	**2.38**	**0.00**	**50,119.10**

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	12.19	0.13	11.23	0.00		0.00	0.25		0.00	0.25	0.00	2,735.65	2,735.65	0.07	0.05	2,752.57
Energy	0.23	1.97	0.95	0.01		0.00	0.16		0.00	0.16	0.00	5,553.82	5,553.82	0.17	0.09	5,584.53
Mobile	13.45	28.37	134.14	0.23	23.38	1.37	24.75	0.37	1.33	1.70	0.00	19,825.52	19,825.52	0.84	0.00	19,843.24
Waste						0.00	0.00		0.00	0.00	259.36	0.00	259.36	15.33	0.00	581.24
Water						0.00	0.00		0.00	0.00	0.00	814.14	814.14	3.30	0.09	912.27
Total	**25.87**	**30.47**	**146.32**	**0.24**	**23.38**	**1.37**	**25.16**	**0.37**	**1.33**	**2.11**	**259.36**	**28,929.13**	**29,188.49**	**19.71**	**0.23**	**29,673.85**

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	12.19	0.13	11.23	0.00		0.00	0.25		0.00	0.25	0.00	2,735.65	2,735.65	0.07	0.05	2,752.57
Energy	0.18	1.56	0.75	0.01		0.00	0.13		0.00	0.13	0.00	4,840.90	4,840.90	0.15	0.08	4,867.50
Mobile	13.21	27.77	131.38	0.23	22.77	1.34	24.11	0.36	1.30	1.66	0.00	19,325.85	19,325.85	0.82	0.00	19,343.16
Waste						0.00	0.00		0.00	0.00	207.49	0.00	207.49	12.26	0.00	464.99
Water						0.00	0.00		0.00	0.00	0.00	619.49	619.49	2.64	0.07	697.83
Total	**25.58**	**29.46**	**143.36**	**0.24**	**22.77**	**1.34**	**24.49**	**0.36**	**1.30**	**2.04**	**207.49**	**27,521.89**	**27,729.38**	**15.94**	**0.20**	**28,126.05**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Building - 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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	**0.79**	**5.23**	**3.12**	**0.01**		**0.36**	**0.36**		**0.36**	**0.36**	**0.00**	**476.40**	**476.40**	**0.06**	**0.00**	**477.75**

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	0.49	5.23	3.45	0.01	0.22	0.18	0.39	0.01	0.17	0.17	0.00	659.43	659.43	0.02	0.00	659.89
Worker	1.30	1.60	15.37	0.02	2.40	0.09	2.49	0.04	0.08	0.12	0.00	1,943.71	1,943.71	0.14	0.00	1,946.62
Total	**1.79**	**6.83**	**18.82**	**0.03**	**2.62**	**0.27**	**2.88**	**0.05**	**0.25**	**0.29**	**0.00**	**2,603.14**	**2,603.14**	**0.16**	**0.00**	**2,606.51**

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	**0.79**	**5.23**	**3.12**	**0.01**		**0.36**	**0.36**		**0.36**	**0.36**	**0.00**	**476.40**	**476.40**	**0.06**	**0.00**	**477.75**

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	0.49	5.23	3.45	0.01	0.02	0.18	0.20	0.01	0.17	0.17	0.00	659.43	659.43	0.02	0.00	659.89
Worker	1.30	1.60	15.37	0.02	0.10	0.09	0.19	0.04	0.08	0.12	0.00	1,943.71	1,943.71	0.14	0.00	1,946.62
Total	**1.79**	**6.83**	**18.82**	**0.03**	**0.12**	**0.27**	**0.39**	**0.05**	**0.25**	**0.29**	**0.00**	**2,603.14**	**2,603.14**	**0.16**	**0.00**	**2,606.51**

3.2 Building - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48

Total	**0.73**	**4.87**	**3.10**	**0.01**		**0.33**	**0.33**		**0.33**	**0.33**	**0.00**	**478.23**	**478.23**	**0.06**	**0.00**	**479.48**

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	0.45	4.88	3.20	0.01	0.22	0.17	0.38	0.01	0.15	0.16	0.00	663.19	663.19	0.02	0.00	663.61
Worker	1.20	1.47	14.12	0.02	2.40	0.09	2.50	0.04	0.09	0.12	0.00	1,909.34	1,909.34	0.13	0.00	1,912.04
Total	**1.65**	**6.35**	**17.32**	**0.03**	**2.62**	**0.26**	**2.88**	**0.05**	**0.24**	**0.28**	**0.00**	**2,572.53**	**2,572.53**	**0.15**	**0.00**	**2,575.65**

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	**0.73**	**4.87**	**3.10**	**0.01**		**0.33**	**0.33**		**0.33**	**0.33**	**0.00**	**478.23**	**478.23**	**0.06**	**0.00**	**479.48**

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	0.45	4.88	3.20	0.01	0.02	0.17	0.18	0.01	0.15	0.16	0.00	663.19	663.19	0.02	0.00	663.61
Worker	1.20	1.47	14.12	0.02	0.10	0.09	0.20	0.04	0.09	0.12	0.00	1,909.34	1,909.34	0.13	0.00	1,912.04

Total	**1.65**	**6.35**	**17.32**	**0.03**	**0.12**	**0.26**	**0.38**	**0.05**	**0.24**	**0.28**	**0.00**	**2,572.53**	**2,572.53**	**0.15**	**0.00**	**2,575.65**

3.2 Building - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	**0.67**	**4.52**	**3.06**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.38**

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	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	0.42	4.52	2.98	0.01	0.22	0.15	0.37	0.01	0.14	0.15	0.00	664.33	664.33	0.02	0.00	664.73
Worker	1.11	1.34	12.95	0.02	2.40	0.09	2.50	0.04	0.09	0.12	0.00	1,868.93	1,868.93	0.12	0.00	1,871.44
Total	**1.53**	**5.86**	**15.93**	**0.03**	**2.62**	**0.24**	**2.87**	**0.05**	**0.23**	**0.27**	**0.00**	**2,533.26**	**2,533.26**	**0.14**	**0.00**	**2,536.17**

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	**0.67**	**4.52**	**3.06**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.38**

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	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	0.42	4.52	2.98	0.01	0.02	0.15	0.17	0.01	0.14	0.15	0.00	664.33	664.33	0.02	0.00	664.73
Worker	1.11	1.34	12.95	0.02	0.10	0.09	0.20	0.04	0.09	0.12	0.00	1,868.93	1,868.93	0.12	0.00	1,871.44
Total	**1.53**	**5.86**	**15.93**	**0.03**	**0.12**	**0.24**	**0.37**	**0.05**	**0.23**	**0.27**	**0.00**	**2,533.26**	**2,533.26**	**0.14**	**0.00**	**2,536.17**

3.2 Building - 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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	**0.62**	**4.18**	**3.03**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.28**

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	0.39	4.19	2.76	0.01	0.22	0.14	0.36	0.01	0.13	0.14	0.00	665.45	665.45	0.02	0.00	665.82
Worker	1.03	1.23	11.87	0.02	2.40	0.09	2.50	0.04	0.09	0.12	0.00	1,829.49	1,829.49	0.11	0.00	1,831.82
Total	**1.42**	**5.42**	**14.63**	**0.03**	**2.62**	**0.23**	**2.86**	**0.05**	**0.22**	**0.26**	**0.00**	**2,494.94**	**2,494.94**	**0.13**	**0.00**	**2,497.64**

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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	**0.62**	**4.18**	**3.03**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.28**

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	0.39	4.19	2.76	0.01	0.02	0.14	0.16	0.01	0.13	0.14	0.00	665.45	665.45	0.02	0.00	665.82
Worker	1.03	1.23	11.87	0.02	0.10	0.09	0.20	0.04	0.09	0.12	0.00	1,829.49	1,829.49	0.11	0.00	1,831.82
Total	**1.42**	**5.42**	**14.63**	**0.03**	**0.12**	**0.23**	**0.36**	**0.05**	**0.22**	**0.26**	**0.00**	**2,494.94**	**2,494.94**	**0.13**	**0.00**	**2,497.64**

3.2 Building - 2015

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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	**0.57**	**3.80**	**3.00**	**0.01**		**0.23**	**0.23**		**0.23**	**0.23**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.20**

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	0.36	3.90	2.56	0.01	0.22	0.13	0.35	0.01	0.12	0.13	0.00	666.45	666.45	0.02	0.00	666.79
Worker	0.96	1.13	10.91	0.02	2.40	0.09	2.50	0.04	0.09	0.12	0.00	1,787.73	1,787.73	0.10	0.00	1,789.89
Total	**1.32**	**5.03**	**13.47**	**0.03**	**2.62**	**0.22**	**2.85**	**0.05**	**0.21**	**0.25**	**0.00**	**2,454.18**	**2,454.18**	**0.12**	**0.00**	**2,456.68**

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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	**0.57**	**3.80**	**3.00**	**0.01**		**0.23**	**0.23**		**0.23**	**0.23**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.20**

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	0.36	3.90	2.56	0.01	0.02	0.13	0.15	0.01	0.12	0.13	0.00	666.45	666.45	0.02	0.00	666.79
Worker	0.96	1.13	10.91	0.02	0.10	0.09	0.20	0.04	0.09	0.12	0.00	1,787.73	1,787.73	0.10	0.00	1,789.89
Total	**1.32**	**5.03**	**13.47**	**0.03**	**0.12**	**0.22**	**0.35**	**0.05**	**0.21**	**0.25**	**0.00**	**2,454.18**	**2,454.18**	**0.12**	**0.00**	**2,456.68**

3.2 Building - 2016

Unmitigated Construction On-Site

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

Off-Road	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11
Total	**0.52**	**3.46**	**2.97**	**0.01**		**0.21**	**0.21**		**0.21**	**0.21**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**479.11**

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	0.33	3.65	2.39	0.01	0.22	0.12	0.34	0.01	0.11	0.12	0.00	667.41	667.41	0.01	0.00	667.72
Worker	0.90	1.04	10.06	0.02	2.40	0.09	2.50	0.04	0.09	0.12	0.00	1,744.57	1,744.57	0.10	0.00	1,746.59
Total	**1.23**	**4.69**	**12.45**	**0.03**	**2.62**	**0.21**	**2.84**	**0.05**	**0.20**	**0.24**	**0.00**	**2,411.98**	**2,411.98**	**0.11**	**0.00**	**2,414.31**

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	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11
Total	**0.52**	**3.46**	**2.97**	**0.01**		**0.21**	**0.21**		**0.21**	**0.21**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**479.11**

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	0.33	3.65	2.39	0.01	0.02	0.12	0.14	0.01	0.11	0.12	0.00	667.41	667.41	0.01	0.00	667.72

Worker	0.90	1.04	10.06	0.02	0.10	0.09	0.20	0.04	0.09	0.12	0.00	1,744.57	1,744.57	0.10	0.00	1,746.59
Total	**1.23**	**4.69**	**12.45**	**0.03**	**0.12**	**0.21**	**0.34**	**0.05**	**0.20**	**0.24**	**0.00**	**2,411.98**	**2,411.98**	**0.11**	**0.00**	**2,414.31**

3.2 Building - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20
Total	**0.48**	**3.13**	**2.94**	**0.01**		**0.18**	**0.18**		**0.18**	**0.18**	**0.00**	**476.40**	**476.40**	**0.04**	**0.00**	**477.20**

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	0.31	3.43	2.24	0.01	0.22	0.11	0.33	0.01	0.10	0.11	0.00	665.69	665.69	0.01	0.00	665.98
Worker	0.84	0.96	9.23	0.02	2.40	0.09	2.49	0.04	0.09	0.12	0.00	1,698.20	1,698.20	0.09	0.00	1,700.07
Total	**1.15**	**4.39**	**11.47**	**0.03**	**2.62**	**0.20**	**2.82**	**0.05**	**0.19**	**0.23**	**0.00**	**2,363.89**	**2,363.89**	**0.10**	**0.00**	**2,366.05**

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	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20
Total	**0.48**	**3.13**	**2.94**	**0.01**		**0.18**	**0.18**		**0.18**	**0.18**	**0.00**	**476.40**	**476.40**	**0.04**	**0.00**	**477.20**

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	0.31	3.43	2.24	0.01	0.02	0.11	0.13	0.01	0.10	0.11	0.00	665.69	665.69	0.01	0.00	665.98
Worker	0.84	0.96	9.23	0.02	0.10	0.09	0.20	0.04	0.09	0.12	0.00	1,698.20	1,698.20	0.09	0.00	1,700.07
Total	**1.15**	**4.39**	**11.47**	**0.03**	**0.12**	**0.20**	**0.33**	**0.05**	**0.19**	**0.23**	**0.00**	**2,363.89**	**2,363.89**	**0.10**	**0.00**	**2,366.05**

3.2 Building - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97
Total	**0.44**	**2.84**	**2.93**	**0.01**		**0.16**	**0.16**		**0.16**	**0.16**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**478.97**

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	0.29	3.25	2.12	0.01	0.22	0.11	0.32	0.01	0.10	0.11	0.00	669.02	669.02	0.01	0.00	669.29
Worker	0.80	0.88	8.56	0.02	2.40	0.09	2.50	0.04	0.09	0.12	0.00	1,667.59	1,667.59	0.08	0.00	1,669.34
Total	**1.09**	**4.13**	**10.68**	**0.03**	**2.62**	**0.20**	**2.82**	**0.05**	**0.19**	**0.23**	**0.00**	**2,336.61**	**2,336.61**	**0.09**	**0.00**	**2,338.63**

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	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97
Total	**0.44**	**2.84**	**2.93**	**0.01**		**0.16**	**0.16**		**0.16**	**0.16**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**478.97**

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	0.29	3.25	2.12	0.01	0.02	0.11	0.13	0.01	0.10	0.11	0.00	669.02	669.02	0.01	0.00	669.29
Worker	0.80	0.88	8.56	0.02	0.10	0.09	0.20	0.04	0.09	0.12	0.00	1,667.59	1,667.59	0.08	0.00	1,669.34
Total	**1.09**	**4.13**	**10.68**	**0.03**	**0.12**	**0.20**	**0.33**	**0.05**	**0.19**	**0.23**	**0.00**	**2,336.61**	**2,336.61**	**0.09**	**0.00**	**2,338.63**

3.2 Building - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.40	2.57	2.92	0.01		0.13	0.13		0.13	0.13	0.00	478.23	478.23	0.03	0.00	478.91
Total	**0.40**	**2.57**	**2.92**	**0.01**		**0.13**	**0.13**		**0.13**	**0.13**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.91**

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	0.28	3.09	2.00	0.01	0.22	0.10	0.32	0.01	0.09	0.10	0.00	669.84	669.84	0.01	0.00	670.10
Worker	0.76	0.82	7.99	0.02	2.40	0.09	2.50	0.04	0.09	0.12	0.00	1,633.67	1,633.67	0.08	0.00	1,635.32
Total	**1.04**	**3.91**	**9.99**	**0.03**	**2.62**	**0.19**	**2.82**	**0.05**	**0.18**	**0.22**	**0.00**	**2,303.51**	**2,303.51**	**0.09**	**0.00**	**2,305.42**

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	0.40	2.57	2.92	0.01		0.13	0.13		0.13	0.13	0.00	478.23	478.23	0.03	0.00	478.91
Total	**0.40**	**2.57**	**2.92**	**0.01**		**0.13**	**0.13**		**0.13**	**0.13**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.91**

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	0.28	3.09	2.00	0.01	0.02	0.10	0.12	0.01	0.09	0.10	0.00	669.84	669.84	0.01	0.00	670.10
Worker	0.76	0.82	7.99	0.02	0.10	0.09	0.20	0.04	0.09	0.12	0.00	1,633.67	1,633.67	0.08	0.00	1,635.32
Total	**1.04**	**3.91**	**9.99**	**0.03**	**0.12**	**0.19**	**0.32**	**0.05**	**0.18**	**0.22**	**0.00**	**2,303.51**	**2,303.51**	**0.09**	**0.00**	**2,305.42**

3.2 Building - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.37	2.34	2.91	0.01		0.11	0.11		0.11	0.11	0.00	480.06	480.06	0.03	0.00	480.68
Total	**0.37**	**2.34**	**2.91**	**0.01**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**480.06**	**480.06**	**0.03**	**0.00**	**480.68**

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	0.27	2.97	1.91	0.01	0.22	0.10	0.32	0.01	0.09	0.10	0.00	673.11	673.11	0.01	0.00	673.36
Worker	0.73	0.77	7.53	0.02	2.41	0.09	2.51	0.04	0.09	0.12	0.00	1,608.76	1,608.76	0.07	0.00	1,610.32
Total	**1.00**	**3.74**	**9.44**	**0.03**	**2.63**	**0.19**	**2.83**	**0.05**	**0.18**	**0.22**	**0.00**	**2,281.87**	**2,281.87**	**0.08**	**0.00**	**2,283.68**

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	0.37	2.34	2.91	0.01		0.11	0.11		0.11	0.11	0.00	480.06	480.06	0.03	0.00	480.68
Total	**0.37**	**2.34**	**2.91**	**0.01**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**480.06**	**480.06**	**0.03**	**0.00**	**480.68**

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	0.27	2.97	1.91	0.01	0.02	0.10	0.12	0.01	0.09	0.10	0.00	673.11	673.11	0.01	0.00	673.36
Worker	0.73	0.77	7.53	0.02	0.10	0.09	0.20	0.04	0.09	0.12	0.00	1,608.76	1,608.76	0.07	0.00	1,610.32
Total	**1.00**	**3.74**	**9.44**	**0.03**	**0.12**	**0.19**	**0.32**	**0.05**	**0.18**	**0.22**	**0.00**	**2,281.87**	**2,281.87**	**0.08**	**0.00**	**2,283.68**

3.2 Building - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.33	2.10	2.88	0.01		0.10	0.10		0.10	0.10	0.00	478.23	478.23	0.03	0.00	478.79
Total	**0.33**	**2.10**	**2.88**	**0.01**		**0.10**	**0.10**		**0.10**	**0.10**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.79**

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	0.25	2.85	1.81	0.01	0.22	0.09	0.31	0.01	0.09	0.09	0.00	671.20	671.20	0.01	0.00	671.44
Worker	0.71	0.72	7.19	0.02	2.40	0.10	2.50	0.04	0.09	0.13	0.00	1,589.31	1,589.31	0.07	0.00	1,590.81
Total	**0.96**	**3.57**	**9.00**	**0.03**	**2.62**	**0.19**	**2.81**	**0.05**	**0.18**	**0.22**	**0.00**	**2,260.51**	**2,260.51**	**0.08**	**0.00**	**2,262.25**

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	0.33	2.10	2.88	0.01		0.10	0.10		0.10	0.10	0.00	478.23	478.23	0.03	0.00	478.79

Total	**0.33**	**2.10**	**2.88**	**0.01**		**0.10**	**0.10**		**0.10**	**0.10**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.79**

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	0.25	2.85	1.81	0.01	0.02	0.09	0.11	0.01	0.09	0.09	0.00	671.20	671.20	0.01	0.00	671.44
Worker	0.71	0.72	7.19	0.02	0.10	0.10	0.20	0.04	0.09	0.13	0.00	1,589.31	1,589.31	0.07	0.00	1,590.81
Total	**0.96**	**3.57**	**9.00**	**0.03**	**0.12**	**0.19**	**0.31**	**0.05**	**0.18**	**0.22**	**0.00**	**2,260.51**	**2,260.51**	**0.08**	**0.00**	**2,262.25**

3.2 Building - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.31	1.89	2.86	0.01		0.08	0.08		0.08	0.08	0.00	476.40	476.40	0.02	0.00	476.92
Total	**0.31**	**1.89**	**2.86**	**0.01**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.92**

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	0.24	2.74	1.73	0.01	0.22	0.09	0.31	0.01	0.08	0.09	0.00	669.22	669.22	0.01	0.00	669.44
Worker	0.68	0.68	6.78	0.02	2.40	0.10	2.49	0.04	0.09	0.13	0.00	1,557.22	1,557.22	0.07	0.00	1,558.65

Total	**0.92**	**3.42**	**8.51**	**0.03**	**2.62**	**0.19**	**2.80**	**0.05**	**0.17**	**0.22**	**0.00**	**2,226.44**	**2,226.44**	**0.08**	**0.00**	**2,228.09**

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	0.31	1.89	2.86	0.01		0.08	0.08		0.08	0.08	0.00	476.40	476.40	0.02	0.00	476.92
Total	**0.31**	**1.89**	**2.86**	**0.01**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.92**

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	0.24	2.74	1.73	0.01	0.02	0.09	0.11	0.01	0.08	0.09	0.00	669.22	669.22	0.01	0.00	669.44
Worker	0.68	0.68	6.78	0.02	0.10	0.10	0.20	0.04	0.09	0.13	0.00	1,557.22	1,557.22	0.07	0.00	1,558.65
Total	**0.92**	**3.42**	**8.51**	**0.03**	**0.12**	**0.19**	**0.31**	**0.05**	**0.17**	**0.22**	**0.00**	**2,226.44**	**2,226.44**	**0.08**	**0.00**	**2,228.09**

3.2 Building - 2023

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	0.29	1.72	2.86	0.01		0.07	0.07		0.07	0.07	0.00	476.40	476.40	0.02	0.00	476.89
Total	**0.29**	**1.72**	**2.86**	**0.01**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.89**

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	0.23	2.67	1.67	0.01	0.22	0.09	0.30	0.01	0.08	0.09	0.00	669.76	669.76	0.01	0.00	669.98
Worker	0.65	0.64	6.42	0.02	2.40	0.10	2.49	0.04	0.09	0.13	0.00	1,533.42	1,533.42	0.07	0.00	1,534.79
Total	**0.88**	**3.31**	**8.09**	**0.03**	**2.62**	**0.19**	**2.79**	**0.05**	**0.17**	**0.22**	**0.00**	**2,203.18**	**2,203.18**	**0.08**	**0.00**	**2,204.77**

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	0.29	1.72	2.86	0.01		0.07	0.07		0.07	0.07	0.00	476.40	476.40	0.02	0.00	476.89
Total	**0.29**	**1.72**	**2.86**	**0.01**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.89**

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	0.23	2.67	1.67	0.01	0.02	0.09	0.11	0.01	0.08	0.09	0.00	669.76	669.76	0.01	0.00	669.98
Worker	0.65	0.64	6.42	0.02	0.10	0.10	0.20	0.04	0.09	0.13	0.00	1,533.42	1,533.42	0.07	0.00	1,534.79
Total	**0.88**	**3.31**	**8.09**	**0.03**	**0.12**	**0.19**	**0.31**	**0.05**	**0.17**	**0.22**	**0.00**	**2,203.18**	**2,203.18**	**0.08**	**0.00**	**2,204.77**

3.2 Building - 2024

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	0.28	1.58	2.87	0.01		0.06	0.06		0.06	0.06	0.00	480.06	480.06	0.02	0.00	480.53
Total	**0.28**	**1.58**	**2.87**	**0.01**		**0.06**	**0.06**		**0.06**	**0.06**	**0.00**	**480.06**	**480.06**	**0.02**	**0.00**	**480.53**

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	0.23	2.62	1.61	0.01	0.22	0.09	0.30	0.01	0.08	0.09	0.00	675.47	675.47	0.01	0.00	675.68
Worker	0.63	0.61	6.15	0.02	2.41	0.10	2.51	0.04	0.09	0.13	0.00	1,523.50	1,523.50	0.06	0.00	1,524.83
Total	**0.86**	**3.23**	**7.76**	**0.03**	**2.63**	**0.19**	**2.81**	**0.05**	**0.17**	**0.22**	**0.00**	**2,198.97**	**2,198.97**	**0.07**	**0.00**	**2,200.51**

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	0.28	1.58	2.87	0.01		0.06	0.06		0.06	0.06	0.00	480.06	480.06	0.02	0.00	480.53
Total	**0.28**	**1.58**	**2.87**	**0.01**		**0.06**	**0.06**		**0.06**	**0.06**	**0.00**	**480.06**	**480.06**	**0.02**	**0.00**	**480.53**

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	0.23	2.62	1.61	0.01	0.02	0.09	0.11	0.01	0.08	0.09	0.00	675.47	675.47	0.01	0.00	675.68
Worker	0.63	0.61	6.15	0.02	0.10	0.10	0.20	0.04	0.09	0.13	0.00	1,523.50	1,523.50	0.06	0.00	1,524.83
Total	**0.86**	**3.23**	**7.76**	**0.03**	**0.12**	**0.19**	**0.31**	**0.05**	**0.17**	**0.22**	**0.00**	**2,198.97**	**2,198.97**	**0.07**	**0.00**	**2,200.51**

3.2 Building - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.22	2.56	1.56	0.01	0.22	0.08	0.30	0.01	0.08	0.08	0.00	673.30	673.30	0.01	0.00	673.50
Worker	0.61	0.57	5.86	0.02	2.40	0.10	2.50	0.04	0.09	0.13	0.00	1,498.34	1,498.34	0.06	0.00	1,499.60
Total	**0.83**	**3.13**	**7.42**	**0.03**	**2.62**	**0.18**	**2.80**	**0.05**	**0.17**	**0.21**	**0.00**	**2,171.64**	**2,171.64**	**0.07**	**0.00**	**2,173.10**

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.22	2.56	1.56	0.01	0.02	0.08	0.10	0.01	0.08	0.08	0.00	673.30	673.30	0.01	0.00	673.50
Worker	0.61	0.57	5.86	0.02	0.10	0.10	0.20	0.04	0.09	0.13	0.00	1,498.34	1,498.34	0.06	0.00	1,499.60
Total	**0.83**	**3.13**	**7.42**	**0.03**	**0.12**	**0.18**	**0.30**	**0.05**	**0.17**	**0.21**	**0.00**	**2,171.64**	**2,171.64**	**0.07**	**0.00**	**2,173.10**

