



Rommel Pabalinas <rommel.pabalinas@edcgov.us>

Piedmont Oak Estates

1 message

Jeffery Little <Jeffery.Little@sycamoreenv.com>
To: Rommel Pabalinas <rommel.pabalinas@edcgov.us>
Cc: "j854davies@att.net" <j854davies@att.net>

Thu, Sep 29, 2016 at 11:49 AM

Mel,

Per your request, we looked at the AQ/GHG analysis prepared previously to determine whether updates are needed based upon the current site plan.

The November 4th and 9th 2015 AQ letters evaluated:

- 63 clustered residential lots
- 41 custom residential lots
- 2 commercial lots

The current design, revised in March 2016 includes:

- 64 clustered residential lots
- 43 custom residential lots
- 1 commercial lot
- (also a 1 new sewer lift station lot)

The shift of one lot from commercial to residential does not result in changes to the AQ/GHG analysis.

Cordially,

Jeffery Little

Vice President

Sycamore Environmental Consultants, Inc.

6355 Riverside Blvd., Suite C

Sacramento, CA 95831

916/ 427-0703 main

ATTACHMENT 9

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SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.

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916/ 427-0703 Fax 916/ 427-2175

14 January 2016

Mr. Jim Davies
Piedmont Oak Estates, LLC
854 Diablo Road
Danville, CA 94526-2760

Phone: 925/ 855-8489

Subject: Piedmont Oak Estates Project Air Quality Analysis

Dear Mr. Davies:

This letter transmits the CalEEMod v. 2013.2.2 El Dorado-Mountain Counties Annual Emissions model for the Piedmont Oak Estates Project. The annual emissions model supplements our November 9, 2015 letter. The Piedmont Oak Estates Project does not exceed the Air Quality Management District's air quality thresholds of significance for daily or annual emissions.

The model reports that annual CO₂e construction emissions are 607.43 metric tons per year. The annual CO₂e operations emissions are 940.02 metric tons per year. The Piedmont Oaks Estates Project does not exceed the annual CO₂e emissions threshold of 1,100 metric tons per year.

Therefore, the California Supreme Court's opinion in the *Center for Biological Diversity v. Department of Fish & Wildlife*, 45 ELR 20226 (November 2015) regarding air quality analysis is not applicable to this project.

If you have any questions, please call.

Cordially,

Jeffery Little
Vice President

Attachment A. CalEEMod Annual Model Results.

Attachment A
CalEEMod Annual Emissions Report
for the
Piedmont Oak Estates Project

El Dorado County, CA

Piedmont Oaks
El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	20.00	1000sqft	0.46	20,000.00	0
Other Asphalt Surfaces	5.50	Acre	5.50	0.00	0
Single Family Housing	41.00	Dwelling Unit	7.00	73,800.00	117
User Defined Residential	63.00	Dwelling Unit	3.37	100,800.00	180

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	70
Climate Zone	1			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Clustered homes. Lot Acreage Based on current TM design (16Jan2013). Sq ft of used defined residential assumed to be 1,600.

Construction Phase - Demolition Phase Not needed, phase removed

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Demolition Phase Not needed, phase removed

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - No demo phase, worker trips put to zero.

Grading -

Woodstoves - No woodstoves or wood burning fireplaces. Gas fireplaces only. Default number of wood fireplaces added to default gas fireplace number for total fireplaces. No wood mass.

Land Use Change -

Sequestration -

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	22.55	41.00
tblFireplaces	NumberGas	34.65	63.00
tblFireplaces	NumberNoFireplace	4.10	0.00
tblFireplaces	NumberNoFireplace	6.30	0.00
tblFireplaces	NumberWood	14.35	0.00
tblFireplaces	NumberWood	22.05	0.00
tblLandUse	LandUseSquareFeet	239,580.00	0.00
tblLandUse	LandUseSquareFeet	0.00	100,800.00
tblLandUse	LotAcreage	13.31	7.00
tblLandUse	LotAcreage	0.00	3.37
tblProjectCharacteristics	OperationalYear	2014	2017
tblSequestration	NumberOfNewTrees	0.00	132.00
tblWoodstoves	NumberCatalytic	2.05	0.00
tblWoodstoves	NumberCatalytic	3.15	0.00
tblWoodstoves	NumberNoncatalytic	2.05	0.00
tblWoodstoves	NumberNoncatalytic	3.15	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

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					
2016	0.5140	4.4290	3.4966	4.7800e-003	0.2853	0.2686	0.5539	0.1210	0.2510	0.3720	0.0000	425.6061	425.6061	0.0953	0.0000	427.6062
2017	3.1678	1.6086	1.3800	2.0700e-003	0.0326	0.1024	0.1350	8.7700e-003	0.0960	0.1048	0.0000	179.0453	179.0453	0.0372	0.0000	179.8256
Total	3.6818	6.0376	4.8766	6.8500e-003	0.3179	0.3710	0.6889	0.1298	0.3470	0.4768	0.0000	604.6514	604.6514	0.1324	0.0000	607.4319