3.2 Building - 2026

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.22	2.56	1.56	0.01	0.22	0.08	0.30	0.01	0.08	0.08	0.00	673.30	673.30	0.01	0.00	673.50

Worker	0.61	0.57	5.86	0.02	2.40	0.10	2.50	0.04	0.09	0.13	0.00	1,498.34	1,498.34	0.06	0.00	1,499.60
Total	**0.83**	**3.13**	**7.42**	**0.03**	**2.62**	**0.18**	**2.80**	**0.05**	**0.17**	**0.21**	**0.00**	**2,171.64**	**2,171.64**	**0.07**	**0.00**	**2,173.10**

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.22	2.56	1.56	0.01	0.02	0.08	0.10	0.01	0.08	0.08	0.00	673.30	673.30	0.01	0.00	673.50
Worker	0.61	0.57	5.86	0.02	0.10	0.10	0.20	0.04	0.09	0.13	0.00	1,498.34	1,498.34	0.06	0.00	1,499.60
Total	**0.83**	**3.13**	**7.42**	**0.03**	**0.12**	**0.18**	**0.30**	**0.05**	**0.17**	**0.21**	**0.00**	**2,171.64**	**2,171.64**	**0.07**	**0.00**	**2,173.10**

3.2 Building - 2027

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.22	2.56	1.56	0.01	0.22	0.08	0.30	0.01	0.08	0.08	0.00	673.30	673.30	0.01	0.00	673.50
Worker	0.61	0.57	5.86	0.02	2.40	0.10	2.50	0.04	0.09	0.13	0.00	1,498.34	1,498.34	0.06	0.00	1,499.60
Total	**0.83**	**3.13**	**7.42**	**0.03**	**2.62**	**0.18**	**2.80**	**0.05**	**0.17**	**0.21**	**0.00**	**2,171.64**	**2,171.64**	**0.07**	**0.00**	**2,173.10**

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.22	2.56	1.56	0.01	0.02	0.08	0.10	0.01	0.08	0.08	0.00	673.30	673.30	0.01	0.00	673.50
Worker	0.61	0.57	5.86	0.02	0.10	0.10	0.20	0.04	0.09	0.13	0.00	1,498.34	1,498.34	0.06	0.00	1,499.60
Total	**0.83**	**3.13**	**7.42**	**0.03**	**0.12**	**0.18**	**0.30**	**0.05**	**0.17**	**0.21**	**0.00**	**2,171.64**	**2,171.64**	**0.07**	**0.00**	**2,173.10**

3.2 Building - 2028

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	0.21	1.19	2.36	0.00		0.04	0.04		0.04	0.04	0.00	393.94	393.94	0.02	0.00	394.30
Total	**0.21**	**1.19**	**2.36**	**0.00**		**0.04**	**0.04**		**0.04**	**0.04**	**0.00**	**393.94**	**393.94**	**0.02**	**0.00**	**394.30**

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	0.18	2.11	1.28	0.01	0.18	0.07	0.25	0.01	0.06	0.07	0.00	554.63	554.63	0.01	0.00	554.80
Worker	0.50	0.47	4.83	0.02	1.98	0.08	2.06	0.03	0.07	0.10	0.00	1,234.27	1,234.27	0.05	0.00	1,235.30
Total	**0.68**	**2.58**	**6.11**	**0.03**	**2.16**	**0.15**	**2.31**	**0.04**	**0.13**	**0.17**	**0.00**	**1,788.90**	**1,788.90**	**0.06**	**0.00**	**1,790.10**

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	0.21	1.19	2.36	0.00		0.04	0.04		0.04	0.04	0.00	393.94	393.94	0.02	0.00	394.30
Total	**0.21**	**1.19**	**2.36**	**0.00**		**0.04**	**0.04**		**0.04**	**0.04**	**0.00**	**393.94**	**393.94**	**0.02**	**0.00**	**394.30**

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	0.18	2.11	1.28	0.01	0.02	0.07	0.09	0.01	0.06	0.07	0.00	554.63	554.63	0.01	0.00	554.80
Worker	0.50	0.47	4.83	0.02	0.08	0.08	0.16	0.03	0.07	0.10	0.00	1,234.27	1,234.27	0.05	0.00	1,235.30
Total	**0.68**	**2.58**	**6.11**	**0.03**	**0.10**	**0.15**	**0.25**	**0.04**	**0.13**	**0.17**	**0.00**	**1,788.90**	**1,788.90**	**0.06**	**0.00**	**1,790.10**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Integrate Below Market Rate Housing

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	13.21	27.77	131.38	0.23	22.77	1.34	24.11	0.36	1.30	1.66	0.00	19,325.85	19,325.85	0.82	0.00	19,343.16
Unmitigated	13.45	28.37	134.14	0.23	23.38	1.37	24.75	0.37	1.33	1.70	0.00	19,825.52	19,825.52	0.84	0.00	19,843.24
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
Apartments Low Rise	3,084.12	3,350.88	2840.76	11,425,652	11,130,413

City Park	18.76	18.76	18.76	46,271	45,075
Condo/Townhouse	1,779.30	1,933.20	1638.90	6,591,722	6,421,392
Congregate Care (Assisted Living)	548.00	440.00	488.00	1,939,146	1,889,039
Hotel	408.50	409.50	297.50	789,173	768,781
Office Park	325.47	46.74	21.66	701,428	683,304
Single Family Housing	5,225.22	5,503.68	4788.42	19,253,057	18,755,558
Strip Mall	2,548.40	2,417.30	1174.73	3,724,085	3,627,855
User Defined Educational	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	13,937.77	14,120.06	11,268.73	44,470,535	43,321,416

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
Apartments Low Rise	16.80	7.10	7.90	41.60	18.80	39.60
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Condo/Townhouse	16.80	7.10	7.90	41.60	18.80	39.60
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Hotel	14.70	6.60	6.60	19.40	61.60	19.00
Office Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60
Strip Mall	14.70	6.60	6.60	16.60	64.40	19.00
User Defined Educational	14.70	6.60	6.60	0.00	0.00	0.00
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	3,047.93	3,047.93	0.11	0.04	3,063.62
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	3,286.27	3,286.27	0.12	0.05	3,303.18
NaturalGas Mitigated	0.18	1.56	0.75	0.01		0.00	0.13		0.00	0.13	0.00	1,792.97	1,792.97	0.03	0.03	1,803.89
NaturalGas Unmitigated	0.23	1.97	0.95	0.01		0.00	0.16		0.00	0.16	0.00	2,267.55	2,267.55	0.04	0.04	2,281.35
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					
Apartments Low Rise	7.8208e+006	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03	0.00	417.35	417.35	0.01	0.01	419.89
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	6.23075e+006	0.03	0.29	0.12	0.00		0.00	0.02		0.00	0.02	0.00	332.50	332.50	0.01	0.01	334.52
Congregate Care (Assisted Living)	2.10798e+006	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	112.49	112.49	0.00	0.00	113.17
Hotel	4.41771e+006	0.02	0.22	0.18	0.00		0.00	0.02		0.00	0.02	0.00	235.75	235.75	0.00	0.00	237.18
Office Park	959880	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	51.22	51.22	0.00	0.00	51.53
Single Family Housing	2.08235e+007	0.11	0.96	0.41	0.01		0.00	0.08		0.00	0.08	0.00	1,111.22	1,111.22	0.02	0.02	1,117.99
Strip Mall	131675	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	7.03	7.03	0.00	0.00	7.07
User Defined Educational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0	0.00	0.00	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		**0.22**	**1.99**	**0.95**	**0.01**		**0.00**	**0.16**		**0.00**	**0.16**	**0.00**	**2,267.56**	**2,267.56**	**0.04**	**0.04**	**2,281.35**

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					
Apartments Low Rise	6.18994e+006	0.03	0.29	0.12	0.00		0.00	0.02		0.00	0.02	0.00	330.32	330.32	0.01	0.01	332.33
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	4.90128e+006	0.03	0.23	0.10	0.00		0.00	0.02		0.00	0.02	0.00	261.55	261.55	0.01	0.00	263.14
Congregate Care (Assisted Living)	1.68035e+006	0.01	0.08	0.03	0.00		0.00	0.01		0.00	0.01	0.00	89.67	89.67	0.00	0.00	90.22
Hotel	3.51475e+006	0.02	0.17	0.14	0.00		0.00	0.01		0.00	0.01	0.00	187.56	187.56	0.00	0.00	188.70
Office Park	767505	0.00	0.04	0.03	0.00		0.00	0.00		0.00	0.00	0.00	40.96	40.96	0.00	0.00	41.21
Single Family Housing	1.64308e+007	0.09	0.76	0.32	0.00		0.00	0.06		0.00	0.06	0.00	876.81	876.81	0.02	0.02	882.15
Strip Mall	114425	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	6.11	6.11	0.00	0.00	6.14
User Defined Educational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0	0.00	0.00	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		**0.18**	**1.58**	**0.74**	**0.00**		**0.00**	**0.12**		**0.00**	**0.12**	**0.00**	**1,792.98**	**1,792.98**	**0.04**	**0.03**	**1,803.89**

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			
Apartments Low Rise	1.64392e+006					582.21	0.02	0.01	585.21
City Park	0					0.00	0.00	0.00	0.00
Condo/Townhouse	1.11671e+006					395.50	0.01	0.01	397.53
Congregate Care (Assisted Living)	649600					230.06	0.01	0.00	231.25
Hotel	1.05923e+006					375.14	0.01	0.01	377.07
Office Park	501600					177.65	0.01	0.00	178.56
Single Family Housing	3.50066e+006					1,239.79	0.05	0.02	1,246.18
Strip Mall	807300					285.91	0.01	0.00	287.39
User Defined Educational	0					0.00	0.00	0.00	0.00

User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						**3,286.26**	**0.12**	**0.05**	**3,303.19**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	1.53705e+006					544.36	0.02	0.01	547.16
City Park	0					0.00	0.00	0.00	0.00
Condo/Townhouse	1.05119e+006					372.29	0.01	0.01	374.21
Congregate Care (Assisted Living)	627074					222.08	0.01	0.00	223.23
Hotel	934798					331.07	0.01	0.00	332.77
Office Park	444272					157.34	0.01	0.00	158.15
Single Family Housing	3.28039e+006					1,161.79	0.04	0.02	1,167.77
Strip Mall	731285					258.99	0.01	0.00	260.33
User Defined Educational	0					0.00	0.00	0.00	0.00
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						**3,047.92**	**0.11**	**0.04**	**3,063.62**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Non-Residential Interior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	12.19	0.13	11.23	0.00		0.00	0.25		0.00	0.25	0.00	2,735.65	2,735.65	0.07	0.05	2,752.57
Unmitigated	12.19	0.13	11.23	0.00		0.00	0.25		0.00	0.25	0.00	2,735.65	2,735.65	0.07	0.05	2,752.57
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	2.44					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	9.13					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.27	0.00	0.01	0.00		0.00	0.19		0.00	0.19	0.00	2,717.45	2,717.45	0.05	0.05	2,733.99
Landscaping	0.35	0.13	11.22	0.00		0.00	0.06		0.00	0.06	0.00	18.20	18.20	0.02	0.00	18.58
Total	**12.19**	**0.13**	**11.23**	**0.00**		**0.00**	**0.25**		**0.00**	**0.25**	**0.00**	**2,735.65**	**2,735.65**	**0.07**	**0.05**	**2,752.57**

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	2.44					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	9.13					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.27	0.00	0.01	0.00		0.00	0.19		0.00	0.19	0.00	2,717.45	2,717.45	0.05	0.05	2,733.99
Landscaping	0.35	0.13	11.22	0.00		0.00	0.06		0.00	0.06	0.00	18.20	18.20	0.02	0.00	18.58
Total	**12.19**	**0.13**	**11.23**	**0.00**		**0.00**	**0.25**		**0.00**	**0.25**	**0.00**	**2,735.65**	**2,735.65**	**0.07**	**0.05**	**2,752.57**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					619.49	2.64	0.07	697.83
Unmitigated					814.14	3.30	0.09	912.27
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			
Apartments Low Rise	30.4921 / 19.2233					216.60	0.94	0.03	244.41
City Park	0 / 14.0595					55.32	0.00	0.00	55.60
Condo/Townhouse	17.5916 / 11.0903					124.96	0.54	0.02	141.01
Congregate Care (Assisted Living)	13.0308 / 8.21507					92.56	0.40	0.01	104.45
Hotel	1.26834 / 0.140927					6.42	0.04	0.00	7.56
Office Park	5.06541 / 3.10461					35.63	0.16	0.00	40.25
Single Family Housing	35.5741 / 22.4271					252.69	1.10	0.03	285.14
Strip Mall	4.25917 / 2.61046					29.96	0.13	0.00	33.84
User Defined Educational	0 / 0					0.00	0.00	0.00	0.00

User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						**814.14**	**3.31**	**0.09**	**912.26**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	24.3937 / 13.4563					165.71	0.75	0.02	187.93
City Park	0 / 9.84164					38.72	0.00	0.00	38.92
Condo/Townhouse	14.0733 / 7.76324					95.60	0.43	0.01	108.42
Congregate Care (Assisted Living)	10.4246 / 5.75055					70.82	0.32	0.01	80.31
Hotel	1.01467 / 0.0986485					5.08	0.03	0.00	5.99
Office Park	4.05233 / 2.17323					27.28	0.12	0.00	30.97
Single Family Housing	28.4593 / 15.699					193.33	0.88	0.02	219.25
Strip Mall	3.40734 / 1.82732					22.94	0.10	0.00	26.04
User Defined Educational	0 / 0					0.00	0.00	0.00	0.00
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						**619.48**	**2.63**	**0.06**	**697.83**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					207.49	12.26	0.00	464.99
Unmitigated					259.36	15.33	0.00	581.24
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			
Apartments Low Rise	215.28					43.70	2.58	0.00	97.93
City Park	1.01					0.21	0.01	0.00	0.46
Condo/Townhouse	124.2					25.21	1.49	0.00	56.50
Congregate Care (Assisted Living)	182.5					37.05	2.19	0.00	83.02
Hotel	27.38					5.56	0.33	0.00	12.46
Office Park	26.51					5.38	0.32	0.00	12.06
Single Family Housing	640.42					130.00	7.68	0.00	291.34
Strip Mall	60.38					12.26	0.72	0.00	27.47
User Defined Educational	0					0.00	0.00	0.00	0.00
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						**259.37**	**15.32**	**0.00**	**581.24**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	172.224					34.96	2.07	0.00	78.35

City Park	0.808					0.16	0.01	0.00	0.37
Condo/Townhouse	99.36					20.17	1.19	0.00	45.20
Congregate Care (Assisted Living)	146					29.64	1.75	0.00	66.42
Hotel	21.904					4.45	0.26	0.00	9.96
Office Park	21.208					4.31	0.25	0.00	9.65
Single Family Housing	512.336					104.00	6.15	0.00	233.07
Strip Mall	48.304					9.81	0.58	0.00	21.97
User Defined Educational	0					0.00	0.00	0.00	0.00
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						**207.50**	**12.26**	**0.00**	**464.99**

9.0 Vegetation

6153: Lilac Ranch - Phase E operational

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Office Park	28.5	1000sqft
Elementary School	568	Student
Junior High School	132	Student
User Defined Educational	10.7	User Defined Unit
User Defined Industrial	2.4	User Defined Unit
User Defined Industrial	0.6	User Defined Unit
City Park	23.8	Acre
Hotel	50	Room
User Defined Recreational	40	User Defined Unit
Apartments Low Rise	468	Dwelling Unit
Condo/Townhouse	375	Dwelling Unit
Congregate Care (Assisted Living)	200	Dwelling Unit
Single Family Housing	903	Dwelling Unit
Strip Mall	61.5	1000sqft

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**		**Utility Company**	San Diego Gas & Electric
Climate Zone	13		2.6		
		Precipitation Freq (Days)			

1.3 User Entered Comments

40

Project Characteristics -

Off-road Equipment -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Land Use - per client

Woodstoves - per client

Area Coating - per client

Energy Use - 10% reduction, energy star

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	3.13	14.44	27.54	0.04	3.36	0.73	4.09	0.06	0.70	0.75	0.00	3,869.81	3,869.81	0.27	0.00	3,875.53
2012	2.89	13.43	25.57	0.04	3.38	0.68	4.05	0.06	0.65	0.71	0.00	3,832.76	3,832.76	0.25	0.00	3,838.06
2013	2.67	12.43	23.72	0.04	3.38	0.63	4.00	0.06	0.60	0.66	0.00	3,782.57	3,782.57	0.23	0.00	3,787.47
2014	2.47	11.51	22.00	0.04	3.38	0.58	3.95	0.06	0.55	0.61	0.00	3,733.57	3,733.57	0.22	0.00	3,738.11
2015	2.29	10.60	20.48	0.04	3.38	0.53	3.91	0.06	0.51	0.57	0.00	3,681.45	3,681.45	0.20	0.00	3,685.64
2016	2.14	9.80	19.13	0.04	3.38	0.49	3.87	0.06	0.47	0.53	0.00	3,627.47	3,627.47	0.19	0.00	3,631.37
2017	1.98	9.05	17.83	0.04	3.36	0.46	3.82	0.06	0.44	0.49	0.00	3,563.89	3,563.89	0.17	0.00	3,567.48
2018	1.86	8.43	16.80	0.04	3.38	0.42	3.80	0.06	0.40	0.46	0.00	3,531.06	3,531.06	0.16	0.00	3,534.41

2019	1.75	7.86	15.89	0.04	3.38	0.39	3.77	0.06	0.38	0.43	0.00	3,488.74	3,488.74	0.15	0.00	3,491.88
2020	1.66	7.40	15.19	0.04	3.39	0.37	3.76	0.06	0.35	0.41	0.00	3,463.13	3,463.13	0.14	0.00	3,466.09
2021	1.58	6.92	14.59	0.04	3.38	0.35	3.73	0.06	0.33	0.39	0.00	3,433.77	3,433.77	0.13	0.00	3,436.58
2022	1.51	6.52	13.92	0.04	3.36	0.33	3.69	0.06	0.31	0.37	0.00	3,388.12	3,388.12	0.13	0.00	3,390.78
2023	1.44	6.19	13.36	0.04	3.36	0.31	3.68	0.06	0.29	0.35	0.00	3,358.37	3,358.37	0.12	0.00	3,360.91
2024	1.40	5.95	12.96	0.04	3.39	0.30	3.69	0.06	0.28	0.34	0.00	3,357.16	3,357.16	0.12	0.00	3,359.61
2025	1.35	5.69	12.50	0.04	3.38	0.29	3.67	0.06	0.27	0.33	0.00	3,320.11	3,320.11	0.11	0.00	3,322.43
2026	1.35	5.69	12.50	0.04	3.38	0.29	3.67	0.06	0.27	0.33	0.00	3,320.11	3,320.11	0.11	0.00	3,322.43
2027	1.35	5.69	12.50	0.04	3.38	0.29	3.67	0.06	0.27	0.33	0.00	3,320.11	3,320.11	0.11	0.00	3,322.43
2028	1.34	5.67	12.45	0.04	3.36	0.29	3.65	0.06	0.27	0.33	0.00	3,307.39	3,307.39	0.11	0.00	3,309.70
2029	1.35	5.69	12.50	0.04	3.38	0.29	3.67	0.06	0.27	0.33	0.00	3,320.11	3,320.11	0.11	0.00	3,322.43
2030	1.17	4.94	11.07	0.04	3.38	0.26	3.63	0.06	0.24	0.30	0.00	3,233.97	3,233.97	0.10	0.00	3,235.98
2031	1.17	4.94	11.07	0.04	3.38	0.26	3.63	0.06	0.24	0.30	0.00	3,233.97	3,233.97	0.10	0.00	3,235.98
2032	1.17	4.96	11.12	0.04	3.39	0.26	3.65	0.06	0.24	0.30	0.00	3,246.36	3,246.36	0.10	0.00	3,248.38
2033	1.16	4.92	11.03	0.04	3.36	0.26	3.62	0.06	0.24	0.29	0.00	3,221.58	3,221.58	0.10	0.00	3,223.58
2034	0.89	3.79	8.49	0.03	2.59	0.20	2.79	0.04	0.18	0.23	0.00	2,478.14	2,478.14	0.07	0.00	2,479.68
Total	**41.07**	**182.51**	**374.21**	**0.95**	**80.24**	**9.26**	**89.46**	**1.42**	**8.75**	**10.14**	**0.00**	**82,113.72**	**82,113.72**	**3.50**	**0.00**	**82,186.94**

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	3.13	14.44	27.54	0.04	0.16	0.73	0.88	0.06	0.70	0.75	0.00	3,869.81	3,869.81	0.27	0.00	3,875.53
2012	2.89	13.43	25.57	0.04	0.16	0.68	0.84	0.06	0.65	0.71	0.00	3,832.76	3,832.76	0.25	0.00	3,838.06
2013	2.67	12.43	23.72	0.04	0.16	0.63	0.78	0.06	0.60	0.66	0.00	3,782.57	3,782.57	0.23	0.00	3,787.47
2014	2.47	11.51	22.00	0.04	0.16	0.58	0.74	0.06	0.55	0.61	0.00	3,733.57	3,733.57	0.22	0.00	3,738.11
2015	2.29	10.60	20.48	0.04	0.16	0.53	0.69	0.06	0.51	0.57	0.00	3,681.45	3,681.45	0.20	0.00	3,685.64
2016	2.14	9.80	19.13	0.04	0.16	0.49	0.65	0.06	0.47	0.53	0.00	3,627.47	3,627.47	0.19	0.00	3,631.37

2017	1.98	9.05	17.83	0.04	0.16	0.46	0.61	0.06	0.44	0.49	0.00	3,563.89	3,563.89	0.17	0.00	3,567.48
2018	1.86	8.43	16.80	0.04	0.16	0.42	0.58	0.06	0.40	0.46	0.00	3,531.06	3,531.06	0.16	0.00	3,534.41
2019	1.75	7.86	15.89	0.04	0.16	0.39	0.55	0.06	0.38	0.43	0.00	3,488.74	3,488.74	0.15	0.00	3,491.88
2020	1.66	7.40	15.19	0.04	0.16	0.37	0.53	0.06	0.35	0.41	0.00	3,463.13	3,463.13	0.14	0.00	3,466.09
2021	1.58	6.92	14.59	0.04	0.16	0.35	0.51	0.06	0.33	0.39	0.00	3,433.77	3,433.77	0.13	0.00	3,436.58
2022	1.51	6.52	13.92	0.04	0.16	0.33	0.49	0.06	0.31	0.37	0.00	3,388.12	3,388.12	0.13	0.00	3,390.78
2023	1.44	6.19	13.36	0.04	0.16	0.31	0.47	0.06	0.29	0.35	0.00	3,358.37	3,358.37	0.12	0.00	3,360.91
2024	1.40	5.95	12.96	0.04	0.16	0.30	0.46	0.06	0.28	0.34	0.00	3,357.16	3,357.16	0.12	0.00	3,359.61
2025	1.35	5.69	12.50	0.04	0.16	0.29	0.45	0.06	0.27	0.33	0.00	3,320.11	3,320.11	0.11	0.00	3,322.43
2026	1.35	5.69	12.50	0.04	0.16	0.29	0.45	0.06	0.27	0.33	0.00	3,320.11	3,320.11	0.11	0.00	3,322.43
2027	1.35	5.69	12.50	0.04	0.16	0.29	0.45	0.06	0.27	0.33	0.00	3,320.11	3,320.11	0.11	0.00	3,322.43
2028	1.34	5.67	12.45	0.04	0.16	0.29	0.45	0.06	0.27	0.33	0.00	3,307.39	3,307.39	0.11	0.00	3,309.70
2029	1.35	5.69	12.50	0.04	0.16	0.29	0.45	0.06	0.27	0.33	0.00	3,320.11	3,320.11	0.11	0.00	3,322.43
2030	1.17	4.94	11.07	0.04	0.16	0.26	0.42	0.06	0.24	0.30	0.00	3,233.97	3,233.97	0.10	0.00	3,235.98
2031	1.17	4.94	11.07	0.04	0.16	0.26	0.42	0.06	0.24	0.30	0.00	3,233.97	3,233.97	0.10	0.00	3,235.98
2032	1.17	4.96	11.12	0.04	0.16	0.26	0.42	0.06	0.24	0.30	0.00	3,246.36	3,246.36	0.10	0.00	3,248.38
2033	1.16	4.92	11.03	0.04	0.16	0.26	0.41	0.06	0.24	0.29	0.00	3,221.58	3,221.58	0.10	0.00	3,223.58
2034	0.89	3.79	8.49	0.03	0.12	0.20	0.32	0.04	0.18	0.23	0.00	2,478.14	2,478.14	0.07	0.00	2,479.68
Total	**41.07**	**182.51**	**374.21**	**0.95**	**3.80**	**9.26**	**13.02**	**1.42**	**8.75**	**10.14**	**0.00**	**82,113.72**	**82,113.72**	**3.50**	**0.00**	**82,186.94**

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	17.02	0.17	14.64	0.00		0.00	0.27		0.00	0.27	0.00	2,741.32	2,741.32	0.08	0.05	2,758.34
Energy	0.32	2.73	1.28	0.02		0.00	0.22		0.00	0.22	0.00	7,548.35	7,548.35	0.22	0.12	7,590.15
Mobile	18.63	39.39	186.16	0.32	32.58	1.91	34.49	0.52	1.85	2.37	0.00	27,616.38	27,616.38	1.17	0.00	27,641.02

Waste						0.00	0.00		0.00	0.00	381.13	0.00	381.13	22.52	0.00	854.14
Water						0.00	0.00		0.00	0.00	0.00	1,111.31	1,111.31	4.30	0.12	1,239.08
Total	**35.97**	**42.29**	**202.08**	**0.34**	**32.58**	**1.91**	**34.98**	**0.52**	**1.85**	**2.86**	**381.13**	**39,017.36**	**39,398.49**	**28.29**	**0.29**	**40,082.73**

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	17.02	0.17	14.64	0.00		0.00	0.27		0.00	0.27	0.00	2,741.32	2,741.32	0.08	0.05	2,758.34
Energy	0.25	2.16	1.01	0.01		0.00	0.17		0.00	0.17	0.00	6,574.16	6,574.16	0.20	0.10	6,610.33
Mobile	18.29	38.55	182.31	0.31	31.74	1.86	33.60	0.51	1.80	2.31	0.00	26,919.99	26,919.99	1.15	0.00	26,944.06
Waste						0.00	0.00		0.00	0.00	304.91	0.00	304.91	18.02	0.00	683.31
Water						0.00	0.00		0.00	0.00	0.00	842.35	842.35	3.43	0.10	944.32
Total	**35.56**	**40.88**	**197.96**	**0.32**	**31.74**	**1.86**	**34.04**	**0.51**	**1.80**	**2.75**	**304.91**	**37,077.82**	**37,382.73**	**22.88**	**0.25**	**37,940.36**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Building - 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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	**0.79**	**5.23**	**3.12**	**0.01**		**0.36**	**0.36**		**0.36**	**0.36**	**0.00**	**476.40**	**476.40**	**0.06**	**0.00**	**477.75**

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	0.67	7.17	4.73	0.01	0.30	0.25	0.54	0.01	0.23	0.23	0.00	903.45	903.45	0.03	0.00	904.08
Worker	1.67	2.04	19.69	0.03	3.07	0.12	3.19	0.05	0.11	0.16	0.00	2,489.97	2,489.97	0.18	0.00	2,493.70
Total	**2.34**	**9.21**	**24.42**	**0.04**	**3.37**	**0.37**	**3.73**	**0.06**	**0.34**	**0.39**	**0.00**	**3,393.42**	**3,393.42**	**0.21**	**0.00**	**3,397.78**

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	0.79	5.23	3.12	0.01		0.36	0.36		0.36	0.36	0.00	476.40	476.40	0.06	0.00	477.75
Total	**0.79**	**5.23**	**3.12**	**0.01**		**0.36**	**0.36**		**0.36**	**0.36**	**0.00**	**476.40**	**476.40**	**0.06**	**0.00**	**477.75**

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	0.67	7.17	4.73	0.01	0.03	0.25	0.27	0.01	0.23	0.23	0.00	903.45	903.45	0.03	0.00	904.08
Worker	1.67	2.04	19.69	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	2,489.97	2,489.97	0.18	0.00	2,493.70
Total	**2.34**	**9.21**	**24.42**	**0.04**	**0.16**	**0.37**	**0.52**	**0.06**	**0.34**	**0.39**	**0.00**	**3,393.42**	**3,393.42**	**0.21**	**0.00**	**3,397.78**

3.2 Building - 2012

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	**0.73**	**4.87**	**3.10**	**0.01**		**0.33**	**0.33**		**0.33**	**0.33**	**0.00**	**478.23**	**478.23**	**0.06**	**0.00**	**479.48**

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	0.62	6.68	4.39	0.01	0.30	0.23	0.52	0.01	0.21	0.22	0.00	908.60	908.60	0.03	0.00	909.18
Worker	1.54	1.88	18.09	0.03	3.08	0.12	3.20	0.05	0.11	0.16	0.00	2,445.94	2,445.94	0.16	0.00	2,449.39
Total	**2.16**	**8.56**	**22.48**	**0.04**	**3.38**	**0.35**	**3.72**	**0.06**	**0.32**	**0.38**	**0.00**	**3,354.54**	**3,354.54**	**0.19**	**0.00**	**3,358.57**

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	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	**0.73**	**4.87**	**3.10**	**0.01**		**0.33**	**0.33**		**0.33**	**0.33**	**0.00**	**478.23**	**478.23**	**0.06**	**0.00**	**479.48**

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	0.62	6.68	4.39	0.01	0.03	0.23	0.25	0.01	0.21	0.22	0.00	908.60	908.60	0.03	0.00	909.18
Worker	1.54	1.88	18.09	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	2,445.94	2,445.94	0.16	0.00	2,449.39
Total	**2.16**	**8.56**	**22.48**	**0.04**	**0.16**	**0.35**	**0.50**	**0.06**	**0.32**	**0.38**	**0.00**	**3,354.54**	**3,354.54**	**0.19**	**0.00**	**3,358.57**

3.2 Building - 2013

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	**0.67**	**4.52**	**3.06**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.38**

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	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	0.57	6.19	4.08	0.01	0.30	0.21	0.51	0.01	0.19	0.20	0.00	910.17	910.17	0.03	0.00	910.71
Worker	1.43	1.72	16.59	0.03	3.08	0.12	3.20	0.05	0.11	0.16	0.00	2,394.18	2,394.18	0.15	0.00	2,397.39
Total	**2.00**	**7.91**	**20.67**	**0.04**	**3.38**	**0.33**	**3.71**	**0.06**	**0.30**	**0.36**	**0.00**	**3,304.35**	**3,304.35**	**0.18**	**0.00**	**3,308.10**

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	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	**0.67**	**4.52**	**3.06**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.38**

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	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	0.57	6.19	4.08	0.01	0.03	0.21	0.24	0.01	0.19	0.20	0.00	910.17	910.17	0.03	0.00	910.71
Worker	1.43	1.72	16.59	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	2,394.18	2,394.18	0.15	0.00	2,397.39
Total	**2.00**	**7.91**	**20.67**	**0.04**	**0.16**	**0.33**	**0.49**	**0.06**	**0.30**	**0.36**	**0.00**	**3,304.35**	**3,304.35**	**0.18**	**0.00**	**3,308.10**

3.2 Building - 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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	**0.62**	**4.18**	**3.03**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.28**

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	0.53	5.74	3.78	0.01	0.30	0.19	0.49	0.01	0.18	0.19	0.00	911.70	911.70	0.02	0.00	912.20
Worker	1.32	1.58	15.20	0.03	3.08	0.12	3.20	0.05	0.11	0.16	0.00	2,343.64	2,343.64	0.14	0.00	2,346.63
Total	**1.85**	**7.32**	**18.98**	**0.04**	**3.38**	**0.31**	**3.69**	**0.06**	**0.29**	**0.35**	**0.00**	**3,255.34**	**3,255.34**	**0.16**	**0.00**	**3,258.83**

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	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	**0.62**	**4.18**	**3.03**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.28**

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	0.53	5.74	3.78	0.01	0.03	0.19	0.22	0.01	0.18	0.19	0.00	911.70	911.70	0.02	0.00	912.20
Worker	1.32	1.58	15.20	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	2,343.64	2,343.64	0.14	0.00	2,346.63
Total	**1.85**	**7.32**	**18.98**	**0.04**	**0.16**	**0.31**	**0.47**	**0.06**	**0.29**	**0.35**	**0.00**	**3,255.34**	**3,255.34**	**0.16**	**0.00**	**3,258.83**

3.2 Building - 2015

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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	**0.57**	**3.80**	**3.00**	**0.01**		**0.23**	**0.23**		**0.23**	**0.23**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.20**

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	0.49	5.35	3.50	0.01	0.30	0.18	0.48	0.01	0.16	0.17	0.00	913.07	913.07	0.02	0.00	913.53
Worker	1.24	1.45	13.98	0.03	3.08	0.12	3.20	0.05	0.11	0.16	0.00	2,290.16	2,290.16	0.13	0.00	2,292.92
Total	**1.73**	**6.80**	**17.48**	**0.04**	**3.38**	**0.30**	**3.68**	**0.06**	**0.27**	**0.33**	**0.00**	**3,203.23**	**3,203.23**	**0.15**	**0.00**	**3,206.45**

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	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20

Total	**0.57**	**3.80**	**3.00**	**0.01**		**0.23**	**0.23**		**0.23**	**0.23**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.20**

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	0.49	5.35	3.50	0.01	0.03	0.18	0.20	0.01	0.16	0.17	0.00	913.07	913.07	0.02	0.00	913.53
Worker	1.24	1.45	13.98	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	2,290.16	2,290.16	0.13	0.00	2,292.92
Total	**1.73**	**6.80**	**17.48**	**0.04**	**0.16**	**0.30**	**0.45**	**0.06**	**0.27**	**0.33**	**0.00**	**3,203.23**	**3,203.23**	**0.15**	**0.00**	**3,206.45**

3.2 Building - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11
Total	**0.52**	**3.46**	**2.97**	**0.01**		**0.21**	**0.21**		**0.21**	**0.21**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**479.11**

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	0.46	5.01	3.27	0.01	0.30	0.17	0.46	0.01	0.15	0.16	0.00	914.37	914.37	0.02	0.00	914.80
Worker	1.16	1.33	12.89	0.03	3.08	0.12	3.20	0.05	0.11	0.16	0.00	2,234.87	2,234.87	0.12	0.00	2,237.45

Total	**1.62**	**6.34**	**16.16**	**0.04**	**3.38**	**0.29**	**3.66**	**0.06**	**0.26**	**0.32**	**0.00**	**3,149.24**	**3,149.24**	**0.14**	**0.00**	**3,152.25**

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	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11
Total	**0.52**	**3.46**	**2.97**	**0.01**		**0.21**	**0.21**		**0.21**	**0.21**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**479.11**

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	0.46	5.01	3.27	0.01	0.03	0.17	0.19	0.01	0.15	0.16	0.00	914.37	914.37	0.02	0.00	914.80
Worker	1.16	1.33	12.89	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	2,234.87	2,234.87	0.12	0.00	2,237.45
Total	**1.62**	**6.34**	**16.16**	**0.04**	**0.16**	**0.29**	**0.44**	**0.06**	**0.26**	**0.32**	**0.00**	**3,149.24**	**3,149.24**	**0.14**	**0.00**	**3,152.25**

3.2 Building - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20
Total	**0.48**	**3.13**	**2.94**	**0.01**		**0.18**	**0.18**		**0.18**	**0.18**	**0.00**	**476.40**	**476.40**	**0.04**	**0.00**	**477.20**

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	0.43	4.70	3.06	0.01	0.30	0.16	0.45	0.01	0.14	0.15	0.00	912.03	912.03	0.02	0.00	912.43
Worker	1.08	1.23	11.83	0.03	3.07	0.12	3.19	0.05	0.11	0.16	0.00	2,175.46	2,175.46	0.11	0.00	2,177.85
Total	**1.51**	**5.93**	**14.89**	**0.04**	**3.37**	**0.28**	**3.64**	**0.06**	**0.25**	**0.31**	**0.00**	**3,087.49**	**3,087.49**	**0.13**	**0.00**	**3,090.28**

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	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20
Total	**0.48**	**3.13**	**2.94**	**0.01**		**0.18**	**0.18**		**0.18**	**0.18**	**0.00**	**476.40**	**476.40**	**0.04**	**0.00**	**477.20**

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	0.43	4.70	3.06	0.01	0.03	0.16	0.18	0.01	0.14	0.15	0.00	912.03	912.03	0.02	0.00	912.43
Worker	1.08	1.23	11.83	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	2,175.46	2,175.46	0.11	0.00	2,177.85
Total	**1.51**	**5.93**	**14.89**	**0.04**	**0.16**	**0.28**	**0.43**	**0.06**	**0.25**	**0.31**	**0.00**	**3,087.49**	**3,087.49**	**0.13**	**0.00**	**3,090.28**

3.2 Building - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97
Total	**0.44**	**2.84**	**2.93**	**0.01**		**0.16**	**0.16**		**0.16**	**0.16**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**478.97**

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	0.40	4.46	2.90	0.01	0.30	0.15	0.44	0.01	0.14	0.14	0.00	916.58	916.58	0.02	0.00	916.96
Worker	1.02	1.13	10.96	0.03	3.08	0.12	3.20	0.05	0.11	0.16	0.00	2,136.24	2,136.24	0.11	0.00	2,138.49
Total	**1.42**	**5.59**	**13.86**	**0.04**	**3.38**	**0.27**	**3.64**	**0.06**	**0.25**	**0.30**	**0.00**	**3,052.82**	**3,052.82**	**0.13**	**0.00**	**3,055.45**

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	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97
Total	**0.44**	**2.84**	**2.93**	**0.01**		**0.16**	**0.16**		**0.16**	**0.16**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**478.97**

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	0.40	4.46	2.90	0.01	0.03	0.15	0.17	0.01	0.14	0.14	0.00	916.58	916.58	0.02	0.00	916.96
Worker	1.02	1.13	10.96	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	2,136.24	2,136.24	0.11	0.00	2,138.49
Total	**1.42**	**5.59**	**13.86**	**0.04**	**0.16**	**0.27**	**0.42**	**0.06**	**0.25**	**0.30**	**0.00**	**3,052.82**	**3,052.82**	**0.13**	**0.00**	**3,055.45**

3.2 Building - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.40	2.57	2.92	0.01		0.13	0.13		0.13	0.13	0.00	478.23	478.23	0.03	0.00	478.91
Total	**0.40**	**2.57**	**2.92**	**0.01**		**0.13**	**0.13**		**0.13**	**0.13**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.91**

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	0.38	4.24	2.74	0.01	0.30	0.14	0.44	0.01	0.13	0.14	0.00	917.72	917.72	0.02	0.00	918.07
Worker	0.97	1.05	10.23	0.03	3.08	0.12	3.20	0.05	0.11	0.16	0.00	2,092.80	2,092.80	0.10	0.00	2,094.91
Total	**1.35**	**5.29**	**12.97**	**0.04**	**3.38**	**0.26**	**3.64**	**0.06**	**0.24**	**0.30**	**0.00**	**3,010.52**	**3,010.52**	**0.12**	**0.00**	**3,012.98**

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	0.40	2.57	2.92	0.01		0.13	0.13		0.13	0.13	0.00	478.23	478.23	0.03	0.00	478.91
Total	**0.40**	**2.57**	**2.92**	**0.01**		**0.13**	**0.13**		**0.13**	**0.13**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.91**

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	0.38	4.24	2.74	0.01	0.03	0.14	0.17	0.01	0.13	0.14	0.00	917.72	917.72	0.02	0.00	918.07
Worker	0.97	1.05	10.23	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	2,092.80	2,092.80	0.10	0.00	2,094.91
Total	**1.35**	**5.29**	**12.97**	**0.04**	**0.16**	**0.26**	**0.42**	**0.06**	**0.24**	**0.30**	**0.00**	**3,010.52**	**3,010.52**	**0.12**	**0.00**	**3,012.98**

3.2 Building - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.37	2.34	2.91	0.01		0.11	0.11		0.11	0.11	0.00	480.06	480.06	0.03	0.00	480.68
Total	**0.37**	**2.34**	**2.91**	**0.01**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**480.06**	**480.06**	**0.03**	**0.00**	**480.68**

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	0.36	4.06	2.62	0.01	0.30	0.13	0.43	0.01	0.12	0.13	0.00	922.19	922.19	0.02	0.00	922.53

Worker	0.94	0.99	9.65	0.03	3.09	0.12	3.21	0.05	0.11	0.16	0.00	2,060.88	2,060.88	0.10	0.00	2,062.88
Total	**1.30**	**5.05**	**12.27**	**0.04**	**3.39**	**0.25**	**3.64**	**0.06**	**0.23**	**0.29**	**0.00**	**2,983.07**	**2,983.07**	**0.12**	**0.00**	**2,985.41**

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	0.37	2.34	2.91	0.01		0.11	0.11		0.11	0.11	0.00	480.06	480.06	0.03	0.00	480.68
Total	**0.37**	**2.34**	**2.91**	**0.01**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**480.06**	**480.06**	**0.03**	**0.00**	**480.68**

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	0.36	4.06	2.62	0.01	0.03	0.13	0.16	0.01	0.12	0.13	0.00	922.19	922.19	0.02	0.00	922.53
Worker	0.94	0.99	9.65	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	2,060.88	2,060.88	0.10	0.00	2,062.88
Total	**1.30**	**5.05**	**12.27**	**0.04**	**0.16**	**0.25**	**0.41**	**0.06**	**0.23**	**0.29**	**0.00**	**2,983.07**	**2,983.07**	**0.12**	**0.00**	**2,985.41**

3.2 Building - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.33	2.10	2.88	0.01		0.10	0.10		0.10	0.10	0.00	478.23	478.23	0.03	0.00	478.79
Total	**0.33**	**2.10**	**2.88**	**0.01**		**0.10**	**0.10**		**0.10**	**0.10**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.79**

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	0.35	3.90	2.49	0.01	0.30	0.13	0.43	0.01	0.12	0.13	0.00	919.58	919.58	0.02	0.00	919.90
Worker	0.90	0.93	9.22	0.03	3.08	0.12	3.20	0.05	0.11	0.16	0.00	2,035.96	2,035.96	0.09	0.00	2,037.89
Total	**1.25**	**4.83**	**11.71**	**0.04**	**3.38**	**0.25**	**3.63**	**0.06**	**0.23**	**0.29**	**0.00**	**2,955.54**	**2,955.54**	**0.11**	**0.00**	**2,957.79**

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	0.33	2.10	2.88	0.01		0.10	0.10		0.10	0.10	0.00	478.23	478.23	0.03	0.00	478.79
Total	**0.33**	**2.10**	**2.88**	**0.01**		**0.10**	**0.10**		**0.10**	**0.10**	**0.00**	**478.23**	**478.23**	**0.03**	**0.00**	**478.79**

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	0.35	3.90	2.49	0.01	0.03	0.13	0.15	0.01	0.12	0.13	0.00	919.58	919.58	0.02	0.00	919.90
Worker	0.90	0.93	9.22	0.03	0.13	0.12	0.26	0.05	0.11	0.16	0.00	2,035.96	2,035.96	0.09	0.00	2,037.89
Total	**1.25**	**4.83**	**11.71**	**0.04**	**0.16**	**0.25**	**0.41**	**0.06**	**0.23**	**0.29**	**0.00**	**2,955.54**	**2,955.54**	**0.11**	**0.00**	**2,957.79**

3.2 Building - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.31	1.89	2.86	0.01		0.08	0.08		0.08	0.08	0.00	476.40	476.40	0.02	0.00	476.92
Total	**0.31**	**1.89**	**2.86**	**0.01**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.92**

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	0.33	3.76	2.37	0.01	0.30	0.12	0.42	0.01	0.11	0.12	0.00	916.86	916.86	0.01	0.00	917.17
Worker	0.87	0.87	8.69	0.03	3.07	0.12	3.19	0.05	0.11	0.16	0.00	1,994.86	1,994.86	0.09	0.00	1,996.69
Total	**1.20**	**4.63**	**11.06**	**0.04**	**3.37**	**0.24**	**3.61**	**0.06**	**0.22**	**0.28**	**0.00**	**2,911.72**	**2,911.72**	**0.10**	**0.00**	**2,913.86**

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	0.31	1.89	2.86	0.01		0.08	0.08		0.08	0.08	0.00	476.40	476.40	0.02	0.00	476.92
Total	**0.31**	**1.89**	**2.86**	**0.01**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.92**

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	0.33	3.76	2.37	0.01	0.03	0.12	0.15	0.01	0.11	0.12	0.00	916.86	916.86	0.01	0.00	917.17
Worker	0.87	0.87	8.69	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	1,994.86	1,994.86	0.09	0.00	1,996.69
Total	**1.20**	**4.63**	**11.06**	**0.04**	**0.16**	**0.24**	**0.40**	**0.06**	**0.22**	**0.28**	**0.00**	**2,911.72**	**2,911.72**	**0.10**	**0.00**	**2,913.86**

3.2 Building - 2023

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	0.29	1.72	2.86	0.01		0.07	0.07		0.07	0.07	0.00	476.40	476.40	0.02	0.00	476.89
Total	**0.29**	**1.72**	**2.86**	**0.01**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.89**

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	0.32	3.65	2.28	0.01	0.30	0.12	0.42	0.01	0.11	0.12	0.00	917.61	917.61	0.01	0.00	917.90
Worker	0.84	0.82	8.22	0.03	3.07	0.12	3.19	0.05	0.11	0.16	0.00	1,964.37	1,964.37	0.08	0.00	1,966.12
Total	**1.16**	**4.47**	**10.50**	**0.04**	**3.37**	**0.24**	**3.61**	**0.06**	**0.22**	**0.28**	**0.00**	**2,881.98**	**2,881.98**	**0.09**	**0.00**	**2,884.02**

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	0.29	1.72	2.86	0.01		0.07	0.07		0.07	0.07	0.00	476.40	476.40	0.02	0.00	476.89
Total	**0.29**	**1.72**	**2.86**	**0.01**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.89**

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	0.32	3.65	2.28	0.01	0.03	0.12	0.15	0.01	0.11	0.12	0.00	917.61	917.61	0.01	0.00	917.90
Worker	0.84	0.82	8.22	0.03	0.13	0.12	0.25	0.05	0.11	0.16	0.00	1,964.37	1,964.37	0.08	0.00	1,966.12
Total	**1.16**	**4.47**	**10.50**	**0.04**	**0.16**	**0.24**	**0.40**	**0.06**	**0.22**	**0.28**	**0.00**	**2,881.98**	**2,881.98**	**0.09**	**0.00**	**2,884.02**

3.2 Building - 2024

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	0.28	1.58	2.87	0.01		0.06	0.06		0.06	0.06	0.00	480.06	480.06	0.02	0.00	480.53
Total	**0.28**	**1.58**	**2.87**	**0.01**		**0.06**	**0.06**		**0.06**	**0.06**	**0.00**	**480.06**	**480.06**	**0.02**	**0.00**	**480.53**

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	0.31	3.60	2.21	0.01	0.30	0.12	0.42	0.01	0.11	0.12	0.00	925.43	925.43	0.01	0.00	925.71
Worker	0.81	0.78	7.88	0.03	3.09	0.12	3.22	0.05	0.12	0.16	0.00	1,951.67	1,951.67	0.08	0.00	1,953.36
Total	**1.12**	**4.38**	**10.09**	**0.04**	**3.39**	**0.24**	**3.64**	**0.06**	**0.23**	**0.28**	**0.00**	**2,877.10**	**2,877.10**	**0.09**	**0.00**	**2,879.07**

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	0.28	1.58	2.87	0.01		0.06	0.06		0.06	0.06	0.00	480.06	480.06	0.02	0.00	480.53
Total	**0.28**	**1.58**	**2.87**	**0.01**		**0.06**	**0.06**		**0.06**	**0.06**	**0.00**	**480.06**	**480.06**	**0.02**	**0.00**	**480.53**

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	0.31	3.60	2.21	0.01	0.03	0.12	0.15	0.01	0.11	0.12	0.00	925.43	925.43	0.01	0.00	925.71
Worker	0.81	0.78	7.88	0.03	0.13	0.12	0.26	0.05	0.12	0.16	0.00	1,951.67	1,951.67	0.08	0.00	1,953.36
Total	**1.12**	**4.38**	**10.09**	**0.04**	**0.16**	**0.24**	**0.41**	**0.06**	**0.23**	**0.28**	**0.00**	**2,877.10**	**2,877.10**	**0.09**	**0.00**	**2,879.07**

3.2 Building - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66

Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.30	3.51	2.13	0.01	0.30	0.12	0.41	0.01	0.11	0.12	0.00	922.45	922.45	0.01	0.00	922.72
Worker	0.78	0.74	7.50	0.03	3.08	0.12	3.20	0.05	0.12	0.16	0.00	1,919.44	1,919.44	0.08	0.00	1,921.05
Total	**1.08**	**4.25**	**9.63**	**0.04**	**3.38**	**0.24**	**3.61**	**0.06**	**0.23**	**0.28**	**0.00**	**2,841.89**	**2,841.89**	**0.09**	**0.00**	**2,843.77**

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.30	3.51	2.13	0.01	0.03	0.12	0.14	0.01	0.11	0.12	0.00	922.45	922.45	0.01	0.00	922.72
Worker	0.78	0.74	7.50	0.03	0.13	0.12	0.26	0.05	0.12	0.16	0.00	1,919.44	1,919.44	0.08	0.00	1,921.05

Total	**1.08**	**4.25**	**9.63**	**0.04**	**0.16**	**0.24**	**0.40**	**0.06**	**0.23**	**0.28**	**0.00**	**2,841.89**	**2,841.89**	**0.09**	**0.00**	**2,843.77**

3.2 Building - 2026

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.30	3.51	2.13	0.01	0.30	0.12	0.41	0.01	0.11	0.12	0.00	922.45	922.45	0.01	0.00	922.72
Worker	0.78	0.74	7.50	0.03	3.08	0.12	3.20	0.05	0.12	0.16	0.00	1,919.44	1,919.44	0.08	0.00	1,921.05
Total	**1.08**	**4.25**	**9.63**	**0.04**	**3.38**	**0.24**	**3.61**	**0.06**	**0.23**	**0.28**	**0.00**	**2,841.89**	**2,841.89**	**0.09**	**0.00**	**2,843.77**

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.30	3.51	2.13	0.01	0.03	0.12	0.14	0.01	0.11	0.12	0.00	922.45	922.45	0.01	0.00	922.72
Worker	0.78	0.74	7.50	0.03	0.13	0.12	0.26	0.05	0.12	0.16	0.00	1,919.44	1,919.44	0.08	0.00	1,921.05
Total	**1.08**	**4.25**	**9.63**	**0.04**	**0.16**	**0.24**	**0.40**	**0.06**	**0.23**	**0.28**	**0.00**	**2,841.89**	**2,841.89**	**0.09**	**0.00**	**2,843.77**