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					
2016	0.5140	4.4290	3.4966	4.7800e-003	0.2853	0.2686	0.5539	0.1210	0.2510	0.3720	0.0000	425.6057	425.6057	0.0953	0.0000	427.6058
2017	3.1678	1.6086	1.3800	2.0700e-003	0.0326	0.1024	0.1350	8.7700e-003	0.0960	0.1048	0.0000	179.0452	179.0452	0.0372	0.0000	179.8255
Total	3.6818	6.0376	4.8766	6.8500e-003	0.3179	0.3710	0.6889	0.1298	0.3470	0.4768	0.0000	604.6508	604.6508	0.1324	0.0000	607.4313

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

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	1.0889	9.0900e-003	0.7807	4.0000e-005		9.9500e-003	9.9500e-003		9.8900e-003	9.8900e-003	0.0000	83.1774	83.1774	2.8400e-003	1.5000e-003	83.7026
Energy	6.1600e-003	0.0538	0.0313	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003	0.0000	219.2290	219.2290	8.3200e-003	2.6000e-003	220.2093
Mobile	0.3737	0.8059	3.7071	7.8200e-003	0.5593	0.0100	0.5694	0.1498	9.2300e-003	0.1590	0.0000	592.3172	592.3172	0.0266	0.0000	592.8762
Waste						0.0000	0.0000		0.0000	0.0000	9.7131	0.0000	9.7131	0.5740	0.0000	21.7677
Water						0.0000	0.0000		0.0000	0.0000	1.9752	13.7335	15.7087	0.2035	4.9200e-003	21.5069
Total	1.4687	0.8688	4.5191	8.2000e-003	0.5593	0.0243	0.5836	0.1498	0.0234	0.1732	11.6883	908.4571	920.1454	0.8153	9.0200e-003	940.0627

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0889	9.0900e-003	0.7807	4.0000e-005		9.9500e-003	9.9500e-003		9.8900e-003	9.8900e-003	0.0000	83.1774	83.1774	2.8400e-003	1.5000e-003	83.7026
Energy	6.1600e-003	0.0538	0.0313	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003	0.0000	219.2290	219.2290	8.3200e-003	2.6000e-003	220.2093
Mobile	0.3737	0.8059	3.7071	7.8200e-003	0.5593	0.0100	0.5694	0.1498	9.2300e-003	0.1590	0.0000	592.3172	592.3172	0.0266	0.0000	592.8762
Waste						0.0000	0.0000		0.0000	0.0000	9.7131	0.0000	9.7131	0.5740	0.0000	21.7677
Water						0.0000	0.0000		0.0000	0.0000	1.9752	13.7335	15.7087	0.2035	4.9100e-003	21.5038
Total	1.4687	0.8688	4.5191	8.2000e-003	0.5593	0.0243	0.5836	0.1498	0.0234	0.1732	11.6883	908.4571	920.1454	0.8153	9.0100e-003	940.0595

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	96.8880
Vegetation Land Change	- 1,879.6488
Total	- 1,782.7608

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2016	2/11/2016	5	10	
2	Grading	Grading	2/12/2016	3/24/2016	5	30	
3	Building Construction	Building Construction	3/25/2016	5/18/2017	5	300	
4	Paving	Paving	5/19/2017	6/15/2017	5	20	
5	Architectural Coating	Architectural Coating	6/16/2017	7/13/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 353,565; Residential Outdoor: 117,855; Non-Residential Indoor: 30,000; Non-Residential Outdoor: 10,000 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	67.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0254	0.2732	0.2055	2.0000e-004		0.0147	0.0147		0.0135	0.0135	0.0000	18.4386	18.4386	5.5600e-003	0.0000	18.5554
Total	0.0254	0.2732	0.2055	2.0000e-004	0.0903	0.0147	0.1050	0.0497	0.0135	0.0632	0.0000	18.4386	18.4386	5.5600e-003	0.0000	18.5554

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	4.2000e-004	4.3800e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.1000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6431	0.6431	4.0000e-005	0.0000	0.6438
Total	3.5000e-004	4.2000e-004	4.3800e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.1000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6431	0.6431	4.0000e-005	0.0000	0.6438

3.2 Site Preparation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0254	0.2732	0.2055	2.0000e-004		0.0147	0.0147		0.0135	0.0135	0.0000	18.4385	18.4385	5.5600e-003	0.0000	18.5553
Total	0.0254	0.2732	0.2055	2.0000e-004	0.0903	0.0147	0.1050	0.0497	0.0135	0.0632	0.0000	18.4385	18.4385	5.5600e-003	0.0000	18.5553

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	4.2000e-004	4.3800e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.1000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6431	0.6431	4.0000e-005	0.0000	0.6438
Total	3.5000e-004	4.2000e-004	4.3800e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.1000e-004	1.9000e-004	1.0000e-005	1.9000e-004	0.0000	0.6431	0.6431	4.0000e-005	0.0000	0.6438

3.3 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	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2936	87.2936	0.0263	0.0000	87.8465
Total	0.0972	1.1222	0.7371	9.3000e-004	0.1301	0.0538	0.1839	0.0540	0.0495	0.1034	0.0000	87.2936	87.2936	0.0263	0.0000	87.8465

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1600e-003	1.4100e-003	0.0146	3.0000e-005	2.3600e-003	2.0000e-005	2.3800e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.1436	2.1436	1.2000e-004	0.0000	2.1461
Total	1.1600e-003	1.4100e-003	0.0146	3.0000e-005	2.3600e-003	2.0000e-005	2.3800e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.1436	2.1436	1.2000e-004	0.0000	2.1461