3.2 Building - 2027

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.30	3.51	2.13	0.01	0.30	0.12	0.41	0.01	0.11	0.12	0.00	922.45	922.45	0.01	0.00	922.72
Worker	0.78	0.74	7.50	0.03	3.08	0.12	3.20	0.05	0.12	0.16	0.00	1,919.44	1,919.44	0.08	0.00	1,921.05
Total	**1.08**	**4.25**	**9.63**	**0.04**	**3.38**	**0.24**	**3.61**	**0.06**	**0.23**	**0.28**	**0.00**	**2,841.89**	**2,841.89**	**0.09**	**0.00**	**2,843.77**

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.30	3.51	2.13	0.01	0.03	0.12	0.14	0.01	0.11	0.12	0.00	922.45	922.45	0.01	0.00	922.72
Worker	0.78	0.74	7.50	0.03	0.13	0.12	0.26	0.05	0.12	0.16	0.00	1,919.44	1,919.44	0.08	0.00	1,921.05
Total	**1.08**	**4.25**	**9.63**	**0.04**	**0.16**	**0.24**	**0.40**	**0.06**	**0.23**	**0.28**	**0.00**	**2,841.89**	**2,841.89**	**0.09**	**0.00**	**2,843.77**

3.2 Building - 2028

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	0.26	1.44	2.85	0.01		0.05	0.05		0.05	0.05	0.00	476.40	476.40	0.02	0.00	476.83
Total	**0.26**	**1.44**	**2.85**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.83**

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	0.30	3.50	2.13	0.01	0.30	0.12	0.41	0.01	0.11	0.12	0.00	918.91	918.91	0.01	0.00	919.19
Worker	0.78	0.73	7.48	0.03	3.07	0.12	3.19	0.05	0.11	0.16	0.00	1,912.08	1,912.08	0.08	0.00	1,913.69
Total	**1.08**	**4.23**	**9.61**	**0.04**	**3.37**	**0.24**	**3.60**	**0.06**	**0.22**	**0.28**	**0.00**	**2,830.99**	**2,830.99**	**0.09**	**0.00**	**2,832.88**

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	0.26	1.44	2.85	0.01		0.05	0.05		0.05	0.05	0.00	476.40	476.40	0.02	0.00	476.83
Total	**0.26**	**1.44**	**2.85**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.83**

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	0.30	3.50	2.13	0.01	0.03	0.12	0.14	0.01	0.11	0.12	0.00	918.91	918.91	0.01	0.00	919.19
Worker	0.78	0.73	7.48	0.03	0.13	0.12	0.26	0.05	0.11	0.16	0.00	1,912.08	1,912.08	0.08	0.00	1,913.69
Total	**1.08**	**4.23**	**9.61**	**0.04**	**0.16**	**0.24**	**0.40**	**0.06**	**0.22**	**0.28**	**0.00**	**2,830.99**	**2,830.99**	**0.09**	**0.00**	**2,832.88**

3.2 Building - 2029

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.30	3.51	2.13	0.01	0.30	0.12	0.41	0.01	0.11	0.12	0.00	922.45	922.45	0.01	0.00	922.72
Worker	0.78	0.74	7.50	0.03	3.08	0.12	3.20	0.05	0.12	0.16	0.00	1,919.44	1,919.44	0.08	0.00	1,921.05
Total	**1.08**	**4.25**	**9.63**	**0.04**	**3.38**	**0.24**	**3.61**	**0.06**	**0.23**	**0.28**	**0.00**	**2,841.89**	**2,841.89**	**0.09**	**0.00**	**2,843.77**

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	0.26	1.44	2.86	0.01		0.05	0.05		0.05	0.05	0.00	478.23	478.23	0.02	0.00	478.66
Total	**0.26**	**1.44**	**2.86**	**0.01**		**0.05**	**0.05**		**0.05**	**0.05**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.66**

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	0.30	3.51	2.13	0.01	0.03	0.12	0.14	0.01	0.11	0.12	0.00	922.45	922.45	0.01	0.00	922.72

Worker	0.78	0.74	7.50	0.03	0.13	0.12	0.26	0.05	0.12	0.16	0.00	1,919.44	1,919.44	0.08	0.00	1,921.05
Total	**1.08**	**4.25**	**9.63**	**0.04**	**0.16**	**0.24**	**0.40**	**0.06**	**0.23**	**0.28**	**0.00**	**2,841.89**	**2,841.89**	**0.09**	**0.00**	**2,843.77**

3.2 Building - 2030

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	0.22	1.05	2.85	0.01		0.02	0.02		0.02	0.02	0.00	478.23	478.23	0.02	0.00	478.60
Total	**0.22**	**1.05**	**2.85**	**0.01**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.60**

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	0.28	3.30	1.93	0.01	0.30	0.11	0.41	0.01	0.10	0.11	0.00	924.45	924.45	0.01	0.00	924.70
Worker	0.67	0.59	6.29	0.03	3.08	0.13	3.21	0.05	0.12	0.16	0.00	1,831.29	1,831.29	0.07	0.00	1,832.68
Total	**0.95**	**3.89**	**8.22**	**0.04**	**3.38**	**0.24**	**3.62**	**0.06**	**0.22**	**0.27**	**0.00**	**2,755.74**	**2,755.74**	**0.08**	**0.00**	**2,757.38**

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	0.22	1.05	2.85	0.01		0.02	0.02		0.02	0.02	0.00	478.23	478.23	0.02	0.00	478.60
Total	**0.22**	**1.05**	**2.85**	**0.01**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.60**

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	0.28	3.30	1.93	0.01	0.03	0.11	0.14	0.01	0.10	0.11	0.00	924.45	924.45	0.01	0.00	924.70
Worker	0.67	0.59	6.29	0.03	0.13	0.13	0.26	0.05	0.12	0.16	0.00	1,831.29	1,831.29	0.07	0.00	1,832.68
Total	**0.95**	**3.89**	**8.22**	**0.04**	**0.16**	**0.24**	**0.40**	**0.06**	**0.22**	**0.27**	**0.00**	**2,755.74**	**2,755.74**	**0.08**	**0.00**	**2,757.38**

3.2 Building - 2031

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	0.22	1.05	2.85	0.01		0.02	0.02		0.02	0.02	0.00	478.23	478.23	0.02	0.00	478.60
Total	**0.22**	**1.05**	**2.85**	**0.01**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.60**

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	0.28	3.30	1.93	0.01	0.30	0.11	0.41	0.01	0.10	0.11	0.00	924.45	924.45	0.01	0.00	924.70
Worker	0.67	0.59	6.29	0.03	3.08	0.13	3.21	0.05	0.12	0.16	0.00	1,831.29	1,831.29	0.07	0.00	1,832.68
Total	**0.95**	**3.89**	**8.22**	**0.04**	**3.38**	**0.24**	**3.62**	**0.06**	**0.22**	**0.27**	**0.00**	**2,755.74**	**2,755.74**	**0.08**	**0.00**	**2,757.38**

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	0.22	1.05	2.85	0.01		0.02	0.02		0.02	0.02	0.00	478.23	478.23	0.02	0.00	478.60
Total	**0.22**	**1.05**	**2.85**	**0.01**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**478.23**	**478.23**	**0.02**	**0.00**	**478.60**

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	0.28	3.30	1.93	0.01	0.03	0.11	0.14	0.01	0.10	0.11	0.00	924.45	924.45	0.01	0.00	924.70
Worker	0.67	0.59	6.29	0.03	0.13	0.13	0.26	0.05	0.12	0.16	0.00	1,831.29	1,831.29	0.07	0.00	1,832.68
Total	**0.95**	**3.89**	**8.22**	**0.04**	**0.16**	**0.24**	**0.40**	**0.06**	**0.22**	**0.27**	**0.00**	**2,755.74**	**2,755.74**	**0.08**	**0.00**	**2,757.38**

3.2 Building - 2032

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	0.22	1.05	2.86	0.01		0.02	0.02		0.02	0.02	0.00	480.06	480.06	0.02	0.00	480.43
Total	**0.22**	**1.05**	**2.86**	**0.01**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**480.06**	**480.06**	**0.02**	**0.00**	**480.43**

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	0.28	3.32	1.94	0.01	0.30	0.11	0.41	0.01	0.10	0.11	0.00	927.99	927.99	0.01	0.00	928.24
Worker	0.68	0.59	6.32	0.03	3.09	0.13	3.22	0.05	0.12	0.16	0.00	1,838.31	1,838.31	0.07	0.00	1,839.70
Total	**0.96**	**3.91**	**8.26**	**0.04**	**3.39**	**0.24**	**3.63**	**0.06**	**0.22**	**0.27**	**0.00**	**2,766.30**	**2,766.30**	**0.08**	**0.00**	**2,767.94**

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	0.22	1.05	2.86	0.01		0.02	0.02		0.02	0.02	0.00	480.06	480.06	0.02	0.00	480.43
Total	**0.22**	**1.05**	**2.86**	**0.01**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**480.06**	**480.06**	**0.02**	**0.00**	**480.43**

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	0.28	3.32	1.94	0.01	0.03	0.11	0.14	0.01	0.10	0.11	0.00	927.99	927.99	0.01	0.00	928.24
Worker	0.68	0.59	6.32	0.03	0.13	0.13	0.26	0.05	0.12	0.16	0.00	1,838.31	1,838.31	0.07	0.00	1,839.70
Total	**0.96**	**3.91**	**8.26**	**0.04**	**0.16**	**0.24**	**0.40**	**0.06**	**0.22**	**0.27**	**0.00**	**2,766.30**	**2,766.30**	**0.08**	**0.00**	**2,767.94**

3.2 Building - 2033

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	0.22	1.05	2.84	0.01		0.02	0.02		0.02	0.02	0.00	476.40	476.40	0.02	0.00	476.76
Total	**0.22**	**1.05**	**2.84**	**0.01**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.76**

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	0.28	3.29	1.93	0.01	0.30	0.11	0.40	0.01	0.10	0.11	0.00	920.91	920.91	0.01	0.00	921.16
Worker	0.67	0.59	6.27	0.03	3.07	0.12	3.19	0.05	0.11	0.16	0.00	1,824.28	1,824.28	0.07	0.00	1,825.66
Total	**0.95**	**3.88**	**8.20**	**0.04**	**3.37**	**0.23**	**3.59**	**0.06**	**0.21**	**0.27**	**0.00**	**2,745.19**	**2,745.19**	**0.08**	**0.00**	**2,746.82**

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	0.22	1.05	2.84	0.01		0.02	0.02		0.02	0.02	0.00	476.40	476.40	0.02	0.00	476.76
Total	**0.22**	**1.05**	**2.84**	**0.01**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**476.40**	**476.40**	**0.02**	**0.00**	**476.76**

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	0.28	3.29	1.93	0.01	0.03	0.11	0.13	0.01	0.10	0.11	0.00	920.91	920.91	0.01	0.00	921.16
Worker	0.67	0.59	6.27	0.03	0.13	0.12	0.26	0.05	0.11	0.16	0.00	1,824.28	1,824.28	0.07	0.00	1,825.66
Total	**0.95**	**3.88**	**8.20**	**0.04**	**0.16**	**0.23**	**0.39**	**0.06**	**0.21**	**0.27**	**0.00**	**2,745.19**	**2,745.19**	**0.08**	**0.00**	**2,746.82**

3.2 Building - 2034

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	0.17	0.80	2.18	0.00		0.02	0.02		0.02	0.02	0.00	366.46	366.46	0.01	0.00	366.74
Total	**0.17**	**0.80**	**2.18**	**0.00**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**366.46**	**366.46**	**0.01**	**0.00**	**366.74**

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	0.21	2.53	1.48	0.01	0.23	0.08	0.31	0.01	0.08	0.08	0.00	708.39	708.39	0.01	0.00	708.58
Worker	0.52	0.45	4.82	0.02	2.36	0.10	2.46	0.04	0.09	0.12	0.00	1,403.29	1,403.29	0.05	0.00	1,404.35
Total	**0.73**	**2.98**	**6.30**	**0.03**	**2.59**	**0.18**	**2.77**	**0.05**	**0.17**	**0.20**	**0.00**	**2,111.68**	**2,111.68**	**0.06**	**0.00**	**2,112.93**

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	0.17	0.80	2.18	0.00		0.02	0.02		0.02	0.02	0.00	366.46	366.46	0.01	0.00	366.74

Total	**0.17**	**0.80**	**2.18**	**0.00**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**366.46**	**366.46**	**0.01**	**0.00**	**366.74**

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	0.21	2.53	1.48	0.01	0.02	0.08	0.10	0.01	0.08	0.08	0.00	708.39	708.39	0.01	0.00	708.58
Worker	0.52	0.45	4.82	0.02	0.10	0.10	0.20	0.04	0.09	0.12	0.00	1,403.29	1,403.29	0.05	0.00	1,404.35
Total	**0.73**	**2.98**	**6.30**	**0.03**	**0.12**	**0.18**	**0.30**	**0.05**	**0.17**	**0.20**	**0.00**	**2,111.68**	**2,111.68**	**0.06**	**0.00**	**2,112.93**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Integrate Below Market Rate Housing

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	18.29	38.55	182.31	0.31	31.74	1.86	33.60	0.51	1.80	2.31	0.00	26,919.99	26,919.99	1.15	0.00	26,944.06
Unmitigated	18.63	39.39	186.16	0.32	32.58	1.91	34.49	0.52	1.85	2.37	0.00	27,616.38	27,616.38	1.17	0.00	27,641.02
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
Apartments Low Rise	3,084.12	3,350.88	2840.76	11,425,652	11,130,413
City Park	37.84	37.84	37.84	93,326	90,915
Condo/Townhouse	2,471.25	2,685.00	2276.25	9,155,170	8,918,600
Congregate Care (Assisted Living)	548.00	440.00	488.00	1,939,146	1,889,039
Elementary School	732.72	0.00	0.00	1,567,591	1,527,084
Hotel	408.50	409.50	297.50	789,173	768,781
Junior High School	213.84	0.00	0.00	481,818	469,367
Office Park	325.47	46.74	21.66	701,428	683,304
Single Family Housing	8,641.71	9,102.24	7919.31	31,841,594	31,018,807
Strip Mall	2,725.68	2,585.46	1256.45	3,983,152	3,880,227
User Defined Educational	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	19,189.13	18,657.66	15,137.77	61,978,050	60,376,537

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
Apartments Low Rise	16.80	7.10	7.90	41.60	18.80	39.60
City Park	14.70	6.60	6.60	33.00	48.00	19.00
Condo/Townhouse	16.80	7.10	7.90	41.60	18.80	39.60
Congregate Care (Assisted Living)	16.80	7.10	7.90	41.60	18.80	39.60
Elementary School	14.70	6.60	6.60	65.00	30.00	5.00
Hotel	14.70	6.60	6.60	19.40	61.60	19.00
Junior High School	14.70	6.60	6.60	72.80	22.20	5.00
Office Park	14.70	6.60	6.60	33.00	48.00	19.00
Single Family Housing	16.80	7.10	7.90	41.60	18.80	39.60
Strip Mall	14.70	6.60	6.60	16.60	64.40	19.00
User Defined Educational	14.70	6.60	6.60	0.00	0.00	0.00
User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00

User Defined Industrial	14.70	6.60	6.60	0.00	0.00	0.00
User Defined Recreational	14.70	6.60	6.60	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	4,089.71	4,089.71	0.15	0.06	4,110.76
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	4,403.58	4,403.58	0.16	0.06	4,426.25
NaturalGas Mitigated	0.25	2.16	1.01	0.01		0.00	0.17		0.00	0.17	0.00	2,484.45	2,484.45	0.05	0.05	2,499.57
NaturalGas Unmitigated	0.32	2.73	1.28	0.02		0.00	0.22		0.00	0.22	0.00	3,144.76	3,144.76	0.06	0.06	3,163.90
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					
Apartments Low Rise	7.8208e+006	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03	0.00	417.35	417.35	0.01	0.01	419.89
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	8.65382e+006	0.05	0.40	0.17	0.00		0.00	0.03		0.00	0.03	0.00	461.80	461.80	0.01	0.01	464.61

Congregate Care (Assisted Living)	2.10798e+006	0.01	0.10	0.04	0.00		0.00	0.01		0.00	0.01	0.00	112.49	112.49	0.00	0.00	113.17
Elementary School	294418	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	15.71	15.71	0.00	0.00	15.81
Hotel	4.41771e+006	0.02	0.22	0.18	0.00		0.00	0.02		0.00	0.02	0.00	235.75	235.75	0.00	0.00	237.18
Junior High School	96212.5	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	5.13	5.13	0.00	0.00	5.17
Office Park	959880	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	51.22	51.22	0.00	0.00	51.53
Single Family Housing	3.44389e+007	0.19	1.59	0.68	0.01		0.00	0.13		0.00	0.13	0.00	1,837.79	1,837.79	0.04	0.03	1,848.98
Strip Mall	140835	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	7.52	7.52	0.00	0.00	7.56
User Defined Educational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Recreational	0	0.00	0.00	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		**0.32**	**2.74**	**1.28**	**0.01**		**0.00**	**0.22**		**0.00**	**0.22**	**0.00**	**3,144.76**	**3,144.76**	**0.06**	**0.05**	**3,163.90**

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					
Apartments Low Rise	6.18994e+006	0.03	0.29	0.12	0.00		0.00	0.02		0.00	0.02	0.00	330.32	330.32	0.01	0.01	332.33
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Condo/Townhouse	6.80734e+006	0.04	0.31	0.13	0.00		0.00	0.03		0.00	0.03	0.00	363.27	363.27	0.01	0.01	365.48
Congregate Care (Assisted Living)	1.68035e+006	0.01	0.08	0.03	0.00		0.00	0.01		0.00	0.01	0.00	89.67	89.67	0.00	0.00	90.22
Elementary School	226512	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	12.09	12.09	0.00	0.00	12.16
Hotel	3.51475e+006	0.02	0.17	0.14	0.00		0.00	0.01		0.00	0.01	0.00	187.56	187.56	0.00	0.00	188.70
Junior High School	74021.5	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	3.95	3.95	0.00	0.00	3.97
Office Park	767505	0.00	0.04	0.03	0.00		0.00	0.00		0.00	0.00	0.00	40.96	40.96	0.00	0.00	41.21
Single Family Housing	2.7174e+007	0.15	1.25	0.53	0.01		0.00	0.10		0.00	0.10	0.00	1,450.11	1,450.11	0.03	0.03	1,458.94
Strip Mall	122385	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	6.53	6.53	0.00	0.00	6.57
User Defined Educational	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

User Defined Recreational	0	0.00	0.00	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		**0.25**	**2.16**	**1.00**	**0.01**		**0.00**	**0.17**		**0.00**	**0.17**	**0.00**	**2,484.46**	**2,484.46**	**0.05**	**0.05**	**2,499.58**

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			
Apartments Low Rise	1.64392e+006					582.21	0.02	0.01	585.21
City Park	0					0.00	0.00	0.00	0.00
Condo/Townhouse	1.55099e+006					549.30	0.02	0.01	552.13
Congregate Care (Assisted Living)	649600					230.06	0.01	0.00	231.25
Elementary School	283021					100.23	0.00	0.00	100.75
Hotel	1.05923e+006					375.14	0.01	0.01	377.07
Junior High School	92488.1					32.76	0.00	0.00	32.92
Office Park	501600					177.65	0.01	0.00	178.56
Single Family Housing	5.78955e+006					2,050.43	0.08	0.03	2,060.98
Strip Mall	863460					305.80	0.01	0.00	307.38
User Defined Educational	0					0.00	0.00	0.00	0.00
User Defined Industrial	0					0.00	0.00	0.00	0.00
User Defined Recreational	0					0.00	0.00	0.00	0.00
Total						**4,403.58**	**0.16**	**0.06**	**4,426.25**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	1.53705e+006					544.36	0.02	0.01	547.16

City Park	0					0.00	0.00	0.00	0.00
Condo/Townhouse	1.45999e+006					517.07	0.02	0.01	519.73
Congregate Care (Assisted Living)	627074					222.08	0.01	0.00	223.23
Elementary School	254006					89.96	0.00	0.00	90.42
Hotel	934798					331.07	0.01	0.00	332.77
Junior High School	83006.5					29.40	0.00	0.00	29.55
Office Park	444272					157.34	0.01	0.00	158.15
Single Family Housing	5.42527e+006					1,921.41	0.07	0.03	1,931.30
Strip Mall	782157					277.01	0.01	0.00	278.43
User Defined Educational	0					0.00	0.00	0.00	0.00
User Defined Industrial	0					0.00	0.00	0.00	0.00
User Defined Recreational	0					0.00	0.00	0.00	0.00
Total						**4,089.70**	**0.15**	**0.05**	**4,110.74**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Non-Residential Interior

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	17.02	0.17	14.64	0.00		0.00	0.27		0.00	0.27	0.00	2,741.32	2,741.32	0.08	0.05	2,758.34
Unmitigated	17.02	0.17	14.64	0.00		0.00	0.27		0.00	0.27	0.00	2,741.32	2,741.32	0.08	0.05	2,758.34

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	3.43					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	12.88					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.27	0.00	0.01	0.00		0.00	0.19		0.00	0.19	0.00	2,717.45	2,717.45	0.05	0.05	2,733.99
Landscaping	0.44	0.17	14.62	0.00		0.00	0.08		0.00	0.08	0.00	23.87	23.87	0.02	0.00	24.35
Total	**17.02**	**0.17**	**14.63**	**0.00**		**0.00**	**0.27**		**0.00**	**0.27**	**0.00**	**2,741.32**	**2,741.32**	**0.07**	**0.05**	**2,758.34**

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	3.43					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	12.88					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.27	0.00	0.01	0.00		0.00	0.19		0.00	0.19	0.00	2,717.45	2,717.45	0.05	0.05	2,733.99
Landscaping	0.44	0.17	14.62	0.00		0.00	0.08		0.00	0.08	0.00	23.87	23.87	0.02	0.00	24.35
Total	**17.02**	**0.17**	**14.63**	**0.00**		**0.00**	**0.27**		**0.00**	**0.27**	**0.00**	**2,741.32**	**2,741.32**	**0.07**	**0.05**	**2,758.34**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					842.35	3.43	0.10	944.32
Unmitigated					1,111.31	4.30	0.12	1,239.08
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			
Apartments Low Rise	30.4921 / 19.2233					216.60	0.94	0.03	244.41
City Park	0 / 28.3573					111.58	0.00	0.00	112.15
Condo/Townhouse	24.4328 / 15.4033					173.55	0.75	0.02	195.84
Congregate Care (Assisted Living)	13.0308 / 8.21507					92.56	0.40	0.01	104.45
Elementary School	1.37697 / 3.54078					20.30	0.04	0.00	21.61
Hotel	1.26834 / 0.140927					6.42	0.04	0.00	7.56
Junior High School	0.32 / 0.822856					4.72	0.01	0.00	5.02
Office Park	5.06541 / 3.10461					35.63	0.16	0.00	40.25
Single Family Housing	58.8341 / 37.0911					417.92	1.81	0.05	471.59
Strip Mall	4.55546 / 2.79206					32.04	0.14	0.00	36.20
User Defined Educational	0 / 0					0.00	0.00	0.00	0.00
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
User Defined Recreational	0 / 0					0.00	0.00	0.00	0.00
Total						**1,111.32**	**4.29**	**0.11**	**1,239.08**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	24.3937 / 13.4563					165.71	0.75	0.02	187.93
City Park	0 / 19.8501					78.10	0.00	0.00	78.51
Condo/Townhouse	19.5462 / 10.7823					132.78	0.60	0.02	150.58
Congregate Care (Assisted Living)	10.4246 / 5.75055					70.82	0.32	0.01	80.31
Elementary School	1.10157 / 2.47854					14.84	0.03	0.00	15.89
Hotel	1.01467 / 0.0986485					5.08	0.03	0.00	5.99
Junior High School	0.256 / 0.575999					3.45	0.01	0.00	3.69
Office Park	4.05233 / 2.17323					27.28	0.12	0.00	30.97
Single Family Housing	47.0673 / 25.9637					319.74	1.45	0.04	362.60
Strip Mall	3.64437 / 1.95444					24.54	0.11	0.00	27.85
User Defined Educational	0 / 0					0.00	0.00	0.00	0.00
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
User Defined Recreational	0 / 0					0.00	0.00	0.00	0.00
Total						**842.34**	**3.42**	**0.09**	**944.32**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					304.91	18.02	0.00	683.31
Unmitigated					381.13	22.52	0.00	854.14
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			
Apartments Low Rise	215.28					43.70	2.58	0.00	97.93
City Park	2.05					0.42	0.02	0.00	0.93
Condo/Townhouse	172.5					35.02	2.07	0.00	78.47
Congregate Care (Assisted Living)	182.5					37.05	2.19	0.00	83.02
Elementary School	103.66					21.04	1.24	0.00	47.16
Hotel	27.38					5.56	0.33	0.00	12.46
Junior High School	24.09					4.89	0.29	0.00	10.96
Office Park	26.51					5.38	0.32	0.00	12.06
Single Family Housing	1059.03					214.97	12.70	0.00	481.77
Strip Mall	64.58					13.11	0.77	0.00	29.38
User Defined Educational	0					0.00	0.00	0.00	0.00
User Defined Industrial	0					0.00	0.00	0.00	0.00
User Defined Recreational	0					0.00	0.00	0.00	0.00
Total						**381.14**	**22.51**	**0.00**	**854.14**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	172.224					34.96	2.07	0.00	78.35
City Park	1.64					0.33	0.02	0.00	0.75
Condo/Townhouse	138					28.01	1.66	0.00	62.78
Congregate Care (Assisted Living)	146					29.64	1.75	0.00	66.42
Elementary School	82.928					16.83	0.99	0.00	37.73
Hotel	21.904					4.45	0.26	0.00	9.96
Junior High School	19.272					3.91	0.23	0.00	8.77
Office Park	21.208					4.31	0.25	0.00	9.65
Single Family Housing	847.224					171.98	10.16	0.00	385.42
Strip Mall	51.664					10.49	0.62	0.00	23.50
User Defined Educational	0					0.00	0.00	0.00	0.00
User Defined Industrial	0					0.00	0.00	0.00	0.00
User Defined Recreational	0					0.00	0.00	0.00	0.00
Total						**304.91**	**18.01**	**0.00**	**683.33**

9.0 Vegetation

CALROADS OUTPUT FILES

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**
** CALINE4 Combined Output File Produced by:
** CALRoads View Ver. 5.2.1
** Lakes Environmental Software Inc.
** Date: 8/23/2012 5:07:37 PM
** File: C:\CalRoads\Lilac\Lilac.ou1
**
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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: C:\CalRoads\Lilac\Lilac.clv
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	0.5	M/S	Z0=	10.	CM	ALT=	206. (M)
BRG=	WORST CASE		VD=	0.0	CM/S		
CLAS=	7	(G)	VS=	0.0	CM/S		
MIXH=	1000.	M	AMB=	3.5	PPM		
SIGTH=	5.	DEGREES	TEMP=	4.4	DEGREE (C)		

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: C:\CalRoads\Lilac\Lilac.clv
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Link_1	*****	*****	*****	*****	AG	1257	0.3	0.0	9.7
B. Link_2	*****	*****	*****	*****	AG	1257	0.3	0.0	9.7
C. Link_3	*****	*****	*****	*****	AG	1257	0.3	0.0	9.7
D. Link_4	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
E. Link_5	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
F. Link_6	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
G. Link_7	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
H. Link_8	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
I. Link_9	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
J. Link_10	*****	*****	*****	*****	AG	1084	0.3	0.0	9.6
K. Link_11	*****	*****	*****	*****	AG	1084	0.3	0.0	9.6
L. Link_12	*****	*****	*****	*****	AG	1084	0.3	0.0	9.6
M. Link_13	*****	*****	*****	*****	AG	1084	0.3	0.0	9.6

N. Link_14	* *****	*****	*****	***** *	AG	1084	0.3	0.0	9.6
O. Link_15	* *****	*****	*****	***** *	AG	938	0.3	0.0	9.6
P. Link_16	* *****	*****	*****	***** *	AG	938	0.3	0.0	9.6
Q. Link_17	* *****	*****	*****	***** *	AG	938	0.3	0.0	9.6
R. Link_18	* *****	*****	*****	***** *	AG	938	0.3	0.0	9.6
S. Link_19	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
T. Link_20	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
U. Link_21	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
V. Link_22	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
W. Link_23	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
X. Link_24	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
Y. Link_25	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
Z. Link_26	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
a. Link_27	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
b. Link_28	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
c. Link_29	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
d. Link_30	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
e. Link_31	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
f. Link_32	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
g. Link_33	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
h. Link_34	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
i. Link_35	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
j. Link_36	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
k. Link_37	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
l. Link_38	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
m. Link_39	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
n. Link_40	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
o. Link_41	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
p. Link_42	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
q. Link_43	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
r. Link_46	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
s. Link_47	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
t. Link_48	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
u. Link_44	* *****	*****	*****	***** *	AG	643	0.3	0.0	9.6
v. Link_45	* *****	*****	*****	***** *	AG	643	0.3	0.0	9.6
w. Link_49	* *****	*****	*****	***** *	AG	643	0.3	0.0	9.6
x. Link_50	* *****	*****	*****	***** *	AG	643	0.3	0.0	9.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: C:\CalRoads\Lilac\Lilac.clv
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. RCP_1	477718	3679728	1.8
2. RCP_2	477718	3679745	1.8
3. RCP_3	477718	3679763	1.8

4.	RCP_4	*	477718	3679780	1.8
5.	RCP_5	*	477718	3679797	1.8
6.	RCP_6	*	477718	3679815	1.8
7.	RCP_7	*	477718	3679832	1.8
8.	RCP_8	*	477718	3679849	1.8
9.	RCP_9	*	477718	3679867	1.8
10.	RCP_10	*	477718	3679884	1.8
11.	RCP_11	*	477718	3679902	1.8
12.	RCP_12	*	477718	3679919	1.8
13.	RCP_13	*	477718	3679936	1.8
14.	RCP_14	*	477718	3679954	1.8
15.	RCP_15	*	477718	3679971	1.8
16.	RCP_16	*	477718	3679989	1.8
17.	RCP_17	*	477718	3680006	1.8
18.	RCP_18	*	477718	3680023	1.8
19.	RCP_19	*	477718	3680041	1.8
20.	RCP_20	*	477718	3680058	1.8
21.	RCP_21	*	477718	3680075	1.8
22.	RCP_22	*	477734	3679728	1.8
23.	RCP_23	*	477734	3679745	1.8
24.	RCP_24	*	477734	3679763	1.8
25.	RCP_25	*	477734	3679780	1.8
26.	RCP_26	*	477734	3679797	1.8
27.	RCP_27	*	477734	3679815	1.8
28.	RCP_28	*	477734	3679832	1.8
29.	RCP_29	*	477734	3679849	1.8
30.	RCP_30	*	477734	3679867	1.8
31.	RCP_31	*	477734	3679884	1.8
32.	RCP_32	*	477734	3679902	1.8
33.	RCP_33	*	477734	3679919	1.8
34.	RCP_34	*	477734	3679936	1.8
35.	RCP_35	*	477734	3679954	1.8
36.	RCP_36	*	477734	3679971	1.8
37.	RCP_37	*	477734	3679989	1.8
38.	RCP_38	*	477734	3680006	1.8
39.	RCP_39	*	477734	3680023	1.8
40.	RCP_40	*	477734	3680041	1.8
41.	RCP_41	*	477734	3680058	1.8
42.	RCP_42	*	477734	3680075	1.8
43.	RCP_43	*	477749	3679728	1.8
44.	RCP_44	*	477749	3679745	1.8
45.	RCP_45	*	477749	3679763	1.8
46.	RCP_46	*	477749	3679780	1.8
47.	RCP_47	*	477749	3679797	1.8
48.	RCP_48	*	477749	3679815	1.8
49.	RCP_49	*	477749	3679832	1.8
50.	RCP_50	*	477749	3679849	1.8
51.	RCP_51	*	477749	3679867	1.8
52.	RCP_52	*	477749	3679884	1.8
53.	RCP_53	*	477749	3679902	1.8
54.	RCP_54	*	477749	3679919	1.8
55.	RCP_55	*	477749	3679936	1.8
56.	RCP_56	*	477749	3679954	1.8
57.	RCP_57	*	477749	3679971	1.8
58.	RCP_58	*	477749	3679989	1.8
59.	RCP_59	*	477749	3680006	1.8
60.	RCP_60	*	477749	3680023	1.8
61.	RCP_61	*	477749	3680041	1.8
62.	RCP_62	*	477749	3680058	1.8
63.	RCP_63	*	477749	3680075	1.8
64.	RCP_64	*	477765	3679728	1.8
65.	RCP_65	*	477765	3679745	1.8
66.	RCP_66	*	477765	3679763	1.8

67.	RCP_67	*	477765	3679780	1.8
68.	RCP_68	*	477765	3679797	1.8
69.	RCP_69	*	477765	3679815	1.8
70.	RCP_70	*	477765	3679832	1.8
71.	RCP_71	*	477765	3679849	1.8
72.	RCP_72	*	477765	3679867	1.8
73.	RCP_73	*	477765	3679884	1.8
74.	RCP_74	*	477765	3679902	1.8
75.	RCP_75	*	477765	3679919	1.8
76.	RCP_76	*	477765	3679936	1.8
77.	RCP_77	*	477765	3679954	1.8
78.	RCP_78	*	477765	3679971	1.8
79.	RCP_79	*	477765	3679989	1.8
80.	RCP_80	*	477765	3680006	1.8
81.	RCP_81	*	477765	3680023	1.8
82.	RCP_82	*	477765	3680041	1.8
83.	RCP_83	*	477765	3680058	1.8
84.	RCP_84	*	477765	3680075	1.8
85.	RCP_85	*	477781	3679728	1.8
86.	RCP_86	*	477781	3679745	1.8
87.	RCP_87	*	477781	3679763	1.8
88.	RCP_88	*	477781	3679780	1.8
89.	RCP_89	*	477781	3679797	1.8
90.	RCP_90	*	477781	3679815	1.8
91.	RCP_91	*	477781	3679832	1.8
92.	RCP_92	*	477781	3679849	1.8
93.	RCP_93	*	477781	3679867	1.8
94.	RCP_94	*	477781	3679884	1.8
95.	RCP_95	*	477781	3679902	1.8
96.	RCP_96	*	477781	3679919	1.8
97.	RCP_97	*	477781	3679936	1.8
98.	RCP_98	*	477781	3679954	1.8
99.	RCP_99	*	477781	3679971	1.8
100.	RCP_100	*	477781	3679989	1.8
101.	RCP_101	*	477781	3680006	1.8
102.	RCP_102	*	477781	3680023	1.8
103.	RCP_103	*	477781	3680041	1.8
104.	RCP_104	*	477781	3680058	1.8
105.	RCP_105	*	477781	3680075	1.8
106.	RCP_106	*	477797	3679728	1.8
107.	RCP_107	*	477797	3679745	1.8
108.	RCP_108	*	477797	3679763	1.8
109.	RCP_109	*	477797	3679780	1.8
110.	RCP_110	*	477797	3679797	1.8
111.	RCP_111	*	477797	3679815	1.8
112.	RCP_112	*	477797	3679832	1.8
113.	RCP_113	*	477797	3679849	1.8
114.	RCP_114	*	477797	3679867	1.8
115.	RCP_115	*	477797	3679884	1.8

RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

RECEPTOR	COORDINATES (M) X	Y	Z
116. RCP_116	477797	3679902	1.8
117. RCP_117	477797	3679919	1.8
118. RCP_118	477797	3679936	1.8
119. RCP_119	477797	3679954	1.8
120. RCP_120	477797	3679971	1.8
121. RCP_121	477797	3679989	1.8
122. RCP_122	477797	3680006	1.8
123. RCP_123	477797	3680023	1.8
124. RCP_124	477797	3680041	1.8
125. RCP_125	477797	3680058	1.8
126. RCP_126	477797	3680075	1.8
127. RCP_127	477813	3679728	1.8
128. RCP_128	477813	3679745	1.8
129. RCP_129	477813	3679763	1.8
130. RCP_130	477813	3679780	1.8
131. RCP_131	477813	3679797	1.8
132. RCP_132	477813	3679815	1.8
133. RCP_133	477813	3679832	1.8
134. RCP_134	477813	3679849	1.8
135. RCP_135	477813	3679867	1.8
136. RCP_136	477813	3679884	1.8
137. RCP_137	477813	3679902	1.8
138. RCP_138	477813	3679919	1.8
139. RCP_139	477813	3679936	1.8
140. RCP_140	477813	3679954	1.8
141. RCP_141	477813	3679971	1.8
142. RCP_142	477813	3679989	1.8
143. RCP_143	477813	3680006	1.8
144. RCP_144	477813	3680023	1.8
145. RCP_145	477813	3680041	1.8
146. RCP_146	477813	3680058	1.8
147. RCP_147	477813	3680075	1.8
148. RCP_148	477828	3679728	1.8
149. RCP_149	477828	3679745	1.8
150. RCP_150	477828	3679763	1.8
151. RCP_151	477828	3679780	1.8
152. RCP_152	477828	3679797	1.8
153. RCP_153	477828	3679815	1.8
154. RCP_154	477828	3679832	1.8
155. RCP_155	477828	3679849	1.8
156. RCP_156	477828	3679867	1.8
157. RCP_157	477828	3679884	1.8
158. RCP_158	477828	3679902	1.8
159. RCP_159	477828	3679919	1.8
160. RCP_160	477828	3679936	1.8
161. RCP_161	477828	3679954	1.8
162. RCP_162	477828	3679971	1.8
163. RCP_163	477828	3679989	1.8
164. RCP_164	477828	3680006	1.8
165. RCP_165	477828	3680023	1.8
166. RCP_166	477828	3680041	1.8
167. RCP_167	477828	3680058	1.8
168. RCP_168	477828	3680075	1.8
169. RCP_169	477844	3679728	1.8
170. RCP_170	477844	3679745	1.8
171. RCP_171	477844	3679763	1.8

172.	RCP_172	*	477844	3679780	1.8
173.	RCP_173	*	477844	3679797	1.8
174.	RCP_174	*	477844	3679815	1.8
175.	RCP_175	*	477844	3679832	1.8
176.	RCP_176	*	477844	3679849	1.8
177.	RCP_177	*	477844	3679867	1.8
178.	RCP_178	*	477844	3679884	1.8
179.	RCP_179	*	477844	3679902	1.8
180.	RCP_180	*	477844	3679919	1.8
181.	RCP_181	*	477844	3679936	1.8
182.	RCP_182	*	477844	3679954	1.8
183.	RCP_183	*	477844	3679971	1.8
184.	RCP_184	*	477844	3679989	1.8
185.	RCP_185	*	477844	3680006	1.8
186.	RCP_186	*	477844	3680023	1.8
187.	RCP_187	*	477844	3680041	1.8
188.	RCP_188	*	477844	3680058	1.8
189.	RCP_189	*	477844	3680075	1.8
190.	RCP_190	*	477860	3679728	1.8
191.	RCP_191	*	477860	3679745	1.8
192.	RCP_192	*	477860	3679763	1.8
193.	RCP_193	*	477860	3679780	1.8
194.	RCP_194	*	477860	3679797	1.8
195.	RCP_195	*	477860	3679815	1.8
196.	RCP_196	*	477860	3679832	1.8
197.	RCP_197	*	477860	3679849	1.8
198.	RCP_198	*	477860	3679867	1.8
199.	RCP_199	*	477860	3679884	1.8
200.	RCP_200	*	477860	3679902	1.8
201.	RCP_201	*	477860	3679919	1.8
202.	RCP_202	*	477860	3679936	1.8
203.	RCP_203	*	477860	3679954	1.8
204.	RCP_204	*	477860	3679971	1.8
205.	RCP_205	*	477860	3679989	1.8
206.	RCP_206	*	477860	3680006	1.8
207.	RCP_207	*	477860	3680023	1.8
208.	RCP_208	*	477860	3680041	1.8
209.	RCP_209	*	477860	3680058	1.8
210.	RCP_210	*	477860	3680075	1.8
211.	RCP_211	*	477876	3679728	1.8
212.	RCP_212	*	477876	3679745	1.8
213.	RCP_213	*	477876	3679763	1.8
214.	RCP_214	*	477876	3679780	1.8
215.	RCP_215	*	477876	3679797	1.8
216.	RCP_216	*	477876	3679815	1.8
217.	RCP_217	*	477876	3679832	1.8
218.	RCP_218	*	477876	3679849	1.8
219.	RCP_219	*	477876	3679867	1.8
220.	RCP_220	*	477876	3679884	1.8
221.	RCP_221	*	477876	3679902	1.8
222.	RCP_222	*	477876	3679919	1.8
223.	RCP_223	*	477876	3679936	1.8
224.	RCP_224	*	477876	3679954	1.8
225.	RCP_225	*	477876	3679971	1.8
226.	RCP_226	*	477876	3679989	1.8
227.	RCP_227	*	477876	3680006	1.8
228.	RCP_228	*	477876	3680023	1.8
229.	RCP_229	*	477876	3680041	1.8
230.	RCP_230	*	477876	3680058	1.8
231.	RCP_231	*	477876	3680075	1.8
232.	RCP_232	*	477892	3679728	1.8
233.	RCP_233	*	477892	3679745	1.8
234.	RCP_234	*	477892	3679763	1.8

235.	RCP_235	*	477892	3679780	1.8
236.	RCP_236	*	477892	3679797	1.8
237.	RCP_237	*	477892	3679815	1.8
238.	RCP_238	*	477892	3679832	1.8
239.	RCP_239	*	477892	3679849	1.8
240.	RCP_240	*	477892	3679867	1.8
241.	RCP_241	*	477892	3679884	1.8
242.	RCP_242	*	477892	3679902	1.8
243.	RCP_243	*	477892	3679919	1.8
244.	RCP_244	*	477892	3679936	1.8
245.	RCP_245	*	477892	3679954	1.8
246.	RCP_246	*	477892	3679971	1.8
247.	RCP_247	*	477892	3679989	1.8
248.	RCP_248	*	477892	3680006	1.8
249.	RCP_249	*	477892	3680023	1.8
250.	RCP_250	*	477892	3680041	1.8
251.	RCP_251	*	477892	3680058	1.8
252.	RCP_252	*	477892	3680075	1.8
253.	RCP_253	*	477907	3679728	1.8
254.	RCP_254	*	477907	3679745	1.8
255.	RCP_255	*	477907	3679763	1.8
256.	RCP_256	*	477907	3679780	1.8
257.	RCP_257	*	477907	3679797	1.8
258.	RCP_258	*	477907	3679815	1.8
259.	RCP_259	*	477907	3679832	1.8
260.	RCP_260	*	477907	3679849	1.8
261.	RCP_261	*	477907	3679867	1.8
262.	RCP_262	*	477907	3679884	1.8
263.	RCP_263	*	477907	3679902	1.8
264.	RCP_264	*	477907	3679919	1.8
265.	RCP_265	*	477907	3679936	1.8
266.	RCP_266	*	477907	3679954	1.8
267.	RCP_267	*	477907	3679971	1.8
268.	RCP_268	*	477907	3679989	1.8
269.	RCP_269	*	477907	3680006	1.8
270.	RCP_270	*	477907	3680023	1.8
271.	RCP_271	*	477907	3680041	1.8
272.	RCP_272	*	477907	3680058	1.8
273.	RCP_273	*	477907	3680075	1.8
274.	RCP_274	*	477923	3679728	1.8
275.	RCP_275	*	477923	3679745	1.8
276.	RCP_276	*	477923	3679763	1.8
277.	RCP_277	*	477923	3679780	1.8
278.	RCP_278	*	477923	3679797	1.8
279.	RCP_279	*	477923	3679815	1.8
280.	RCP_280	*	477923	3679832	1.8
281.	RCP_281	*	477923	3679849	1.8
282.	RCP_282	*	477923	3679867	1.8
283.	RCP_283	*	477923	3679884	1.8
284.	RCP_284	*	477923	3679902	1.8
285.	RCP_285	*	477923	3679919	1.8
286.	RCP_286	*	477923	3679936	1.8
287.	RCP_287	*	477923	3679954	1.8
288.	RCP_288	*	477923	3679971	1.8
289.	RCP_289	*	477923	3679989	1.8
290.	RCP_290	*	477923	3680006	1.8
291.	RCP_291	*	477923	3680023	1.8
292.	RCP_292	*	477923	3680041	1.8
293.	RCP_293	*	477923	3680058	1.8
294.	RCP_294	*	477923	3680075	1.8
295.	RCP_295	*	477939	3679728	1.8
296.	RCP_296	*	477939	3679745	1.8
297.	RCP_297	*	477939	3679763	1.8

298.	RCP_298	*	477939	3679780	1.8
299.	RCP_299	*	477939	3679797	1.8
300.	RCP_300	*	477939	3679815	1.8
301.	RCP_301	*	477939	3679832	1.8
302.	RCP_302	*	477939	3679849	1.8
303.	RCP_303	*	477939	3679867	1.8
304.	RCP_304	*	477939	3679884	1.8
305.	RCP_305	*	477939	3679902	1.8
306.	RCP_306	*	477939	3679919	1.8
307.	RCP_307	*	477939	3679936	1.8
308.	RCP_308	*	477939	3679954	1.8
309.	RCP_309	*	477939	3679971	1.8
310.	RCP_310	*	477939	3679989	1.8
311.	RCP_311	*	477939	3680006	1.8
312.	RCP_312	*	477939	3680023	1.8
313.	RCP_313	*	477939	3680041	1.8
314.	RCP_314	*	477939	3680058	1.8
315.	RCP_315	*	477939	3680075	1.8
316.	RCP_316	*	477955	3679728	1.8
317.	RCP_317	*	477955	3679745	1.8
318.	RCP_318	*	477955	3679763	1.8
319.	RCP_319	*	477955	3679780	1.8
320.	RCP_320	*	477955	3679797	1.8
321.	RCP_321	*	477955	3679815	1.8
322.	RCP_322	*	477955	3679832	1.8
323.	RCP_323	*	477955	3679849	1.8
324.	RCP_324	*	477955	3679867	1.8
325.	RCP_325	*	477955	3679884	1.8
326.	RCP_326	*	477955	3679902	1.8
327.	RCP_327	*	477955	3679919	1.8
328.	RCP_328	*	477955	3679936	1.8
329.	RCP_329	*	477955	3679954	1.8
330.	RCP_330	*	477955	3679971	1.8
331.	RCP_331	*	477955	3679989	1.8
332.	RCP_332	*	477955	3680006	1.8
333.	RCP_333	*	477955	3680023	1.8
334.	RCP_334	*	477955	3680041	1.8
335.	RCP_335	*	477955	3680058	1.8
336.	RCP_336	*	477955	3680075	1.8
337.	RCP_337	*	477971	3679728	1.8
338.	RCP_338	*	477971	3679745	1.8
339.	RCP_339	*	477971	3679763	1.8
340.	RCP_340	*	477971	3679780	1.8
341.	RCP_341	*	477971	3679797	1.8
342.	RCP_342	*	477971	3679815	1.8
343.	RCP_343	*	477971	3679832	1.8
344.	RCP_344	*	477971	3679849	1.8
345.	RCP_345	*	477971	3679867	1.8
346.	RCP_346	*	477971	3679884	1.8
347.	RCP_347	*	477971	3679902	1.8
348.	RCP_348	*	477971	3679919	1.8
349.	RCP_349	*	477971	3679936	1.8
350.	RCP_350	*	477971	3679954	1.8
351.	RCP_351	*	477971	3679971	1.8
352.	RCP_352	*	477971	3679989	1.8
353.	RCP_353	*	477971	3680006	1.8
354.	RCP_354	*	477971	3680023	1.8
355.	RCP_355	*	477971	3680041	1.8
356.	RCP_356	*	477971	3680058	1.8
357.	RCP_357	*	477971	3680075	1.8
358.	RCP_358	*	477986	3679728	1.8
359.	RCP_359	*	477986	3679745	1.8
360.	RCP_360	*	477986	3679763	1.8

361.	RCP_361	*	477986	3679780	1.8
362.	RCP_362	*	477986	3679797	1.8
363.	RCP_363	*	477986	3679815	1.8
364.	RCP_364	*	477986	3679832	1.8
365.	RCP_365	*	477986	3679849	1.8
366.	RCP_366	*	477986	3679867	1.8
367.	RCP_367	*	477986	3679884	1.8
368.	RCP_368	*	477986	3679902	1.8
369.	RCP_369	*	477986	3679919	1.8
370.	RCP_370	*	477986	3679936	1.8
371.	RCP_371	*	477986	3679954	1.8
372.	RCP_372	*	477986	3679971	1.8
373.	RCP_373	*	477986	3679989	1.8
374.	RCP_374	*	477986	3680006	1.8
375.	RCP_375	*	477986	3680023	1.8
376.	RCP_376	*	477986	3680041	1.8
377.	RCP_377	*	477986	3680058	1.8
378.	RCP_378	*	477986	3680075	1.8
379.	RCP_379	*	478002	3679728	1.8
380.	RCP_380	*	478002	3679745	1.8
381.	RCP_381	*	478002	3679763	1.8
382.	RCP_382	*	478002	3679780	1.8
383.	RCP_383	*	478002	3679797	1.8
384.	RCP_384	*	478002	3679815	1.8
385.	RCP_385	*	478002	3679832	1.8
386.	RCP_386	*	478002	3679849	1.8
387.	RCP_387	*	478002	3679867	1.8
388.	RCP_388	*	478002	3679884	1.8
389.	RCP_389	*	478002	3679902	1.8
390.	RCP_390	*	478002	3679919	1.8
391.	RCP_391	*	478002	3679936	1.8
392.	RCP_392	*	478002	3679954	1.8
393.	RCP_393	*	478002	3679971	1.8
394.	RCP_394	*	478002	3679989	1.8
395.	RCP_395	*	478002	3680006	1.8
396.	RCP_396	*	478002	3680023	1.8
397.	RCP_397	*	478002	3680041	1.8
398.	RCP_398	*	478002	3680058	1.8
399.	RCP_399	*	478002	3680075	1.8
400.	RCP_400	*	478018	3679728	1.8
401.	RCP_401	*	478018	3679745	1.8
402.	RCP_402	*	478018	3679763	1.8
403.	RCP_403	*	478018	3679780	1.8
404.	RCP_404	*	478018	3679797	1.8
405.	RCP_405	*	478018	3679815	1.8
406.	RCP_406	*	478018	3679832	1.8
407.	RCP_407	*	478018	3679849	1.8
408.	RCP_408	*	478018	3679867	1.8
409.	RCP_409	*	478018	3679884	1.8
410.	RCP_410	*	478018	3679902	1.8
411.	RCP_411	*	478018	3679919	1.8
412.	RCP_412	*	478018	3679936	1.8
413.	RCP_413	*	478018	3679954	1.8
414.	RCP_414	*	478018	3679971	1.8
415.	RCP_415	*	478018	3679989	1.8
416.	RCP_416	*	478018	3680006	1.8
417.	RCP_417	*	478018	3680023	1.8
418.	RCP_418	*	478018	3680041	1.8
419.	RCP_419	*	478018	3680058	1.8
420.	RCP_420	*	478018	3680075	1.8
421.	RCP_421	*	478034	3679728	1.8
422.	RCP_422	*	478034	3679745	1.8
423.	RCP_423	*	478034	3679763	1.8