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2935	87.2935	0.0263	0.0000	87.8464
Total	0.0972	1.1222	0.7371	9.3000e-004	0.1301	0.0538	0.1839	0.0540	0.0495	0.1034	0.0000	87.2935	87.2935	0.0263	0.0000	87.8464

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1600e-003	1.4100e-003	0.0146	3.0000e-005	2.3600e-003	2.0000e-005	2.3800e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.1436	2.1436	1.2000e-004	0.0000	2.1461
Total	1.1600e-003	1.4100e-003	0.0146	3.0000e-005	2.3600e-003	2.0000e-005	2.3800e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	2.1436	2.1436	1.2000e-004	0.0000	2.1461

3.4 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	tons/yr										MT/yr					
Off-Road	0.3423	2.8649	1.8599	2.6900e-003		0.1977	0.1977		0.1858	0.1858	0.0000	243.3644	243.3644	0.0604	0.0000	244.6319
Total	0.3423	2.8649	1.8599	2.6900e-003		0.1977	0.1977		0.1858	0.1858	0.0000	243.3644	243.3644	0.0604	0.0000	244.6319

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0214	0.1352	0.3475	2.9000e-004	8.7700e-003	1.9600e-003	0.0107	2.5000e-003	1.8000e-003	4.3000e-003	0.0000	25.6089	25.6089	2.1000e-004	0.0000	25.6134
Worker	0.0262	0.0317	0.3277	6.4000e-004	0.0530	4.4000e-004	0.0535	0.0141	4.0000e-004	0.0145	0.0000	48.1139	48.1139	2.6300e-003	0.0000	48.1692
Total	0.0476	0.1669	0.6751	9.3000e-004	0.0618	2.4000e-003	0.0642	0.0166	2.2000e-003	0.0188	0.0000	73.7229	73.7229	2.8400e-003	0.0000	73.7825

3.4 Building Construction - 2016

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	0.3423	2.8649	1.8599	2.6900e-003		0.1977	0.1977		0.1858	0.1858	0.0000	243.3641	243.3641	0.0604	0.0000	244.6316
Total	0.3423	2.8649	1.8599	2.6900e-003		0.1977	0.1977		0.1858	0.1858	0.0000	243.3641	243.3641	0.0604	0.0000	244.6316

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0214	0.1352	0.3475	2.9000e-004	8.7700e-003	1.9600e-003	0.0107	2.5000e-003	1.8000e-003	4.3000e-003	0.0000	25.6089	25.6089	2.1000e-004	0.0000	25.6134
Worker	0.0262	0.0317	0.3277	6.4000e-004	0.0530	4.4000e-004	0.0535	0.0141	4.0000e-004	0.0145	0.0000	48.1139	48.1139	2.6300e-003	0.0000	48.1692
Total	0.0476	0.1669	0.6751	9.3000e-004	0.0618	2.4000e-003	0.0642	0.0166	2.2000e-003	0.0188	0.0000	73.7229	73.7229	2.8400e-003	0.0000	73.7825

3.4 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	tons/yr										MT/yr					
Off-Road	0.1536	1.3071	0.8974	1.3300e-003		0.0882	0.0882		0.0828	0.0828	0.0000	118.5422	118.5422	0.0292	0.0000	119.1548
Total	0.1536	1.3071	0.8974	1.3300e-003		0.0882	0.0882		0.0828	0.0828	0.0000	118.5422	118.5422	0.0292	0.0000	119.1548

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.4900e-003	0.0617	0.1628	1.4000e-004	4.3300e-003	8.4000e-004	5.1700e-003	1.2400e-003	7.7000e-004	2.0000e-003	0.0000	12.5767	12.5767	1.0000e-004	0.0000	12.5787
Worker	0.0112	0.0138	0.1418	3.2000e-004	0.0261	2.1000e-004	0.0263	6.9500e-003	1.9000e-004	7.1400e-003	0.0000	22.7584	22.7584	1.1700e-003	0.0000	22.7831
Total	0.0207	0.0755	0.3046	4.6000e-004	0.0304	1.0500e-003	0.0315	8.1900e-003	9.6000e-004	9.1400e-003	0.0000	35.3351	35.3351	1.2700e-003	0.0000	35.3618

3.4 Building Construction - 2017

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	0.1536	1.3071	0.8974	1.3300e-003		0.0882	0.0882		0.0828	0.0828	0.0000	118.5420	118.5420	0.0292	0.0000	119.1547
Total	0.1536	1.3071	0.8974	1.3300e-003		0.0882	0.0882		0.0828	0.0828	0.0000	118.5420	118.5420	0.0292	0.0000	119.1547

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.4900e-003	0.0617	0.1628	1.4000e-004	4.3300e-003	8.4000e-004	5.1700e-003	1.2400e-003	7.7000e-004	2.0000e-003	0.0000	12.5767	12.5767	1.0000e-004	0.0000	12.5787
Worker	0.0112	0.0138	0.1418	3.2000e-004	0.0261	2.1000e-004	0.0263	6.9500e-003	1.9000e-004	7.1400e-003	0.0000	22.7584	22.7584	1.1700e-003	0.0000	22.7831
Total	0.0207	0.0755	0.3046	4.6000e-004	0.0304	1.0500e-003	0.0315	8.1900e-003	9.6000e-004	9.1400e-003	0.0000	35.3351	35.3351	1.2700e-003	0.0000	35.3618