424.	RCP_424	*	478034	3679780	1.8
425.	RCP_425	*	478034	3679797	1.8
426.	RCP_426	*	478034	3679815	1.8
427.	RCP_427	*	478034	3679832	1.8
428.	RCP_428	*	478034	3679849	1.8
429.	RCP_429	*	478034	3679867	1.8
430.	RCP_430	*	478034	3679884	1.8
431.	RCP_431	*	478034	3679902	1.8
432.	RCP_432	*	478034	3679919	1.8
433.	RCP_433	*	478034	3679936	1.8
434.	RCP_434	*	478034	3679954	1.8
435.	RCP_435	*	478034	3679971	1.8
436.	RCP_436	*	478034	3679989	1.8
437.	RCP_437	*	478034	3680006	1.8
438.	RCP_438	*	478034	3680023	1.8
439.	RCP_439	*	478034	3680041	1.8
440.	RCP_440	*	478034	3680058	1.8
441.	RCP_441	*	478034	3680075	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: C:\CalRoads\Lilac\Lilac.clv
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. RCP_1	43.	3.7	.1	.0	.0	.0	.0	.0	.0	.0
2. RCP_2	57.	3.6	.0	.0	.0	.0	.0	.0	.0	.0
3. RCP_3	50.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
4. RCP_4	53.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
5. RCP_5	58.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
6. RCP_6	62.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
7. RCP_7	69.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
8. RCP_8	74.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
9. RCP_9	83.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
10. RCP_10	90.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
11. RCP_11	100.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
12. RCP_12	104.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
13. RCP_13	108.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
14. RCP_14	112.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
15. RCP_15	116.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
16. RCP_16	120.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
17. RCP_17	123.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
18. RCP_18	126.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
19. RCP_19	129.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
20. RCP_20	132.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
21. RCP_21	134.	3.5	.0	.0	.0	.0	.0	.0	.0	.0

22.	RCP_22	*	37. *	3.6 *	.0	.0	.0	.0	.0	.0	.0	.0
23.	RCP_23	*	44. *	3.6 *	.0	.0	.0	.0	.0	.0	.0	.0
24.	RCP_24	*	47. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
25.	RCP_25	*	51. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
26.	RCP_26	*	55. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
27.	RCP_27	*	60. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
28.	RCP_28	*	64. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
29.	RCP_29	*	71. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
30.	RCP_30	*	79. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
31.	RCP_31	*	90. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
32.	RCP_32	*	101. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
33.	RCP_33	*	105. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
34.	RCP_34	*	110. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
35.	RCP_35	*	113. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
36.	RCP_36	*	118. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
37.	RCP_37	*	122. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
38.	RCP_38	*	125. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
39.	RCP_39	*	128. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
40.	RCP_40	*	131. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
41.	RCP_41	*	134. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
42.	RCP_42	*	137. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
43.	RCP_43	*	34. *	3.6 *	.0	.0	.0	.0	.0	.0	.0	.0
44.	RCP_44	*	37. *	3.6 *	.0	.0	.0	.0	.0	.0	.0	.0
45.	RCP_45	*	45. *	3.6 *	.0	.0	.0	.0	.0	.0	.0	.0
46.	RCP_46	*	48. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
47.	RCP_47	*	51. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
48.	RCP_48	*	56. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
49.	RCP_49	*	61. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
50.	RCP_50	*	68. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
51.	RCP_51	*	77. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
52.	RCP_52	*	85. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
53.	RCP_53	*	99. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
54.	RCP_54	*	106. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
55.	RCP_55	*	111. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
56.	RCP_56	*	115. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
57.	RCP_57	*	120. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
58.	RCP_58	*	124. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
59.	RCP_59	*	128. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
60.	RCP_60	*	131. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
61.	RCP_61	*	134. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
62.	RCP_62	*	136. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
63.	RCP_63	*	139. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
64.	RCP_64	*	32. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
65.	RCP_65	*	34. *	3.6 *	.0	.0	.0	.0	.0	.0	.0	.0
66.	RCP_66	*	37. *	3.6 *	.0	.0	.0	.0	.0	.0	.0	.0
67.	RCP_67	*	41. *	3.6 *	.0	.0	.0	.0	.0	.0	.0	.0
68.	RCP_68	*	48. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
69.	RCP_69	*	52. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
70.	RCP_70	*	58. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
71.	RCP_71	*	65. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
72.	RCP_72	*	73. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
73.	RCP_73	*	85. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
74.	RCP_74	*	103. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
75.	RCP_75	*	108. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
76.	RCP_76	*	112. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
77.	RCP_77	*	117. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
78.	RCP_78	*	122. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
79.	RCP_79	*	126. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
80.	RCP_80	*	130. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
81.	RCP_81	*	133. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
82.	RCP_82	*	136. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
83.	RCP_83	*	139. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0
84.	RCP_84	*	141. *	3.5 *	.0	.0	.0	.0	.0	.0	.0	.0

85.	RCP_85	*	29.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
86.	RCP_86	*	31.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
87.	RCP_87	*	33.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
88.	RCP_88	*	36.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
89.	RCP_89	*	40.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
90.	RCP_90	*	48.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
91.	RCP_91	*	54.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
92.	RCP_92	*	61.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
93.	RCP_93	*	71.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
94.	RCP_94	*	85.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
95.	RCP_95	*	104.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
96.	RCP_96	*	110.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
97.	RCP_97	*	114.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
98.	RCP_98	*	120.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
99.	RCP_99	*	125.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
100.	RCP_100	*	129.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
101.	RCP_101	*	133.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
102.	RCP_102	*	136.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
103.	RCP_103	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
104.	RCP_104	*	141.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
105.	RCP_105	*	143.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
106.	RCP_106	*	26.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
107.	RCP_107	*	28.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
108.	RCP_108	*	30.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
109.	RCP_109	*	32.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
110.	RCP_110	*	36.	*	3.6	*	.0	.0	.1	.0	.0	.0	.0	.0
111.	RCP_111	*	40.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
112.	RCP_112	*	49.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
113.	RCP_113	*	56.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
114.	RCP_114	*	65.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
115.	RCP_115	*	78.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
116.	RCP_116	*	106.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
117.	RCP_117	*	111.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
118.	RCP_118	*	117.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
119.	RCP_119	*	123.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
120.	RCP_120	*	128.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
121.	RCP_121	*	132.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
122.	RCP_122	*	136.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
123.	RCP_123	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
124.	RCP_124	*	141.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
125.	RCP_125	*	144.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
126.	RCP_126	*	146.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
127.	RCP_127	*	24.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
128.	RCP_128	*	25.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
129.	RCP_129	*	27.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
130.	RCP_130	*	29.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
131.	RCP_131	*	31.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
132.	RCP_132	*	229.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
133.	RCP_133	*	39.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
134.	RCP_134	*	49.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
135.	RCP_135	*	58.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
136.	RCP_136	*	74.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
137.	RCP_137	*	108.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
138.	RCP_138	*	114.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
139.	RCP_139	*	120.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
140.	RCP_140	*	126.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
141.	RCP_141	*	132.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
142.	RCP_142	*	136.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
143.	RCP_143	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
144.	RCP_144	*	141.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
145.	RCP_145	*	144.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
146.	RCP_146	*	146.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
147.	RCP_147	*	148.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0

148.	RCP_148	*	21.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
149.	RCP_149	*	22.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
150.	RCP_150	*	24.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
151.	RCP_151	*	26.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
152.	RCP_152	*	28.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
153.	RCP_153	*	30.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
154.	RCP_154	*	33.	*	3.6	*	.0	.0	.1	.0	.0	.0	.0	.0
155.	RCP_155	*	37.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
156.	RCP_156	*	49.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
157.	RCP_157	*	67.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
158.	RCP_158	*	109.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
159.	RCP_159	*	116.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
160.	RCP_160	*	124.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
161.	RCP_161	*	130.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
162.	RCP_162	*	136.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
163.	RCP_163	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
164.	RCP_164	*	141.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
165.	RCP_165	*	144.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
166.	RCP_166	*	146.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
167.	RCP_167	*	148.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
168.	RCP_168	*	150.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
169.	RCP_169	*	18.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
170.	RCP_170	*	19.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
171.	RCP_171	*	21.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
172.	RCP_172	*	22.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
173.	RCP_173	*	24.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
174.	RCP_174	*	26.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
175.	RCP_175	*	29.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
176.	RCP_176	*	32.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
177.	RCP_177	*	220.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
178.	RCP_178	*	45.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
179.	RCP_179	*	112.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
180.	RCP_180	*	120.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
181.	RCP_181	*	128.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
182.	RCP_182	*	135.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
183.	RCP_183	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
184.	RCP_184	*	142.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
185.	RCP_185	*	144.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
186.	RCP_186	*	146.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
187.	RCP_187	*	148.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
188.	RCP_188	*	150.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
189.	RCP_189	*	152.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
190.	RCP_190	*	15.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
191.	RCP_191	*	16.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
192.	RCP_192	*	17.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
193.	RCP_193	*	19.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
194.	RCP_194	*	21.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
195.	RCP_195	*	23.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
196.	RCP_196	*	24.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
197.	RCP_197	*	27.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
198.	RCP_198	*	30.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
199.	RCP_199	*	220.	*	3.6	*	.0	.0	.1	.0	.0	.0	.0	.0
200.	RCP_200	*	41.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
201.	RCP_201	*	126.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
202.	RCP_202	*	135.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
203.	RCP_203	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
204.	RCP_204	*	142.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
205.	RCP_205	*	189.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
206.	RCP_206	*	147.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
207.	RCP_207	*	149.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
208.	RCP_208	*	151.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
209.	RCP_209	*	153.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
210.	RCP_210	*	155.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0

211.	RCP_211	*	13.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
212.	RCP_212	*	14.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
213.	RCP_213	*	15.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
214.	RCP_214	*	16.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
215.	RCP_215	*	17.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
216.	RCP_216	*	19.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
217.	RCP_217	*	20.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
218.	RCP_218	*	22.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
219.	RCP_219	*	25.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
220.	RCP_220	*	28.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
221.	RCP_221	*	221.	*	3.6	*	.0	.0	.1	.0	.0	.0	.0	.0
222.	RCP_222	*	39.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
223.	RCP_223	*	139.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
224.	RCP_224	*	142.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
225.	RCP_225	*	145.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
226.	RCP_226	*	148.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
227.	RCP_227	*	150.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
228.	RCP_228	*	201.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
229.	RCP_229	*	154.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
230.	RCP_230	*	156.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
231.	RCP_231	*	157.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
232.	RCP_232	*	9.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
233.	RCP_233	*	10.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
234.	RCP_234	*	11.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
235.	RCP_235	*	12.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
236.	RCP_236	*	14.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
237.	RCP_237	*	15.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
238.	RCP_238	*	16.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
239.	RCP_239	*	18.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
240.	RCP_240	*	20.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
241.	RCP_241	*	22.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
242.	RCP_242	*	131.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
243.	RCP_243	*	221.	*	3.6	*	.0	.0	.1	.0	.0	.0	.0	.0
244.	RCP_244	*	217.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
245.	RCP_245	*	211.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
246.	RCP_246	*	149.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
247.	RCP_247	*	151.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
248.	RCP_248	*	174.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
249.	RCP_249	*	155.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
250.	RCP_250	*	205.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
251.	RCP_251	*	201.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
252.	RCP_252	*	160.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
253.	RCP_253	*	6.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
254.	RCP_254	*	7.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
255.	RCP_255	*	8.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
256.	RCP_256	*	9.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
257.	RCP_257	*	10.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
258.	RCP_258	*	11.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
259.	RCP_259	*	12.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
260.	RCP_260	*	13.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
261.	RCP_261	*	332.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
262.	RCP_262	*	129.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
263.	RCP_263	*	230.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
264.	RCP_264	*	226.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
265.	RCP_265	*	221.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
266.	RCP_266	*	218.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
267.	RCP_267	*	202.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
268.	RCP_268	*	209.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
269.	RCP_269	*	157.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
270.	RCP_270	*	158.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
271.	RCP_271	*	160.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
272.	RCP_272	*	162.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
273.	RCP_273	*	203.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0

274.	RCP_274	*	3.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
275.	RCP_275	*	4.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
276.	RCP_276	*	4.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
277.	RCP_277	*	5.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
278.	RCP_278	*	6.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
279.	RCP_279	*	340.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
280.	RCP_280	*	336.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
281.	RCP_281	*	329.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
282.	RCP_282	*	318.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
283.	RCP_283	*	138.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
284.	RCP_284	*	233.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
285.	RCP_285	*	229.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
286.	RCP_286	*	226.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
287.	RCP_287	*	221.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
288.	RCP_288	*	218.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
289.	RCP_289	*	209.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
290.	RCP_290	*	202.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
291.	RCP_291	*	162.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
292.	RCP_292	*	192.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
293.	RCP_293	*	191.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
294.	RCP_294	*	166.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
295.	RCP_295	*	360.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
296.	RCP_296	*	360.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
297.	RCP_297	*	359.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
298.	RCP_298	*	360.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
299.	RCP_299	*	359.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
300.	RCP_300	*	333.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
301.	RCP_301	*	327.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
302.	RCP_302	*	320.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
303.	RCP_303	*	137.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
304.	RCP_304	*	239.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
305.	RCP_305	*	235.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
306.	RCP_306	*	232.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
307.	RCP_307	*	229.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
308.	RCP_308	*	226.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
309.	RCP_309	*	222.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
310.	RCP_310	*	218.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
311.	RCP_311	*	214.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
312.	RCP_312	*	198.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
313.	RCP_313	*	192.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
314.	RCP_314	*	167.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
315.	RCP_315	*	169.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
316.	RCP_316	*	348.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
317.	RCP_317	*	348.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
318.	RCP_318	*	358.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
319.	RCP_319	*	355.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
320.	RCP_320	*	331.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
321.	RCP_321	*	327.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
322.	RCP_322	*	320.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
323.	RCP_323	*	309.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
324.	RCP_324	*	293.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
325.	RCP_325	*	241.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
326.	RCP_326	*	238.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
327.	RCP_327	*	234.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
328.	RCP_328	*	231.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
329.	RCP_329	*	229.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
330.	RCP_330	*	226.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
331.	RCP_331	*	223.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
332.	RCP_332	*	219.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
333.	RCP_333	*	214.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
334.	RCP_334	*	206.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
335.	RCP_335	*	192.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
336.	RCP_336	*	172.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0

337.	RCP_337	*	338.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
338.	RCP_338	*	350.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
339.	RCP_339	*	332.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
340.	RCP_340	*	329.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
341.	RCP_341	*	325.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
342.	RCP_342	*	320.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
343.	RCP_343	*	313.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
344.	RCP_344	*	298.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
345.	RCP_345	*	289.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
346.	RCP_346	*	243.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
347.	RCP_347	*	240.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
348.	RCP_348	*	237.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
349.	RCP_349	*	234.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
350.	RCP_350	*	231.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
351.	RCP_351	*	228.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
352.	RCP_352	*	226.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
353.	RCP_353	*	223.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
354.	RCP_354	*	220.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
355.	RCP_355	*	216.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
356.	RCP_356	*	209.	*	3.7	*	.0	.0	.0	.0	.0	.0	.0	.0
357.	RCP_357	*	200.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
358.	RCP_358	*	352.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
359.	RCP_359	*	350.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
360.	RCP_360	*	350.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
361.	RCP_361	*	346.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
362.	RCP_362	*	321.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
363.	RCP_363	*	315.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
364.	RCP_364	*	303.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
365.	RCP_365	*	293.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
366.	RCP_366	*	248.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
367.	RCP_367	*	245.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
368.	RCP_368	*	241.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
369.	RCP_369	*	238.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
370.	RCP_370	*	235.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
371.	RCP_371	*	233.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
372.	RCP_372	*	231.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
373.	RCP_373	*	228.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
374.	RCP_374	*	226.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
375.	RCP_375	*	223.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
376.	RCP_376	*	220.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
377.	RCP_377	*	217.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
378.	RCP_378	*	213.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
379.	RCP_379	*	346.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
380.	RCP_380	*	346.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
381.	RCP_381	*	347.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
382.	RCP_382	*	339.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
383.	RCP_383	*	317.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
384.	RCP_384	*	306.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
385.	RCP_385	*	298.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
386.	RCP_386	*	290.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
387.	RCP_387	*	249.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
388.	RCP_388	*	246.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
389.	RCP_389	*	243.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
390.	RCP_390	*	240.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
391.	RCP_391	*	238.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
392.	RCP_392	*	235.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
393.	RCP_393	*	233.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
394.	RCP_394	*	230.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
395.	RCP_395	*	228.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
396.	RCP_396	*	226.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
397.	RCP_397	*	223.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
398.	RCP_398	*	220.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
399.	RCP_399	*	218.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0

400. RCP_400	*	343.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
401. RCP_401	*	342.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
402. RCP_402	*	335.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
403. RCP_403	*	317.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
404. RCP_404	*	308.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
405. RCP_405	*	301.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
406. RCP_406	*	293.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
407. RCP_407	*	287.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
408. RCP_408	*	250.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
409. RCP_409	*	247.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
410. RCP_410	*	244.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
411. RCP_411	*	241.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
412. RCP_412	*	239.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
413. RCP_413	*	237.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
414. RCP_414	*	235.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
415. RCP_415	*	232.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
416. RCP_416	*	230.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
417. RCP_417	*	228.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
418. RCP_418	*	225.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
419. RCP_419	*	223.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
420. RCP_420	*	221.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
421. RCP_421	*	338.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
422. RCP_422	*	331.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
423. RCP_423	*	318.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
424. RCP_424	*	310.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
425. RCP_425	*	304.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
426. RCP_426	*	297.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
427. RCP_427	*	291.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
428. RCP_428	*	285.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
429. RCP_429	*	251.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
430. RCP_430	*	248.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
431. RCP_431	*	246.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
432. RCP_432	*	244.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
433. RCP_433	*	241.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
434. RCP_434	*	238.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
435. RCP_435	*	236.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
436. RCP_436	*	234.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
437. RCP_437	*	232.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
438. RCP_438	*	230.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
439. RCP_439	*	228.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
440. RCP_440	*	225.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
441. RCP_441	*	223.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0

CONC/LINK

RECEPTOR	*	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
W	X	Y	Z	a	b	c	d	e	f	g	h	i	j	k	l	m
n	o	p	q	r	s	t	u	v	w	x						

1. RCP_1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0					
2. RCP_2	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0					
3. RCP_3	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0					
4. RCP_4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

```
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 5. RCP_5    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 6. RCP_6    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 7. RCP_7    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 8. RCP_8    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 9. RCP_9    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
10. RCP_10   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
11. RCP_11   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
12. RCP_12   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
13. RCP_13   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
14. RCP_14   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
15. RCP_15   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
16. RCP_16   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
17. RCP_17   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
18. RCP_18   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
19. RCP_19   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
20. RCP_20   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
21. RCP_21   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
22. RCP_22   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
23. RCP_23   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
24. RCP_24   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
25. RCP_25   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
26. RCP_26    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
27. RCP_27    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
28. RCP_28    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
29. RCP_29    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
30. RCP_30    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
31. RCP_31    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
32. RCP_32    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
33. RCP_33    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
34. RCP_34    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
35. RCP_35    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
36. RCP_36    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
37. RCP_37    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
38. RCP_38    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
39. RCP_39    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
40. RCP_40    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
41. RCP_41    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
42. RCP_42    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
43. RCP_43    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
44. RCP_44    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
45. RCP_45    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
46. RCP_46    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
```

```
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
47. RCP_47   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
48. RCP_48   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
49. RCP_49   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
50. RCP_50   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
51. RCP_51   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
52. RCP_52   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
53. RCP_53   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
54. RCP_54   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
55. RCP_55   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
56. RCP_56   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
57. RCP_57   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
58. RCP_58   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
59. RCP_59   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
60. RCP_60   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
61. RCP_61   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
62. RCP_62   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
63. RCP_63   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
64. RCP_64   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
65. RCP_65   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
66. RCP_66   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
67. RCP_67   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
68. RCP_68   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
69. RCP_69   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
70. RCP_70   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
71. RCP_71   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
72. RCP_72   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
73. RCP_73   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
74. RCP_74   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
75. RCP_75   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
76. RCP_76   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
77. RCP_77   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
78. RCP_78   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
79. RCP_79   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
80. RCP_80   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
81. RCP_81   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
82. RCP_82   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
83. RCP_83   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
84. RCP_84   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
85. RCP_85   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
86. RCP_86   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
87. RCP_87   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
88. RCP_88   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
89. RCP_89   *   .0   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
90. RCP_90   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
91. RCP_91   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
92. RCP_92   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
93. RCP_93   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
94. RCP_94   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
95. RCP_95   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
96. RCP_96   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
97. RCP_97   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
98. RCP_98   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
99. RCP_99   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
100. RCP_100  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
101. RCP_101  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
102. RCP_102  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
103. RCP_103  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
104. RCP_104  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
105. RCP_105  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
106. RCP_106  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
107. RCP_107  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
108. RCP_108  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
109. RCP_109  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
110. RCP_110  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
111. RCP_111  *   .0   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
112. RCP_112  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
113. RCP_113  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
114. RCP_114  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
115. RCP_115  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
116. RCP_116  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
117. RCP_117  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
118. RCP_118  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
119. RCP_119  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
120. RCP_120  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
121. RCP_121  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
122. RCP_122  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
123. RCP_123  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
124. RCP_124  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
125. RCP_125  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
126. RCP_126  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
127. RCP_127  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
128. RCP_128  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
129. RCP_129  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
130. RCP_130  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
131. RCP_131  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
132. RCP_132  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
133. RCP_133  *   .0   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
134. RCP_134  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
135. RCP_135  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
136. RCP_136  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
137. RCP_137  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
138. RCP_138  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
139. RCP_139  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
140. RCP_140  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
141. RCP_141  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
142. RCP_142  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
143. RCP_143  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
144. RCP_144  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
145. RCP_145  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
146. RCP_146  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
147. RCP_147  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
148. RCP_148  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
149. RCP_149  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
150. RCP_150  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
151. RCP_151  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
152. RCP_152  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
153. RCP_153  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
154. RCP_154  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
155. RCP_155  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
156. RCP_156  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
157. RCP_157  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
158. RCP_158  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
159. RCP_159  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
160. RCP_160  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
161. RCP_161  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
162. RCP_162  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
163. RCP_163  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
164. RCP_164  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
165. RCP_165  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
166. RCP_166  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
167. RCP_167  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
168. RCP_168  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
169. RCP_169  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
170. RCP_170  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
171. RCP_171  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
172. RCP_172  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
173. RCP_173  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
174. RCP_174  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
175. RCP_175  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
176. RCP_176  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
177. RCP_177  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
178. RCP_178  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
179. RCP_179  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
180. RCP_180  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
181. RCP_181  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
182. RCP_182  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
183. RCP_183  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
184. RCP_184  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
185. RCP_185  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
186. RCP_186  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
187. RCP_187  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
188. RCP_188  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
189. RCP_189  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
190. RCP_190  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
191. RCP_191  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
192. RCP_192  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
193. RCP_193  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
194. RCP_194 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
195. RCP_195 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
196. RCP_196 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
197. RCP_197 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
198. RCP_198 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
199. RCP_199 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
200. RCP_200 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
201. RCP_201 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
202. RCP_202 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
203. RCP_203 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
204. RCP_204 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
205. RCP_205 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
206. RCP_206 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
207. RCP_207 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
208. RCP_208 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
209. RCP_209 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
210. RCP_210 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
211. RCP_211 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
212. RCP_212 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
213. RCP_213 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
214. RCP_214 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0

.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
215. RCP_215 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
216. RCP_216 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
217. RCP_217 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
218. RCP_218 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
219. RCP_219 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
220. RCP_220 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
221. RCP_221 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
222. RCP_222 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
223. RCP_223 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
224. RCP_224 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
225. RCP_225 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
226. RCP_226 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
227. RCP_227 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
228. RCP_228 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
229. RCP_229 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
230. RCP_230 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
231. RCP_231 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
232. RCP_232 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
233. RCP_233 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
234. RCP_234 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
235. RCP_235 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
236. RCP_236  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
237. RCP_237  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
238. RCP_238  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
239. RCP_239  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
240. RCP_240  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
241. RCP_241  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
242. RCP_242  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
243. RCP_243  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
244. RCP_244  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
245. RCP_245  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
246. RCP_246  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
247. RCP_247  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
248. RCP_248  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
249. RCP_249  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
250. RCP_250  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
251. RCP_251  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
252. RCP_252  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
253. RCP_253  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
254. RCP_254  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
255. RCP_255  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
256. RCP_256  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

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.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
257. RCP_257  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
258. RCP_258  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
259. RCP_259  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
260. RCP_260  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
261. RCP_261  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
262. RCP_262  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
263. RCP_263  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
264. RCP_264  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
265. RCP_265  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
266. RCP_266  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
267. RCP_267  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
268. RCP_268  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
269. RCP_269  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
270. RCP_270  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
271. RCP_271  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
272. RCP_272  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
273. RCP_273  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
274. RCP_274  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
275. RCP_275  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
276. RCP_276  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
277. RCP_277  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
278. RCP_278  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
279. RCP_279  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
280. RCP_280  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
281. RCP_281  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
282. RCP_282  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
283. RCP_283  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
284. RCP_284  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
285. RCP_285  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
286. RCP_286  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
287. RCP_287  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
288. RCP_288  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
289. RCP_289  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
290. RCP_290  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
291. RCP_291  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
292. RCP_292  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
293. RCP_293  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
294. RCP_294  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
295. RCP_295  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
296. RCP_296  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
297. RCP_297  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
298. RCP_298  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
299. RCP_299 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
300. RCP_300 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
301. RCP_301 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
302. RCP_302 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
303. RCP_303 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
304. RCP_304 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
305. RCP_305 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
306. RCP_306 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
307. RCP_307 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
308. RCP_308 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
309. RCP_309 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
310. RCP_310 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
311. RCP_311 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
312. RCP_312 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
313. RCP_313 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
314. RCP_314 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
315. RCP_315 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
316. RCP_316 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
317. RCP_317 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
318. RCP_318 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
319. RCP_319 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
320. RCP_320  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
321. RCP_321  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
322. RCP_322  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
323. RCP_323  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
324. RCP_324  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
325. RCP_325  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
326. RCP_326  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
327. RCP_327  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
328. RCP_328  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
329. RCP_329  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
330. RCP_330  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
331. RCP_331  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
332. RCP_332  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
333. RCP_333  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
334. RCP_334  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
335. RCP_335  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
336. RCP_336  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
337. RCP_337  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
338. RCP_338  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
339. RCP_339  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
340. RCP_340  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
341. RCP_341  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
342. RCP_342  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
343. RCP_343  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
344. RCP_344  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
345. RCP_345  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
346. RCP_346  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
347. RCP_347  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
348. RCP_348  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
349. RCP_349  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
350. RCP_350  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
351. RCP_351  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
352. RCP_352  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
353. RCP_353  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
354. RCP_354  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
355. RCP_355  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
356. RCP_356  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
357. RCP_357  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
358. RCP_358  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
359. RCP_359  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
360. RCP_360  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
361. RCP_361  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
362. RCP_362 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
363. RCP_363 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
364. RCP_364 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
365. RCP_365 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
366. RCP_366 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
367. RCP_367 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
368. RCP_368 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
369. RCP_369 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
370. RCP_370 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
371. RCP_371 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
372. RCP_372 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
373. RCP_373 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
374. RCP_374 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
375. RCP_375 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
376. RCP_376 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
377. RCP_377 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
378. RCP_378 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
379. RCP_379 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
380. RCP_380 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
381. RCP_381 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
382. RCP_382 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
383. RCP_383  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
384. RCP_384  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
385. RCP_385  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
386. RCP_386  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
387. RCP_387  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
388. RCP_388  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
389. RCP_389  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
390. RCP_390  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
391. RCP_391  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
392. RCP_392  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
393. RCP_393  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
394. RCP_394  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
395. RCP_395  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
396. RCP_396  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
397. RCP_397  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
398. RCP_398  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
399. RCP_399  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
400. RCP_400  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
401. RCP_401  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
402. RCP_402  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
403. RCP_403  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
404. RCP_404  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
405. RCP_405  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
406. RCP_406  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
407. RCP_407  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
408. RCP_408  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
409. RCP_409  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
410. RCP_410  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
411. RCP_411  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
412. RCP_412  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
413. RCP_413  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
414. RCP_414  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
415. RCP_415  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
416. RCP_416  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
417. RCP_417  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
418. RCP_418  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
419. RCP_419  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
420. RCP_420  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
421. RCP_421  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
422. RCP_422  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
423. RCP_423  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
424. RCP_424  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
425. RCP_425  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
426. RCP_426  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
427. RCP_427  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
428. RCP_428  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
429. RCP_429  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
430. RCP_430  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
431. RCP_431  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
432. RCP_432  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
433. RCP_433  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
434. RCP_434  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
435. RCP_435  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
436. RCP_436  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
437. RCP_437  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
438. RCP_438  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
439. RCP_439  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
440. RCP_440  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
441. RCP_441  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
**********************************************
**
** CALINE4 Combined Output File Produced by:
** CALRoads View Ver. 5.2.1
** Lakes Environmental Software Inc.
** Date: 8/23/2012 5:07:37 PM
** File: C:\CalRoads\Lilac\Lilac.ou1
**
**********************************************


          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

               JOB: C:\CalRoads\Lilac\Lilac.clv
               RUN: CALINE4 RUN      (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


   I.  SITE VARIABLES

         U=   0.5 M/S             Z0=  10. CM            ALT=   206. (M)
       BRG= WORST CASE            VD=  0.0 CM/S
      CLAS=     7 (G)             VS=  0.0 CM/S
      MIXH= 1000. M              AMB=  3.5 PPM
     SIGTH=    5. DEGREES       TEMP=  4.4 DEGREE (C)


1 ```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   2

               JOB: C:\CalRoads\Lilac\Lilac.clv
               RUN: CALINE4 RUN      (WORST CASE ANGLE)
         POLLUTANT: Carbon Monoxide


  II.  LINK VARIABLES
```