3.5 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	tons/yr										MT/yr					
Off-Road	0.0191	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8266
Paving	7.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0263	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8266

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	6.3000e-004	6.4200e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0293	1.0293	5.0000e-005	0.0000	1.0304
Total	5.1000e-004	6.3000e-004	6.4200e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0293	1.0293	5.0000e-005	0.0000	1.0304

3.5 Paving - 2017

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	0.0191	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8265
Paving	7.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0263	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8265

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	6.3000e-004	6.4200e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0293	1.0293	5.0000e-005	0.0000	1.0304
Total	5.1000e-004	6.3000e-004	6.4200e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0293	1.0293	5.0000e-005	0.0000	1.0304

3.6 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	tons/yr										MT/yr					
Archit. Coating	2.9630					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total	2.9664	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	5.4000e-004	5.5600e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8921	0.8921	5.0000e-005	0.0000	0.8931
Total	4.4000e-004	5.4000e-004	5.5600e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8921	0.8921	5.0000e-005	0.0000	0.8931

3.6 Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.9630					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total	2.9664	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	5.4000e-004	5.5600e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8921	0.8921	5.0000e-005	0.0000	0.8931
Total	4.4000e-004	5.4000e-004	5.5600e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8921	0.8921	5.0000e-005	0.0000	0.8931

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3737	0.8059	3.7071	7.8200e-003	0.5593	0.0100	0.5694	0.1498	9.2300e-003	0.1590	0.0000	592.3172	592.3172	0.0266	0.0000	592.8762
Unmitigated	0.3737	0.8059	3.7071	7.8200e-003	0.5593	0.0100	0.5694	0.1498	9.2300e-003	0.1590	0.0000	592.3172	592.3172	0.0266	0.0000	592.8762

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	220.20	47.40	19.60	398,747	398,747
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	392.37	413.28	359.57	1,119,095	1,119,095
User Defined Residential	0.00	0.00	0.00		
Total	612.57	460.68	379.17	1,517,842	1,517,842

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
User Defined Residential	10.80	7.30	7.50	42.60	21.00	36.40	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.456704	0.078514	0.189610	0.161545	0.075051	0.010626	0.010499	0.000987	0.001369	0.000777	0.008668	0.000749	0.004900

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	158.2724	158.2724	7.1600e-003	1.4800e-003	158.8817
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	158.2724	158.2724	7.1600e-003	1.4800e-003	158.8817
Natural Gas Mitigated	6.1600e-003	0.0538	0.0313	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003	0.0000	60.9566	60.9566	1.1700e-003	1.1200e-003	61.3276
Natural Gas Unmitigated	6.1600e-003	0.0538	0.0313	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003	0.0000	60.9566	60.9566	1.1700e-003	1.1200e-003	61.3276

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	731083	3.9400e-003	0.0337	0.0143	2.2000e-004		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003	0.0000	39.0134	39.0134	7.5000e-004	7.2000e-004	39.2508
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	411200	2.2200e-003	0.0202	0.0169	1.2000e-004		1.5300e-003	1.5300e-003		1.5300e-003	1.5300e-003	0.0000	21.9432	21.9432	4.2000e-004	4.0000e-004	22.0767
Total		6.1600e-003	0.0539	0.0313	3.4000e-004		4.2500e-003	4.2500e-003		4.2500e-003	4.2500e-003	0.0000	60.9566	60.9566	1.1700e-003	1.1200e-003	61.3276

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	731083	3.9400e-003	0.0337	0.0143	2.2000e-004		2.7200e-003	2.7200e-003		2.7200e-003	2.7200e-003	0.0000	39.0134	39.0134	7.5000e-004	7.2000e-004	39.2508
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	411200	2.2200e-003	0.0202	0.0169	1.2000e-004		1.5300e-003	1.5300e-003		1.5300e-003	1.5300e-003	0.0000	21.9432	21.9432	4.2000e-004	4.0000e-004	22.0767
Total		6.1600e-003	0.0539	0.0313	3.4000e-004		4.2500e-003	4.2500e-003		4.2500e-003	4.2500e-003	0.0000	60.9566	60.9566	1.1700e-003	1.1200e-003	61.3276

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	247000	71.8551	3.2500e-003	6.7000e-004	72.1318
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	297057	86.4173	3.9100e-003	8.1000e-004	86.7499
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000
Total		158.2724	7.1600e-003	1.4800e-003	158.8817

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	247000	71.8551	3.2500e-003	6.7000e-004	72.1318
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	297057	86.4173	3.9100e-003	8.1000e-004	86.7499
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000
Total		158.2724	7.1600e-003	1.4800e-003	158.8817

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0889	9.0900e-003	0.7807	4.0000e-005		9.9500e-003	9.9500e-003		9.8900e-003	9.8900e-003	0.0000	83.1774	83.1774	2.8400e-003	1.5000e-003	83.7026
Unmitigated	1.0889	9.0900e-003	0.7807	4.0000e-005		9.9500e-003	9.9500e-003		9.8900e-003	9.8900e-003	0.0000	83.1774	83.1774	2.8400e-003	1.5000e-003	83.7026