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Link_1	*****	*****	*****	*****	AG	1257	0.3	0.0	9.7
B. Link_2	*****	*****	*****	*****	AG	1257	0.3	0.0	9.7
C. Link_3	*****	*****	*****	*****	AG	1257	0.3	0.0	9.7
D. Link_4	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
E. Link_5	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
F. Link_6	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
G. Link_7	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
H. Link_8	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
I. Link_9	*****	*****	*****	*****	AG	1333	0.3	0.0	9.6
J. Link_10	*****	*****	*****	*****	AG	1084	0.3	0.0	9.6
K. Link_11	*****	*****	*****	*****	AG	1084	0.3	0.0	9.6
L. Link_12	*****	*****	*****	*****	AG	1084	0.3	0.0	9.6
M. Link_13	*****	*****	*****	*****	AG	1084	0.3	0.0	9.6
```

N. Link_14	* *****	*****	*****	***** *	AG	1084	0.3	0.0	9.6
O. Link_15	* *****	*****	*****	***** *	AG	938	0.3	0.0	9.6
P. Link_16	* *****	*****	*****	***** *	AG	938	0.3	0.0	9.6
Q. Link_17	* *****	*****	*****	***** *	AG	938	0.3	0.0	9.6
R. Link_18	* *****	*****	*****	***** *	AG	938	0.3	0.0	9.6
S. Link_19	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
T. Link_20	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
U. Link_21	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
V. Link_22	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
W. Link_23	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
X. Link_24	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
Y. Link_25	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
Z. Link_26	* *****	*****	*****	***** *	AG	593	0.3	0.0	9.6
a. Link_27	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
b. Link_28	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
c. Link_29	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
d. Link_30	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
e. Link_31	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
f. Link_32	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
g. Link_33	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
h. Link_34	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
i. Link_35	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
j. Link_36	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
k. Link_37	* *****	*****	*****	***** *	AG	153	0.3	0.0	9.6
l. Link_38	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
m. Link_39	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
n. Link_40	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
o. Link_41	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
p. Link_42	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
q. Link_43	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
r. Link_46	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
s. Link_47	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
t. Link_48	* *****	*****	*****	***** *	AG	132	0.3	0.0	9.6
u. Link_44	* *****	*****	*****	***** *	AG	643	0.3	0.0	9.6
v. Link_45	* *****	*****	*****	***** *	AG	643	0.3	0.0	9.6
w. Link_49	* *****	*****	*****	***** *	AG	643	0.3	0.0	9.6
x. Link_50	* *****	*****	*****	***** *	AG	643	0.3	0.0	9.6

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: C:\CalRoads\Lilac\Lilac.clv
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. RCP_1	477718	3679728	1.8
2. RCP_2	477718	3679745	1.8
3. RCP_3	477718	3679763	1.8

```
 4. RCP_4    *  477718 3679780   1.8
 5. RCP_5    *  477718 3679797   1.8
 6. RCP_6    *  477718 3679815   1.8
 7. RCP_7    *  477718 3679832   1.8
 8. RCP_8    *  477718 3679849   1.8
 9. RCP_9    *  477718 3679867   1.8
10. RCP_10   *  477718 3679884   1.8
11. RCP_11   *  477718 3679902   1.8
12. RCP_12   *  477718 3679919   1.8
13. RCP_13   *  477718 3679936   1.8
14. RCP_14   *  477718 3679954   1.8
15. RCP_15   *  477718 3679971   1.8
16. RCP_16   *  477718 3679989   1.8
17. RCP_17   *  477718 3680006   1.8
18. RCP_18   *  477718 3680023   1.8
19. RCP_19   *  477718 3680041   1.8
20. RCP_20   *  477718 3680058   1.8
21. RCP_21   *  477718 3680075   1.8
22. RCP_22   *  477734 3679728   1.8
23. RCP_23   *  477734 3679745   1.8
24. RCP_24   *  477734 3679763   1.8
25. RCP_25   *  477734 3679780   1.8
26. RCP_26   *  477734 3679797   1.8
27. RCP_27   *  477734 3679815   1.8
28. RCP_28   *  477734 3679832   1.8
29. RCP_29   *  477734 3679849   1.8
30. RCP_30   *  477734 3679867   1.8
31. RCP_31   *  477734 3679884   1.8
32. RCP_32   *  477734 3679902   1.8
33. RCP_33   *  477734 3679919   1.8
34. RCP_34   *  477734 3679936   1.8
35. RCP_35   *  477734 3679954   1.8
36. RCP_36   *  477734 3679971   1.8
37. RCP_37   *  477734 3679989   1.8
38. RCP_38   *  477734 3680006   1.8
39. RCP_39   *  477734 3680023   1.8
40. RCP_40   *  477734 3680041   1.8
41. RCP_41   *  477734 3680058   1.8
42. RCP_42   *  477734 3680075   1.8
43. RCP_43   *  477749 3679728   1.8
44. RCP_44   *  477749 3679745   1.8
45. RCP_45   *  477749 3679763   1.8
46. RCP_46   *  477749 3679780   1.8
47. RCP_47   *  477749 3679797   1.8
48. RCP_48   *  477749 3679815   1.8
49. RCP_49   *  477749 3679832   1.8
50. RCP_50   *  477749 3679849   1.8
51. RCP_51   *  477749 3679867   1.8
52. RCP_52   *  477749 3679884   1.8
53. RCP_53   *  477749 3679902   1.8
54. RCP_54   *  477749 3679919   1.8
55. RCP_55   *  477749 3679936   1.8
56. RCP_56   *  477749 3679954   1.8
57. RCP_57   *  477749 3679971   1.8
58. RCP_58   *  477749 3679989   1.8
59. RCP_59   *  477749 3680006   1.8
60. RCP_60   *  477749 3680023   1.8
61. RCP_61   *  477749 3680041   1.8
62. RCP_62   *  477749 3680058   1.8
63. RCP_63   *  477749 3680075   1.8
64. RCP_64   *  477765 3679728   1.8
65. RCP_65   *  477765 3679745   1.8
66. RCP_66   *  477765 3679763   1.8
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67. RCP_67   *  477765 3679780   1.8
68. RCP_68   *  477765 3679797   1.8
69. RCP_69   *  477765 3679815   1.8
70. RCP_70   *  477765 3679832   1.8
71. RCP_71   *  477765 3679849   1.8
72. RCP_72   *  477765 3679867   1.8
73. RCP_73   *  477765 3679884   1.8
74. RCP_74   *  477765 3679902   1.8
75. RCP_75   *  477765 3679919   1.8
76. RCP_76   *  477765 3679936   1.8
77. RCP_77   *  477765 3679954   1.8
78. RCP_78   *  477765 3679971   1.8
79. RCP_79   *  477765 3679989   1.8
80. RCP_80   *  477765 3680006   1.8
81. RCP_81   *  477765 3680023   1.8
82. RCP_82   *  477765 3680041   1.8
83. RCP_83   *  477765 3680058   1.8
84. RCP_84   *  477765 3680075   1.8
85. RCP_85   *  477781 3679728   1.8
86. RCP_86   *  477781 3679745   1.8
87. RCP_87   *  477781 3679763   1.8
88. RCP_88   *  477781 3679780   1.8
89. RCP_89   *  477781 3679797   1.8
90. RCP_90   *  477781 3679815   1.8
91. RCP_91   *  477781 3679832   1.8
92. RCP_92   *  477781 3679849   1.8
93. RCP_93   *  477781 3679867   1.8
94. RCP_94   *  477781 3679884   1.8
95. RCP_95   *  477781 3679902   1.8
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97. RCP_97   *  477781 3679936   1.8
98. RCP_98   *  477781 3679954   1.8
99. RCP_99   *  477781 3679971   1.8
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101. RCP_101  *  477781 3680006   1.8
102. RCP_102  *  477781 3680023   1.8
103. RCP_103  *  477781 3680041   1.8
104. RCP_104  *  477781 3680058   1.8
105. RCP_105  *  477781 3680075   1.8
106. RCP_106  *  477797 3679728   1.8
107. RCP_107  *  477797 3679745   1.8
108. RCP_108  *  477797 3679763   1.8
109. RCP_109  *  477797 3679780   1.8
110. RCP_110  *  477797 3679797   1.8
111. RCP_111  *  477797 3679815   1.8
112. RCP_112  *  477797 3679832   1.8
113. RCP_113  *  477797 3679849   1.8
114. RCP_114  *  477797 3679867   1.8
115. RCP_115  *  477797 3679884   1.8
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RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

RECEPTOR	COORDINATES (M) X	Y	Z
116. RCP_116	477797	3679902	1.8
117. RCP_117	477797	3679919	1.8
118. RCP_118	477797	3679936	1.8
119. RCP_119	477797	3679954	1.8
120. RCP_120	477797	3679971	1.8
121. RCP_121	477797	3679989	1.8
122. RCP_122	477797	3680006	1.8
123. RCP_123	477797	3680023	1.8
124. RCP_124	477797	3680041	1.8
125. RCP_125	477797	3680058	1.8
126. RCP_126	477797	3680075	1.8
127. RCP_127	477813	3679728	1.8
128. RCP_128	477813	3679745	1.8
129. RCP_129	477813	3679763	1.8
130. RCP_130	477813	3679780	1.8
131. RCP_131	477813	3679797	1.8
132. RCP_132	477813	3679815	1.8
133. RCP_133	477813	3679832	1.8
134. RCP_134	477813	3679849	1.8
135. RCP_135	477813	3679867	1.8
136. RCP_136	477813	3679884	1.8
137. RCP_137	477813	3679902	1.8
138. RCP_138	477813	3679919	1.8
139. RCP_139	477813	3679936	1.8
140. RCP_140	477813	3679954	1.8
141. RCP_141	477813	3679971	1.8
142. RCP_142	477813	3679989	1.8
143. RCP_143	477813	3680006	1.8
144. RCP_144	477813	3680023	1.8
145. RCP_145	477813	3680041	1.8
146. RCP_146	477813	3680058	1.8
147. RCP_147	477813	3680075	1.8
148. RCP_148	477828	3679728	1.8
149. RCP_149	477828	3679745	1.8
150. RCP_150	477828	3679763	1.8
151. RCP_151	477828	3679780	1.8
152. RCP_152	477828	3679797	1.8
153. RCP_153	477828	3679815	1.8
154. RCP_154	477828	3679832	1.8
155. RCP_155	477828	3679849	1.8
156. RCP_156	477828	3679867	1.8
157. RCP_157	477828	3679884	1.8
158. RCP_158	477828	3679902	1.8
159. RCP_159	477828	3679919	1.8
160. RCP_160	477828	3679936	1.8
161. RCP_161	477828	3679954	1.8
162. RCP_162	477828	3679971	1.8
163. RCP_163	477828	3679989	1.8
164. RCP_164	477828	3680006	1.8
165. RCP_165	477828	3680023	1.8
166. RCP_166	477828	3680041	1.8
167. RCP_167	477828	3680058	1.8
168. RCP_168	477828	3680075	1.8
169. RCP_169	477844	3679728	1.8
170. RCP_170	477844	3679745	1.8
171. RCP_171	477844	3679763	1.8

172.	RCP_172	*	477844	3679780	1.8
173.	RCP_173	*	477844	3679797	1.8
174.	RCP_174	*	477844	3679815	1.8
175.	RCP_175	*	477844	3679832	1.8
176.	RCP_176	*	477844	3679849	1.8
177.	RCP_177	*	477844	3679867	1.8
178.	RCP_178	*	477844	3679884	1.8
179.	RCP_179	*	477844	3679902	1.8
180.	RCP_180	*	477844	3679919	1.8
181.	RCP_181	*	477844	3679936	1.8
182.	RCP_182	*	477844	3679954	1.8
183.	RCP_183	*	477844	3679971	1.8
184.	RCP_184	*	477844	3679989	1.8
185.	RCP_185	*	477844	3680006	1.8
186.	RCP_186	*	477844	3680023	1.8
187.	RCP_187	*	477844	3680041	1.8
188.	RCP_188	*	477844	3680058	1.8
189.	RCP_189	*	477844	3680075	1.8
190.	RCP_190	*	477860	3679728	1.8
191.	RCP_191	*	477860	3679745	1.8
192.	RCP_192	*	477860	3679763	1.8
193.	RCP_193	*	477860	3679780	1.8
194.	RCP_194	*	477860	3679797	1.8
195.	RCP_195	*	477860	3679815	1.8
196.	RCP_196	*	477860	3679832	1.8
197.	RCP_197	*	477860	3679849	1.8
198.	RCP_198	*	477860	3679867	1.8
199.	RCP_199	*	477860	3679884	1.8
200.	RCP_200	*	477860	3679902	1.8
201.	RCP_201	*	477860	3679919	1.8
202.	RCP_202	*	477860	3679936	1.8
203.	RCP_203	*	477860	3679954	1.8
204.	RCP_204	*	477860	3679971	1.8
205.	RCP_205	*	477860	3679989	1.8
206.	RCP_206	*	477860	3680006	1.8
207.	RCP_207	*	477860	3680023	1.8
208.	RCP_208	*	477860	3680041	1.8
209.	RCP_209	*	477860	3680058	1.8
210.	RCP_210	*	477860	3680075	1.8
211.	RCP_211	*	477876	3679728	1.8
212.	RCP_212	*	477876	3679745	1.8
213.	RCP_213	*	477876	3679763	1.8
214.	RCP_214	*	477876	3679780	1.8
215.	RCP_215	*	477876	3679797	1.8
216.	RCP_216	*	477876	3679815	1.8
217.	RCP_217	*	477876	3679832	1.8
218.	RCP_218	*	477876	3679849	1.8
219.	RCP_219	*	477876	3679867	1.8
220.	RCP_220	*	477876	3679884	1.8
221.	RCP_221	*	477876	3679902	1.8
222.	RCP_222	*	477876	3679919	1.8
223.	RCP_223	*	477876	3679936	1.8
224.	RCP_224	*	477876	3679954	1.8
225.	RCP_225	*	477876	3679971	1.8
226.	RCP_226	*	477876	3679989	1.8
227.	RCP_227	*	477876	3680006	1.8
228.	RCP_228	*	477876	3680023	1.8
229.	RCP_229	*	477876	3680041	1.8
230.	RCP_230	*	477876	3680058	1.8
231.	RCP_231	*	477876	3680075	1.8
232.	RCP_232	*	477892	3679728	1.8
233.	RCP_233	*	477892	3679745	1.8
234.	RCP_234	*	477892	3679763	1.8

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235. RCP_235  *  477892 3679780   1.8
236. RCP_236  *  477892 3679797   1.8
237. RCP_237  *  477892 3679815   1.8
238. RCP_238  *  477892 3679832   1.8
239. RCP_239  *  477892 3679849   1.8
240. RCP_240  *  477892 3679867   1.8
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242. RCP_242  *  477892 3679902   1.8
243. RCP_243  *  477892 3679919   1.8
244. RCP_244  *  477892 3679936   1.8
245. RCP_245  *  477892 3679954   1.8
246. RCP_246  *  477892 3679971   1.8
247. RCP_247  *  477892 3679989   1.8
248. RCP_248  *  477892 3680006   1.8
249. RCP_249  *  477892 3680023   1.8
250. RCP_250  *  477892 3680041   1.8
251. RCP_251  *  477892 3680058   1.8
252. RCP_252  *  477892 3680075   1.8
253. RCP_253  *  477907 3679728   1.8
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255. RCP_255  *  477907 3679763   1.8
256. RCP_256  *  477907 3679780   1.8
257. RCP_257  *  477907 3679797   1.8
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261. RCP_261  *  477907 3679867   1.8
262. RCP_262  *  477907 3679884   1.8
263. RCP_263  *  477907 3679902   1.8
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265. RCP_265  *  477907 3679936   1.8
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270. RCP_270  *  477907 3680023   1.8
271. RCP_271  *  477907 3680041   1.8
272. RCP_272  *  477907 3680058   1.8
273. RCP_273  *  477907 3680075   1.8
274. RCP_274  *  477923 3679728   1.8
275. RCP_275  *  477923 3679745   1.8
276. RCP_276  *  477923 3679763   1.8
277. RCP_277  *  477923 3679780   1.8
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285. RCP_285  *  477923 3679919   1.8
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287. RCP_287  *  477923 3679954   1.8
288. RCP_288  *  477923 3679971   1.8
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290. RCP_290  *  477923 3680006   1.8
291. RCP_291  *  477923 3680023   1.8
292. RCP_292  *  477923 3680041   1.8
293. RCP_293  *  477923 3680058   1.8
294. RCP_294  *  477923 3680075   1.8
295. RCP_295  *  477939 3679728   1.8
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297. RCP_297  *  477939 3679763   1.8
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312. RCP_312  *  477939 3680023   1.8
313. RCP_313  *  477939 3680041   1.8
314. RCP_314  *  477939 3680058   1.8
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323. RCP_323  *  477955 3679849   1.8
324. RCP_324  *  477955 3679867   1.8
325. RCP_325  *  477955 3679884   1.8
326. RCP_326  *  477955 3679902   1.8
327. RCP_327  *  477955 3679919   1.8
328. RCP_328  *  477955 3679936   1.8
329. RCP_329  *  477955 3679954   1.8
330. RCP_330  *  477955 3679971   1.8
331. RCP_331  *  477955 3679989   1.8
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418. RCP_418  *  478018 3680041   1.8
419. RCP_419  *  478018 3680058   1.8
420. RCP_420  *  478018 3680075   1.8
421. RCP_421  *  478034 3679728   1.8
422. RCP_422  *  478034 3679745   1.8
423. RCP_423  *  478034 3679763   1.8
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424.	RCP_424	*	478034	3679780	1.8
425.	RCP_425	*	478034	3679797	1.8
426.	RCP_426	*	478034	3679815	1.8
427.	RCP_427	*	478034	3679832	1.8
428.	RCP_428	*	478034	3679849	1.8
429.	RCP_429	*	478034	3679867	1.8
430.	RCP_430	*	478034	3679884	1.8
431.	RCP_431	*	478034	3679902	1.8
432.	RCP_432	*	478034	3679919	1.8
433.	RCP_433	*	478034	3679936	1.8
434.	RCP_434	*	478034	3679954	1.8
435.	RCP_435	*	478034	3679971	1.8
436.	RCP_436	*	478034	3679989	1.8
437.	RCP_437	*	478034	3680006	1.8
438.	RCP_438	*	478034	3680023	1.8
439.	RCP_439	*	478034	3680041	1.8
440.	RCP_440	*	478034	3680058	1.8
441.	RCP_441	*	478034	3680075	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: C:\CalRoads\Lilac\Lilac.clv
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. RCP_1	43.	3.7	.1	.0	.0	.0	.0	.0	.0	.0
2. RCP_2	57.	3.6	.0	.0	.0	.0	.0	.0	.0	.0
3. RCP_3	50.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
4. RCP_4	53.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
5. RCP_5	58.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
6. RCP_6	62.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
7. RCP_7	69.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
8. RCP_8	74.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
9. RCP_9	83.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
10. RCP_10	90.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
11. RCP_11	100.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
12. RCP_12	104.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
13. RCP_13	108.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
14. RCP_14	112.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
15. RCP_15	116.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
16. RCP_16	120.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
17. RCP_17	123.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
18. RCP_18	126.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
19. RCP_19	129.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
20. RCP_20	132.	3.5	.0	.0	.0	.0	.0	.0	.0	.0
21. RCP_21	134.	3.5	.0	.0	.0	.0	.0	.0	.0	.0

22.	RCP_22	*	37.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
23.	RCP_23	*	44.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
24.	RCP_24	*	47.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
25.	RCP_25	*	51.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
26.	RCP_26	*	55.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
27.	RCP_27	*	60.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
28.	RCP_28	*	64.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
29.	RCP_29	*	71.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
30.	RCP_30	*	79.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
31.	RCP_31	*	90.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
32.	RCP_32	*	101.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
33.	RCP_33	*	105.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
34.	RCP_34	*	110.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
35.	RCP_35	*	113.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
36.	RCP_36	*	118.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
37.	RCP_37	*	122.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
38.	RCP_38	*	125.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
39.	RCP_39	*	128.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
40.	RCP_40	*	131.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
41.	RCP_41	*	134.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
42.	RCP_42	*	137.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
43.	RCP_43	*	34.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
44.	RCP_44	*	37.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
45.	RCP_45	*	45.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
46.	RCP_46	*	48.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
47.	RCP_47	*	51.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
48.	RCP_48	*	56.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
49.	RCP_49	*	61.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
50.	RCP_50	*	68.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
51.	RCP_51	*	77.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
52.	RCP_52	*	85.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
53.	RCP_53	*	99.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
54.	RCP_54	*	106.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
55.	RCP_55	*	111.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
56.	RCP_56	*	115.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
57.	RCP_57	*	120.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
58.	RCP_58	*	124.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
59.	RCP_59	*	128.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
60.	RCP_60	*	131.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
61.	RCP_61	*	134.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
62.	RCP_62	*	136.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
63.	RCP_63	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
64.	RCP_64	*	32.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
65.	RCP_65	*	34.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
66.	RCP_66	*	37.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
67.	RCP_67	*	41.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
68.	RCP_68	*	48.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
69.	RCP_69	*	52.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
70.	RCP_70	*	58.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
71.	RCP_71	*	65.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
72.	RCP_72	*	73.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
73.	RCP_73	*	85.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
74.	RCP_74	*	103.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
75.	RCP_75	*	108.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
76.	RCP_76	*	112.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
77.	RCP_77	*	117.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
78.	RCP_78	*	122.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
79.	RCP_79	*	126.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
80.	RCP_80	*	130.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
81.	RCP_81	*	133.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
82.	RCP_82	*	136.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
83.	RCP_83	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
84.	RCP_84	*	141.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0