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	0.2963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	8.2800e-003	0.0000	4.5000e-004	0.0000		5.7200e-003	5.7200e-003		5.6600e-003	5.6600e-003	0.0000	81.9156	81.9156	1.5700e-003	1.5000e-003	82.4141
Landscaping	0.0243	9.0900e-003	0.7802	4.0000e-005		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003	0.0000	1.2619	1.2619	1.2700e-003	0.0000	1.2885
Total	1.0889	9.0900e-003	0.7807	4.0000e-005		9.9600e-003	9.9600e-003		9.9000e-003	9.9000e-003	0.0000	83.1774	83.1774	2.8400e-003	1.5000e-003	83.7026

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	8.2800e-003	0.0000	4.5000e-004	0.0000		5.7200e-003	5.7200e-003		5.6600e-003	5.6600e-003	0.0000	81.9156	81.9156	1.5700e-003	1.5000e-003	82.4141
Landscaping	0.0243	9.0900e-003	0.7802	4.0000e-005		4.2400e-003	4.2400e-003		4.2400e-003	4.2400e-003	0.0000	1.2619	1.2619	1.2700e-003	0.0000	1.2885
Total	1.0889	9.0900e-003	0.7807	4.0000e-005		9.9600e-003	9.9600e-003		9.9000e-003	9.9000e-003	0.0000	83.1774	83.1774	2.8400e-003	1.5000e-003	83.7026

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	15.7087	0.2035	4.9100e-003	21.5038
Unmitigated	15.7087	0.2035	4.9200e-003	21.5069

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	3.55467 / 2.17867	8.9415	0.1162	2.8100e-003	12.2519
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.67132 / 1.68409	6.7672	0.0873	2.1100e-003	9.2551
User Defined Residential	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		15.7087	0.2035	4.9200e-003	21.5069

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	3.55467 / 2.17867	8.9415	0.1162	2.8000e-003	12.2501
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.67132 / 1.68409	6.7672	0.0873	2.1100e-003	9.2537
User Defined Residential	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		15.7087	0.2035	4.9100e-003	21.5038

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9.7131	0.5740	0.0000	21.7677
Unmitigated	9.7131	0.5740	0.0000	21.7677

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	18.6	3.7756	0.2231	0.0000	8.4614
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	29.25	5.9375	0.3509	0.0000	13.3063
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000
Total		9.7131	0.5740	0.0000	21.7677

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	18.6	3.7756	0.2231	0.0000	8.4614
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	29.25	5.9375	0.3509	0.0000	13.3063
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000
Total		9.7131	0.5740	0.0000	21.7677

9.0 Operational Offroad

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

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	- 1,782.7608	0.0000	0.0000	- 1,782.7608

10.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	2.49 / 0.71	-7.6718	0.0000	0.0000	-7.6718
Scrub	1.23 / 0.34	-12.7270	0.0000	0.0000	-12.7270
Trees	23.17 / 6.42	- 1,859.2500	0.0000	0.0000	- 1,859.2500
Total		- 1,879.6488	0.0000	0.0000	- 1,879.6488

10.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Mixed Hardwood	132	96.8880	0.0000	0.0000	96.8880
Total		96.8880	0.0000	0.0000	96.8880



SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.

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4 November 2015

Mr. Jim Davies
Piedmont Oak Estates, LLC
854 Diablo Road
Danville, CA 94526-2760

Phone: 925/ 855-8489

Fax: 925/ 943-7409

Subject: UPDATED CEQA Evaluation of Potential Air Quality Impacts for the Piedmont Oak Estates Project, El Dorado County, CA.

Dear Mr. Davies:

As requested, Sycamore Environmental re-evaluated potential air quality impacts resulting from planned development of APNs 051-550-40, -47, -48, and -51 totaling approximately 25.89 acres. The re-evaluation is based on a request from El Dorado County to conform the square foot of commercial used in the air –quality analysis to that presented in the 2014 *Traffic Impact Analysis for Piedmont Oak Estates* (KDAnderson & Associates, Inc.)

The original 2 May 2013 air quality evaluation included the following land use and operational assumptions:

- **Original 2 May 2013 land use and operational assumptions**
 - 65 clustered residential lots with two-story, detached living units with 1,600 sq ft of living space;
 - 43 custom single-family units;
 - 1 14,000-sq-ft hardware store on commercial Lot 1; and
 - 1 2,500-sq-ft 24 hr convenience store on commercial Lot 2.
 - The model also assumed a mix of open hearth wood burning fireplaces and natural gas fireplaces for the 65 clustered units and 43 custom units.

The November 2015 re-evaluation of the Projects potential air quality impacts includes the following revised land use and operational assumptions based on the 2014 Traffic Impact Analysis and information from the Project applicant.

- **Revised 4 November 2015 land use and operational assumptions**
 - 63 clustered residential lots with two-story, detached living units with 1,600 sq ft of living space;

- o 41 custom single-family units;
- o 20,000-sq-ft business professional office on commercial Lots 1 and 2; and
- o Only natural gas fireplaces will be used. No open hearth wood burning stoves or fireplaces are planned.

The original 2 May 2013 air quality evaluation was conducted using CalEEMod v2011.1.1. The revised 4 November 2015 air quality evaluation was conducted using the most recent version of CalEEMod (v2013.2.2).

The results of revised 4 November 2015 the air quality modeling with a comparison to original 2 May 2013 modeling results and the AQMD's thresholds of significance are in the table below. Based on the CalEEMod modeling, operation of the proposed development would not have significant impacts resulting from ROG and NO_x emissions.

Daily ROG and NO_x emissions during project operation, including emissions from future build-out.

Source	Winter ¹				Summer ¹			
	ROG	NO _x	ROG	NO _x	ROG	NO _x	ROG	NO _x
	Original 2 May 2013	Original 2 May 2013	Revised 4 November 2015	Revised 4 November 2015	Original 2 May 2013	Original 2 May 2013	Revised 4 November 2015	Revised 4 November 2015
Operational emissions	77.73	14.43	8.73	5.59	78.93	13.32	8.90	4.97
Significance threshold	82	82	82	82	82	82	82	82
Significant emissions	NA	NA	NA	NA	NA	NA	NA	NA

¹Units for all values are pounds per day.

The reduction on ROG and NO_x values between the original and revised model output is attributable to the removal of all open hearth wood burning stoves and fireplaces from the model. The conclusions of the original 2 May 2013 air quality evaluation remain valid. The revised land use and operational assumptions result in a reduction of operational ROG and NO_x emissions. Thank you for the opportunity of evaluating your project. If you have any questions, please call.

Yours truly,



Jeffery Little
Vice President

Attachment A. 2015 Revised CalEEMod Results.

Attachment A
2015 Revised CalEEMod Emissions Reports
for the
Piedmont Oak Estates Project

El Dorado County, CA

Piedmont Oaks
El Dorado-Mountain County County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	20.00	1000sqft	0.46	20,000.00	0
Other Asphalt Surfaces	5.50	Acre	5.50	0.00	0
Single Family Housing	41.00	Dwelling Unit	7.00	73,800.00	117
User Defined Residential	63.00	Dwelling Unit	3.37	100,800.00	180

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	70
Climate Zone	1			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Clustered homes. Lot Acreage Based on current TM design (16Jan2013). Sq ft of used defined residential assumed to be 1,600.

Construction Phase - Demolition Phase Not needed, phase removed

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Demolition Phase Not needed, phase removed

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - No demo phase, worker trips put to zero.

Grading -

Woodstoves - No woodstoves or wood burning fireplaces. Gas fireplaces only. Default number of wood fireplaces added to default gas fireplace number for total fireplaces. No wood mass.

Land Use Change -

Sequestration -

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	22.55	41.00
tblFireplaces	NumberGas	34.65	63.00
tblFireplaces	NumberNoFireplace	4.10	0.00
tblFireplaces	NumberNoFireplace	6.30	0.00
tblFireplaces	NumberWood	14.35	0.00
tblFireplaces	NumberWood	22.05	0.00
tblLandUse	LandUseSquareFeet	239,580.00	0.00
tblLandUse	LandUseSquareFeet	0.00	100,800.00
tblLandUse	LotAcreage	13.31	7.00
tblLandUse	LotAcreage	0.00	3.37
tblProjectCharacteristics	OperationalYear	2014	2017
tblSequestration	NumberOfNewTrees	0.00	132.00
tblWoodstoves	NumberCatalytic	2.05	0.00
tblWoodstoves	NumberCatalytic	3.15	0.00
tblWoodstoves	NumberNoncatalytic	2.05	0.00
tblWoodstoves	NumberNoncatalytic	3.15	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.5614	74.9155	50.1371	0.0636	18.2141	3.5856	21.1540	9.9699	3.2987	12.6746	0.0000	6,568.8184	6,568.8184	1.9436	0.0000	6,609.6340
2017	296.6824	27.9724	24.8766	0.0359	0.6411	1.8025	2.4436	0.1718	1.6925	1.8643	0.0000	3,413.3204	3,413.3204	0.7048	0.0000	3,428.1205
Total	303.2438	102.8879	75.0137	0.0995	18.8552	5.3880	23.5976	10.1417	4.9912	14.5389	0.0000	9,982.1388	9,982.1388	2.6484	0.0000	10,037.7545

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	6.5614	74.9155	50.1371	0.0636	18.2141	3.5856	21.1540	9.9699	3.2987	12.6746	0.0000	6,568.8184	6,568.8184	1.9436	0.0000	6,609.6340
2017	296.6824	27.9724	24.8766	0.0359	0.6411	1.8025	2.4436	0.1718	1.6925	1.8643	0.0000	3,413.3204	3,413.3204	0.7048	0.0000	3,428.1205
Total	303.2438	102.8879	75.0137	0.0995	18.8552	5.3880	23.5976	10.1417	4.9912	14.5389	0.0000	9,982.1388	9,982.1388	2.6484	0.0000	10,037.7545

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371
Energy	0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223
Mobile	2.4384	5.1920	24.1970	0.0476	3.6112	0.0624	3.6736	0.9637	0.0574	1.0211		3,971.4502	3,971.4502	0.1821		3,975.2734
Total	8.7322	5.5881	33.0486	0.0499	3.6112	0.2723	3.8835	0.9637	0.2658	1.2295	0.0000	6,557.4398	6,557.4398	0.2468	0.0471	6,577.2327

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371
Energy	0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223
Mobile	2.4384	5.1920	24.1970	0.0476	3.6112	0.0624	3.6736	0.9637	0.0574	1.0211		3,971.4502	3,971.4502	0.1821		3,975.2734
Total	8.7322	5.5881	33.0486	0.0499	3.6112	0.2723	3.8835	0.9637	0.2658	1.2295	0.0000	6,557.4398	6,557.4398	0.2468	0.0471	6,577.2327