85.	RCP_85	*	29.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
86.	RCP_86	*	31.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
87.	RCP_87	*	33.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
88.	RCP_88	*	36.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
89.	RCP_89	*	40.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
90.	RCP_90	*	48.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
91.	RCP_91	*	54.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
92.	RCP_92	*	61.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
93.	RCP_93	*	71.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
94.	RCP_94	*	85.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
95.	RCP_95	*	104.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
96.	RCP_96	*	110.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
97.	RCP_97	*	114.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
98.	RCP_98	*	120.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
99.	RCP_99	*	125.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
100.	RCP_100	*	129.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
101.	RCP_101	*	133.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
102.	RCP_102	*	136.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
103.	RCP_103	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
104.	RCP_104	*	141.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
105.	RCP_105	*	143.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
106.	RCP_106	*	26.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
107.	RCP_107	*	28.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
108.	RCP_108	*	30.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
109.	RCP_109	*	32.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
110.	RCP_110	*	36.	*	3.6	*	.0	.0	.1	.0	.0	.0	.0	.0
111.	RCP_111	*	40.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
112.	RCP_112	*	49.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
113.	RCP_113	*	56.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
114.	RCP_114	*	65.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
115.	RCP_115	*	78.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
116.	RCP_116	*	106.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
117.	RCP_117	*	111.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
118.	RCP_118	*	117.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
119.	RCP_119	*	123.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
120.	RCP_120	*	128.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
121.	RCP_121	*	132.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
122.	RCP_122	*	136.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
123.	RCP_123	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
124.	RCP_124	*	141.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
125.	RCP_125	*	144.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
126.	RCP_126	*	146.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
127.	RCP_127	*	24.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
128.	RCP_128	*	25.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
129.	RCP_129	*	27.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
130.	RCP_130	*	29.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
131.	RCP_131	*	31.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
132.	RCP_132	*	229.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
133.	RCP_133	*	39.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
134.	RCP_134	*	49.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
135.	RCP_135	*	58.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
136.	RCP_136	*	74.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
137.	RCP_137	*	108.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
138.	RCP_138	*	114.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
139.	RCP_139	*	120.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
140.	RCP_140	*	126.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
141.	RCP_141	*	132.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
142.	RCP_142	*	136.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
143.	RCP_143	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
144.	RCP_144	*	141.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
145.	RCP_145	*	144.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
146.	RCP_146	*	146.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
147.	RCP_147	*	148.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0

148.	RCP_148	*	21.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
149.	RCP_149	*	22.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
150.	RCP_150	*	24.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
151.	RCP_151	*	26.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
152.	RCP_152	*	28.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
153.	RCP_153	*	30.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
154.	RCP_154	*	33.	*	3.6	*	.0	.0	.1	.0	.0	.0	.0	.0
155.	RCP_155	*	37.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
156.	RCP_156	*	49.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
157.	RCP_157	*	67.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
158.	RCP_158	*	109.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
159.	RCP_159	*	116.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
160.	RCP_160	*	124.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
161.	RCP_161	*	130.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
162.	RCP_162	*	136.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
163.	RCP_163	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
164.	RCP_164	*	141.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
165.	RCP_165	*	144.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
166.	RCP_166	*	146.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
167.	RCP_167	*	148.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
168.	RCP_168	*	150.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
169.	RCP_169	*	18.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
170.	RCP_170	*	19.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
171.	RCP_171	*	21.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
172.	RCP_172	*	22.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
173.	RCP_173	*	24.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
174.	RCP_174	*	26.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
175.	RCP_175	*	29.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
176.	RCP_176	*	32.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
177.	RCP_177	*	220.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
178.	RCP_178	*	45.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
179.	RCP_179	*	112.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
180.	RCP_180	*	120.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
181.	RCP_181	*	128.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
182.	RCP_182	*	135.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
183.	RCP_183	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
184.	RCP_184	*	142.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
185.	RCP_185	*	144.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
186.	RCP_186	*	146.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
187.	RCP_187	*	148.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
188.	RCP_188	*	150.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
189.	RCP_189	*	152.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
190.	RCP_190	*	15.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
191.	RCP_191	*	16.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
192.	RCP_192	*	17.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
193.	RCP_193	*	19.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
194.	RCP_194	*	21.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
195.	RCP_195	*	23.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
196.	RCP_196	*	24.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
197.	RCP_197	*	27.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
198.	RCP_198	*	30.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
199.	RCP_199	*	220.	*	3.6	*	.0	.0	.1	.0	.0	.0	.0	.0
200.	RCP_200	*	41.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
201.	RCP_201	*	126.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
202.	RCP_202	*	135.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
203.	RCP_203	*	139.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
204.	RCP_204	*	142.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
205.	RCP_205	*	189.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
206.	RCP_206	*	147.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
207.	RCP_207	*	149.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
208.	RCP_208	*	151.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
209.	RCP_209	*	153.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
210.	RCP_210	*	155.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0

211.	RCP_211	*	13.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
212.	RCP_212	*	14.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
213.	RCP_213	*	15.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
214.	RCP_214	*	16.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
215.	RCP_215	*	17.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
216.	RCP_216	*	19.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
217.	RCP_217	*	20.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
218.	RCP_218	*	22.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
219.	RCP_219	*	25.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
220.	RCP_220	*	28.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
221.	RCP_221	*	221.	*	3.6	*	.0	.0	.1	.0	.0	.0	.0	.0
222.	RCP_222	*	39.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
223.	RCP_223	*	139.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
224.	RCP_224	*	142.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
225.	RCP_225	*	145.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
226.	RCP_226	*	148.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
227.	RCP_227	*	150.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
228.	RCP_228	*	201.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
229.	RCP_229	*	154.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
230.	RCP_230	*	156.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
231.	RCP_231	*	157.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
232.	RCP_232	*	9.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
233.	RCP_233	*	10.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
234.	RCP_234	*	11.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
235.	RCP_235	*	12.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
236.	RCP_236	*	14.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
237.	RCP_237	*	15.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
238.	RCP_238	*	16.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
239.	RCP_239	*	18.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
240.	RCP_240	*	20.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
241.	RCP_241	*	22.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
242.	RCP_242	*	131.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
243.	RCP_243	*	221.	*	3.6	*	.0	.0	.1	.0	.0	.0	.0	.0
244.	RCP_244	*	217.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
245.	RCP_245	*	211.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
246.	RCP_246	*	149.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
247.	RCP_247	*	151.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
248.	RCP_248	*	174.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
249.	RCP_249	*	155.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
250.	RCP_250	*	205.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
251.	RCP_251	*	201.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
252.	RCP_252	*	160.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
253.	RCP_253	*	6.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
254.	RCP_254	*	7.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
255.	RCP_255	*	8.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
256.	RCP_256	*	9.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
257.	RCP_257	*	10.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
258.	RCP_258	*	11.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
259.	RCP_259	*	12.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
260.	RCP_260	*	13.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
261.	RCP_261	*	332.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
262.	RCP_262	*	129.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
263.	RCP_263	*	230.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
264.	RCP_264	*	226.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
265.	RCP_265	*	221.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
266.	RCP_266	*	218.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
267.	RCP_267	*	202.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
268.	RCP_268	*	209.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
269.	RCP_269	*	157.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
270.	RCP_270	*	158.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
271.	RCP_271	*	160.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
272.	RCP_272	*	162.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
273.	RCP_273	*	203.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0

274.	RCP_274	*	3.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
275.	RCP_275	*	4.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
276.	RCP_276	*	4.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
277.	RCP_277	*	5.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
278.	RCP_278	*	6.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
279.	RCP_279	*	340.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
280.	RCP_280	*	336.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
281.	RCP_281	*	329.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
282.	RCP_282	*	318.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
283.	RCP_283	*	138.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
284.	RCP_284	*	233.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
285.	RCP_285	*	229.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
286.	RCP_286	*	226.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
287.	RCP_287	*	221.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
288.	RCP_288	*	218.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
289.	RCP_289	*	209.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
290.	RCP_290	*	202.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
291.	RCP_291	*	162.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
292.	RCP_292	*	192.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
293.	RCP_293	*	191.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
294.	RCP_294	*	166.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
295.	RCP_295	*	360.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
296.	RCP_296	*	360.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
297.	RCP_297	*	359.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
298.	RCP_298	*	360.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
299.	RCP_299	*	359.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
300.	RCP_300	*	333.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
301.	RCP_301	*	327.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
302.	RCP_302	*	320.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
303.	RCP_303	*	137.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
304.	RCP_304	*	239.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
305.	RCP_305	*	235.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
306.	RCP_306	*	232.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
307.	RCP_307	*	229.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
308.	RCP_308	*	226.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
309.	RCP_309	*	222.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
310.	RCP_310	*	218.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
311.	RCP_311	*	214.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
312.	RCP_312	*	198.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
313.	RCP_313	*	192.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
314.	RCP_314	*	167.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
315.	RCP_315	*	169.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
316.	RCP_316	*	348.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
317.	RCP_317	*	348.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
318.	RCP_318	*	358.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
319.	RCP_319	*	355.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
320.	RCP_320	*	331.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
321.	RCP_321	*	327.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
322.	RCP_322	*	320.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
323.	RCP_323	*	309.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
324.	RCP_324	*	293.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
325.	RCP_325	*	241.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
326.	RCP_326	*	238.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
327.	RCP_327	*	234.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
328.	RCP_328	*	231.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
329.	RCP_329	*	229.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
330.	RCP_330	*	226.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
331.	RCP_331	*	223.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
332.	RCP_332	*	219.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
333.	RCP_333	*	214.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
334.	RCP_334	*	206.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
335.	RCP_335	*	192.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
336.	RCP_336	*	172.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0

337.	RCP_337	*	338.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
338.	RCP_338	*	350.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
339.	RCP_339	*	332.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
340.	RCP_340	*	329.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
341.	RCP_341	*	325.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
342.	RCP_342	*	320.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
343.	RCP_343	*	313.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
344.	RCP_344	*	298.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
345.	RCP_345	*	289.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
346.	RCP_346	*	243.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
347.	RCP_347	*	240.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
348.	RCP_348	*	237.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
349.	RCP_349	*	234.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
350.	RCP_350	*	231.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
351.	RCP_351	*	228.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
352.	RCP_352	*	226.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
353.	RCP_353	*	223.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
354.	RCP_354	*	220.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
355.	RCP_355	*	216.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
356.	RCP_356	*	209.	*	3.7	*	.0	.0	.0	.0	.0	.0	.0	.0
357.	RCP_357	*	200.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
358.	RCP_358	*	352.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
359.	RCP_359	*	350.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
360.	RCP_360	*	350.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
361.	RCP_361	*	346.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
362.	RCP_362	*	321.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
363.	RCP_363	*	315.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
364.	RCP_364	*	303.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
365.	RCP_365	*	293.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
366.	RCP_366	*	248.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
367.	RCP_367	*	245.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
368.	RCP_368	*	241.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
369.	RCP_369	*	238.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
370.	RCP_370	*	235.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
371.	RCP_371	*	233.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
372.	RCP_372	*	231.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
373.	RCP_373	*	228.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
374.	RCP_374	*	226.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
375.	RCP_375	*	223.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
376.	RCP_376	*	220.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
377.	RCP_377	*	217.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
378.	RCP_378	*	213.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
379.	RCP_379	*	346.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
380.	RCP_380	*	346.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
381.	RCP_381	*	347.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
382.	RCP_382	*	339.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
383.	RCP_383	*	317.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
384.	RCP_384	*	306.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
385.	RCP_385	*	298.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
386.	RCP_386	*	290.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
387.	RCP_387	*	249.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
388.	RCP_388	*	246.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
389.	RCP_389	*	243.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
390.	RCP_390	*	240.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
391.	RCP_391	*	238.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
392.	RCP_392	*	235.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
393.	RCP_393	*	233.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
394.	RCP_394	*	230.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
395.	RCP_395	*	228.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
396.	RCP_396	*	226.	*	3.5	*	.0	.0	.0	.0	.0	.0	.0	.0
397.	RCP_397	*	223.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
398.	RCP_398	*	220.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0
399.	RCP_399	*	218.	*	3.6	*	.0	.0	.0	.0	.0	.0	.0	.0

```
400. RCP_400  *  343. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
401. RCP_401  *  342. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
402. RCP_402  *  335. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
403. RCP_403  *  317. *   3.6 *   .0   .0   .0   .0   .0   .0   .0   .0
404. RCP_404  *  308. *   3.6 *   .0   .0   .0   .0   .0   .0   .0   .0
405. RCP_405  *  301. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
406. RCP_406  *  293. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
407. RCP_407  *  287. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
408. RCP_408  *  250. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
409. RCP_409  *  247. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
410. RCP_410  *  244. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
411. RCP_411  *  241. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
412. RCP_412  *  239. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
413. RCP_413  *  237. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
414. RCP_414  *  235. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
415. RCP_415  *  232. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
416. RCP_416  *  230. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
417. RCP_417  *  228. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
418. RCP_418  *  225. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
419. RCP_419  *  223. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
420. RCP_420  *  221. *   3.6 *   .0   .0   .0   .0   .0   .0   .0   .0
421. RCP_421  *  338. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
422. RCP_422  *  331. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
423. RCP_423  *  318. *   3.6 *   .0   .0   .0   .0   .0   .0   .0   .0
424. RCP_424  *  310. *   3.6 *   .0   .0   .0   .0   .0   .0   .0   .0
425. RCP_425  *  304. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
426. RCP_426  *  297. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
427. RCP_427  *  291. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
428. RCP_428  *  285. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
429. RCP_429  *  251. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
430. RCP_430  *  248. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
431. RCP_431  *  246. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
432. RCP_432  *  244. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
433. RCP_433  *  241. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
434. RCP_434  *  238. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
435. RCP_435  *  236. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
436. RCP_436  *  234. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
437. RCP_437  *  232. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
438. RCP_438  *  230. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
439. RCP_439  *  228. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
440. RCP_440  *  225. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0
441. RCP_441  *  223. *   3.5 *   .0   .0   .0   .0   .0   .0   .0   .0


              *
                                  CONC/LINK
   RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T    U    V
   W    X    Y    Z    a    b    c    d    e    f    g    h    i    j    k    l    m
   n    o    p    q    r    s    t    u    v    w    x

------------*-----------------------------------------------------------------------
-----------------------------------------------------------------------------------
-------------------------------------------------------
 1. RCP_1    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 2. RCP_2    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 3. RCP_3    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 4. RCP_4    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 5. RCP_5    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 6. RCP_6    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 7. RCP_7    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 8. RCP_8    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
 9. RCP_9    *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
10. RCP_10   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
11. RCP_11   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
12. RCP_12   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
13. RCP_13   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
14. RCP_14   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
15. RCP_15   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
16. RCP_16   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
17. RCP_17   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
18. RCP_18   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
19. RCP_19   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
20. RCP_20   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
21. RCP_21   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
22. RCP_22   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
23. RCP_23   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
24. RCP_24   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
25. RCP_25   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
26. RCP_26   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
27. RCP_27   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
28. RCP_28   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
29. RCP_29   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
30. RCP_30   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
31. RCP_31   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
32. RCP_32   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
33. RCP_33   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
34. RCP_34   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
35. RCP_35   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
36. RCP_36   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
37. RCP_37   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
38. RCP_38   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
39. RCP_39   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
40. RCP_40   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
41. RCP_41   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
42. RCP_42   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
43. RCP_43   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
44. RCP_44   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
45. RCP_45   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
46. RCP_46   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
47. RCP_47   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
48. RCP_48   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
49. RCP_49   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
50. RCP_50   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
51. RCP_51   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
52. RCP_52   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
53. RCP_53   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
54. RCP_54   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
55. RCP_55   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
56. RCP_56   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
57. RCP_57   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
58. RCP_58   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
59. RCP_59   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
60. RCP_60   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
61. RCP_61   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
62. RCP_62   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
63. RCP_63   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
64. RCP_64   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
65. RCP_65   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
66. RCP_66   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
67. RCP_67   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
68. RCP_68    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
69. RCP_69    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
70. RCP_70    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
71. RCP_71    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
72. RCP_72    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
73. RCP_73    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
74. RCP_74    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
75. RCP_75    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
76. RCP_76    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
77. RCP_77    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
78. RCP_78    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
79. RCP_79    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
80. RCP_80    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
81. RCP_81    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
82. RCP_82    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
83. RCP_83    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
84. RCP_84    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
85. RCP_85    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
86. RCP_86    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
87. RCP_87    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
88. RCP_88    *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
```

```
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
89. RCP_89   *   .0   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
90. RCP_90   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
91. RCP_91   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
92. RCP_92   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
93. RCP_93   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
94. RCP_94   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
95. RCP_95   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
96. RCP_96   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
97. RCP_97   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
98. RCP_98   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
99. RCP_99   *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
  .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
100. RCP_100  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
101. RCP_101  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
102. RCP_102  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
103. RCP_103  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
104. RCP_104  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
105. RCP_105  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
106. RCP_106  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
107. RCP_107  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
108. RCP_108  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
109. RCP_109  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
110. RCP_110  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
111. RCP_111  *   .0   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
112. RCP_112  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
113. RCP_113  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
114. RCP_114  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
115. RCP_115  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
116. RCP_116  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
117. RCP_117  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
118. RCP_118  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
119. RCP_119  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
120. RCP_120  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
121. RCP_121  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
122. RCP_122  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
123. RCP_123  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
124. RCP_124  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
125. RCP_125  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
126. RCP_126  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
127. RCP_127  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
128. RCP_128  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
129. RCP_129  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
130. RCP_130  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
131. RCP_131  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
132. RCP_132  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
133. RCP_133  *   .0   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
134. RCP_134  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
135. RCP_135  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
136. RCP_136  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
137. RCP_137  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
138. RCP_138  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
139. RCP_139  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
140. RCP_140  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
141. RCP_141  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
142. RCP_142  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
143. RCP_143  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
144. RCP_144  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
145. RCP_145  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
146. RCP_146  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
147. RCP_147  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
148. RCP_148  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
149. RCP_149  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
150. RCP_150  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
151. RCP_151  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
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.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
152. RCP_152 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
153. RCP_153 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
154. RCP_154 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
155. RCP_155 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
156. RCP_156 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
157. RCP_157 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
158. RCP_158 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
159. RCP_159 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
160. RCP_160 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
161. RCP_161 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
162. RCP_162 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
163. RCP_163 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
164. RCP_164 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
165. RCP_165 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
166. RCP_166 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
167. RCP_167 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
168. RCP_168 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
169. RCP_169 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
170. RCP_170 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
171. RCP_171 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
172. RCP_172 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0

.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
173. RCP_173 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
174. RCP_174 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
175. RCP_175 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
176. RCP_176 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
177. RCP_177 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
178. RCP_178 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
179. RCP_179 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
180. RCP_180 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
181. RCP_181 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
182. RCP_182 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
183. RCP_183 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
184. RCP_184 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
185. RCP_185 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
186. RCP_186 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
187. RCP_187 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
188. RCP_188 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
189. RCP_189 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
190. RCP_190 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
191. RCP_191 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
192. RCP_192 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
193. RCP_193 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0

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.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
194. RCP_194  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
195. RCP_195  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
196. RCP_196  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
197. RCP_197  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
198. RCP_198  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
199. RCP_199  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
200. RCP_200  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
201. RCP_201  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
202. RCP_202  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
203. RCP_203  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
204. RCP_204  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
205. RCP_205  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
206. RCP_206  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
207. RCP_207  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
208. RCP_208  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
209. RCP_209  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
210. RCP_210  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
211. RCP_211  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
212. RCP_212  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
213. RCP_213  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
214. RCP_214  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
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.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
215. RCP_215  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
216. RCP_216  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
217. RCP_217  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
218. RCP_218  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
219. RCP_219  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
220. RCP_220  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
221. RCP_221  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
222. RCP_222  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
223. RCP_223  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
224. RCP_224  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
225. RCP_225  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
226. RCP_226  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
227. RCP_227  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
228. RCP_228  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
229. RCP_229  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
230. RCP_230  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
231. RCP_231  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
232. RCP_232  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
233. RCP_233  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
234. RCP_234  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
235. RCP_235  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
236. RCP_236  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
237. RCP_237  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
238. RCP_238  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
239. RCP_239  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
240. RCP_240  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
241. RCP_241  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
242. RCP_242  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
243. RCP_243  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
244. RCP_244  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
245. RCP_245  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
246. RCP_246  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
247. RCP_247  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
248. RCP_248  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
249. RCP_249  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
250. RCP_250  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
251. RCP_251  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
252. RCP_252  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
253. RCP_253  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
254. RCP_254  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
255. RCP_255  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
256. RCP_256  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
257. RCP_257  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
258. RCP_258  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
259. RCP_259  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
260. RCP_260  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
261. RCP_261  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
262. RCP_262  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
263. RCP_263  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
264. RCP_264  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
265. RCP_265  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
266. RCP_266  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
267. RCP_267  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
268. RCP_268  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
269. RCP_269  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
270. RCP_270  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
271. RCP_271  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
272. RCP_272  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
273. RCP_273  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
274. RCP_274  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
275. RCP_275  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
276. RCP_276  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
277. RCP_277  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
278. RCP_278 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
279. RCP_279 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
280. RCP_280 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
281. RCP_281 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
282. RCP_282 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
283. RCP_283 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
284. RCP_284 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
285. RCP_285 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
286. RCP_286 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
287. RCP_287 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
288. RCP_288 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
289. RCP_289 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
290. RCP_290 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
291. RCP_291 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
292. RCP_292 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
293. RCP_293 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
294. RCP_294 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
295. RCP_295 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
296. RCP_296 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
297. RCP_297 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
298. RCP_298 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
299. RCP_299  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
300. RCP_300  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
301. RCP_301  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
302. RCP_302  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
303. RCP_303  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
304. RCP_304  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
305. RCP_305  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
306. RCP_306  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
307. RCP_307  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
308. RCP_308  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
309. RCP_309  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
310. RCP_310  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
311. RCP_311  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
312. RCP_312  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
313. RCP_313  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
314. RCP_314  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
315. RCP_315  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
316. RCP_316  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
317. RCP_317  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
318. RCP_318  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
319. RCP_319  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
320. RCP_320  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
321. RCP_321  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
322. RCP_322  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
323. RCP_323  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
324. RCP_324  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
325. RCP_325  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
326. RCP_326  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
327. RCP_327  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
328. RCP_328  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
329. RCP_329  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
330. RCP_330  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
331. RCP_331  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
332. RCP_332  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
333. RCP_333  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
334. RCP_334  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
335. RCP_335  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
336. RCP_336  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
337. RCP_337  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
338. RCP_338  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
339. RCP_339  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
340. RCP_340  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
341. RCP_341  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
342. RCP_342  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
343. RCP_343  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
344. RCP_344  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
345. RCP_345  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
346. RCP_346  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
347. RCP_347  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
348. RCP_348  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
349. RCP_349  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
350. RCP_350  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
351. RCP_351  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
352. RCP_352  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
353. RCP_353  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
354. RCP_354  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
355. RCP_355  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
356. RCP_356  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
357. RCP_357  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
358. RCP_358  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
359. RCP_359  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
360. RCP_360  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
361. RCP_361  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
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.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
362. RCP_362 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
363. RCP_363 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
364. RCP_364 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
365. RCP_365 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
366. RCP_366 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
367. RCP_367 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
368. RCP_368 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
369. RCP_369 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
370. RCP_370 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
371. RCP_371 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
372. RCP_372 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
373. RCP_373 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
374. RCP_374 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
375. RCP_375 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
376. RCP_376 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
377. RCP_377 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
378. RCP_378 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
379. RCP_379 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
380. RCP_380 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
381. RCP_381 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0
382. RCP_382 * .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
383. RCP_383  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
384. RCP_384  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
385. RCP_385  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
386. RCP_386  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
387. RCP_387  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
388. RCP_388  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
389. RCP_389  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
390. RCP_390  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
391. RCP_391  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
392. RCP_392  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
393. RCP_393  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
394. RCP_394  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
395. RCP_395  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
396. RCP_396  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
397. RCP_397  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
398. RCP_398  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
399. RCP_399  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
400. RCP_400  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
401. RCP_401  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
402. RCP_402  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
403. RCP_403  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
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```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
404. RCP_404  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
405. RCP_405  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
406. RCP_406  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
407. RCP_407  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
408. RCP_408  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
409. RCP_409  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
410. RCP_410  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
411. RCP_411  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
412. RCP_412  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
413. RCP_413  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
414. RCP_414  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
415. RCP_415  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
416. RCP_416  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
417. RCP_417  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
418. RCP_418  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
419. RCP_419  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
420. RCP_420  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
421. RCP_421  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
422. RCP_422  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
423. RCP_423  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
424. RCP_424  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
425. RCP_425  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
426. RCP_426  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
427. RCP_427  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
428. RCP_428  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
429. RCP_429  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
430. RCP_430  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
431. RCP_431  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
432. RCP_432  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
433. RCP_433  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
434. RCP_434  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
435. RCP_435  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
436. RCP_436  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
437. RCP_437  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
438. RCP_438  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
439. RCP_439  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
440. RCP_440  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
441. RCP_441  *   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
.0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```