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2016	2/11/2016	5	10	
2	Grading	Grading	2/12/2016	3/24/2016	5	30	
3	Building Construction	Building Construction	3/25/2016	5/18/2017	5	300	
4	Paving	Paving	5/19/2017	6/15/2017	5	20	
5	Architectural Coating	Architectural Coating	6/16/2017	7/13/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 353,565; Residential Outdoor: 117,855; Non-Residential Indoor: 30,000; Non-Residential Outdoor: 10,000 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	67.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	5.0771	54.6323	41.1053	0.0391	18.0663	2.9387	21.0049	9.9307	2.7036	12.6343		4,065.0053	4,065.0053	1.2262		4,090.7544

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0737	0.0916	0.8997	1.6800e-003	0.1479	1.1800e-003	0.1491	0.0392	1.0800e-003	0.0403		138.4539	138.4539	7.7500e-003		138.6167
Total	0.0737	0.0916	0.8997	1.6800e-003	0.1479	1.1800e-003	0.1491	0.0392	1.0800e-003	0.0403		138.4539	138.4539	7.7500e-003		138.6167

3.2 Site Preparation - 2016

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0737	0.0916	0.8997	1.6800e-003	0.1479	1.1800e-003	0.1491	0.0392	1.0800e-003	0.0403		138.4539	138.4539	7.7500e-003			138.6167
Total	0.0737	0.0916	0.8997	1.6800e-003	0.1479	1.1800e-003	0.1491	0.0392	1.0800e-003	0.0403		138.4539	138.4539	7.7500e-003			138.6167

3.3 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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	6.4795	74.8137	49.1374	0.0617	8.6733	3.5842	12.2576	3.5965	3.2975	6.8940		6,414.9807	6,414.9807	1.9350		6,455.6154

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0819	0.1017	0.9997	1.8700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2000e-003	0.0448		153.8377	153.8377	8.6100e-003		154.0186
Total	0.0819	0.1017	0.9997	1.8700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2000e-003	0.0448		153.8377	153.8377	8.6100e-003		154.0186

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	6.4795	74.8137	49.1374	0.0617	8.6733	3.5842	12.2576	3.5965	3.2975	6.8940	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0819	0.1017	0.9997	1.8700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2000e-003	0.0448		153.8377	153.8377	8.6100e-003		154.0186
Total	0.0819	0.1017	0.9997	1.8700e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2000e-003	0.0448		153.8377	153.8377	8.6100e-003		154.0186

3.4 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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2381	1.3651	4.0055	2.8400e-003	0.0905	0.0197	0.1102	0.0257	0.0181	0.0438		279.4125	279.4125	2.3600e-003		279.4621
Worker	0.2745	0.3408	3.3489	6.2600e-003	0.5504	4.4000e-003	0.5548	0.1460	4.0200e-003	0.1500		515.3563	515.3563	0.0289		515.9622
Total	0.5126	1.7059	7.3544	9.1000e-003	0.6409	0.0241	0.6650	0.1717	0.0221	0.1938		794.7688	794.7688	0.0312		795.4243

3.4 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2381	1.3651	4.0055	2.8400e-003	0.0905	0.0197	0.1102	0.0257	0.0181	0.0438		279.4125	279.4125	2.3600e-003		279.4621
Worker	0.2745	0.3408	3.3489	6.2600e-003	0.5504	4.4000e-003	0.5548	0.1460	4.0200e-003	0.1500		515.3563	515.3563	0.0289		515.9622
Total	0.5126	1.7059	7.3544	9.1000e-003	0.6409	0.0241	0.6650	0.1717	0.0221	0.1938		794.7688	794.7688	0.0312		795.4243

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2135	1.2647	3.8169	2.8800e-003	0.0907	0.0171	0.1078	0.0258	0.0157	0.0415		278.6145	278.6145	2.2300e-003		278.6614
Worker	0.2379	0.3021	2.9305	6.2600e-003	0.5504	4.2100e-003	0.5546	0.1460	3.8700e-003	0.1499		494.9006	494.9006	0.0262		495.4499
Total	0.4514	1.5668	6.7475	9.1400e-003	0.6411	0.0213	0.6624	0.1718	0.0196	0.1913		773.5151	773.5151	0.0284		774.1113

3.4 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2135	1.2647	3.8169	2.8800e-003	0.0907	0.0171	0.1078	0.0258	0.0157	0.0415		278.6145	278.6145	2.2300e-003		278.6614
Worker	0.2379	0.3021	2.9305	6.2600e-003	0.5504	4.2100e-003	0.5546	0.1460	3.8700e-003	0.1499		494.9006	494.9006	0.0262		495.4499
Total	0.4514	1.5668	6.7475	9.1400e-003	0.6411	0.0213	0.6624	0.1718	0.0196	0.1913		773.5151	773.5151	0.0284		774.1113

3.5 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	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.6279	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0533	0.0676	0.6561	1.4000e-003	0.1232	9.4000e-004	0.1242	0.0327	8.7000e-004	0.0336		110.7987	110.7987	5.8600e-003		110.9216
Total	0.0533	0.0676	0.6561	1.4000e-003	0.1232	9.4000e-004	0.1242	0.0327	8.7000e-004	0.0336		110.7987	110.7987	5.8600e-003		110.9216

3.5 Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.6279	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0533	0.0676	0.6561	1.4000e-003	0.1232	9.4000e-004	0.1242	0.0327	8.7000e-004	0.0336		110.7987	110.7987	5.8600e-003		110.9216
Total	0.0533	0.0676	0.6561	1.4000e-003	0.1232	9.4000e-004	0.1242	0.0327	8.7000e-004	0.0336		110.7987	110.7987	5.8600e-003		110.9216

3.6 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	296.3040					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	296.6363	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0462	0.0586	0.5686	1.2100e-003	0.1068	8.2000e-004	0.1076	0.0283	7.5000e-004	0.0291		96.0255	96.0255	5.0700e-003		96.1321
Total	0.0462	0.0586	0.5686	1.2100e-003	0.1068	8.2000e-004	0.1076	0.0283	7.5000e-004	0.0291		96.0255	96.0255	5.0700e-003		96.1321

3.6 Architectural Coating - 2017

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	296.3040					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	296.6363	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0462	0.0586	0.5686	1.2100e-003	0.1068	8.2000e-004	0.1076	0.0283	7.5000e-004	0.0291		96.0255	96.0255	5.0700e-003		96.1321
Total	0.0462	0.0586	0.5686	1.2100e-003	0.1068	8.2000e-004	0.1076	0.0283	7.5000e-004	0.0291		96.0255	96.0255	5.0700e-003		96.1321

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	2.4384	5.1920	24.1970	0.0476	3.6112	0.0624	3.6736	0.9637	0.0574	1.0211		3,971.4502	3,971.4502	0.1821		3,975.2734
Mitigated	2.4384	5.1920	24.1970	0.0476	3.6112	0.0624	3.6736	0.9637	0.0574	1.0211		3,971.4502	3,971.4502	0.1821		3,975.2734

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	220.20	47.40	19.60	398,747	398,747
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	392.37	413.28	359.57	1,119,095	1,119,095
User Defined Residential	0.00	0.00	0.00		
Total	612.57	460.68	379.17	1,517,842	1,517,842

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
User Defined Residential	10.80	7.30	7.50	42.60	21.00	36.40	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.456704	0.078514	0.189610	0.161545	0.075051	0.010626	0.010499	0.000987	0.001369	0.000777	0.008668	0.000749	0.004900

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223
NaturalGas Unmitigated	0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2002.97	0.0216	0.1846	0.0786	1.1800e-003		0.0149	0.0149		0.0149	0.0149		235.6433	235.6433	4.5200e-003	4.3200e-003	237.0774
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1126.58	0.0122	0.1105	0.0928	6.6000e-004		8.3900e-003	8.3900e-003		8.3900e-003	8.3900e-003		132.5383	132.5383	2.5400e-003	2.4300e-003	133.3449
Total		0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.00297	0.0216	0.1846	0.0786	1.1800e-003		0.0149	0.0149		0.0149	0.0149		235.6433	235.6433	4.5200e-003	4.3200e-003	237.0774
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.12658	0.0122	0.1105	0.0928	6.6000e-004		8.3900e-003	8.3900e-003		8.3900e-003	8.3900e-003		132.5383	132.5383	2.5400e-003	2.4300e-003	133.3449
Total		0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223

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					
Unmitigated	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371
Mitigated	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2019	1.0000e-005	0.0110	0.0000		0.1395	0.1395		0.1380	0.1380	0.0000	2,202.3529	2,202.3529	0.0422	0.0404	2,215.7561
Landscaping	0.2701	0.1011	8.6692	4.5000e-004		0.0471	0.0471		0.0471	0.0471		15.4550	15.4550	0.0155		15.7810
Total	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2019	1.0000e-005	0.0110	0.0000		0.1395	0.1395		0.1380	0.1380	0.0000	2,202.3529	2,202.3529	0.0422	0.0404	2,215.7561
Landscaping	0.2701	0.1011	8.6692	4.5000e-004		0.0471	0.0471		0.0471	0.0471		15.4550	15.4550	0.0155		15.7810
Total	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Piedmont Oaks
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	20.00	1000sqft	0.46	20,000.00	0
Other Asphalt Surfaces	5.50	Acre	5.50	0.00	0
Single Family Housing	41.00	Dwelling Unit	7.00	73,800.00	117
User Defined Residential	63.00	Dwelling Unit	3.37	100,800.00	180

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	70
Climate Zone	1			Operational Year	2017
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Clustered homes. Lot Acreage Based on current TM design (16Jan2013). Sq ft of used defined residential assumed to be 1,600.

Construction Phase - Demolition Phase Not needed, phase removed

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Demolition Phase Not needed, phase removed

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - No demo phase, worker trips put to zero.

Grading -

Woodstoves - No woodstoves or wood burning fireplaces. Gas fireplaces only. Default number of wood fireplaces added to default gas fireplace number for total fireplaces. No wood mass.

Land Use Change -

Sequestration -

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	22.55	41.00
tblFireplaces	NumberGas	34.65	63.00
tblFireplaces	NumberNoFireplace	4.10	0.00
tblFireplaces	NumberNoFireplace	6.30	0.00
tblFireplaces	NumberWood	14.35	0.00
tblFireplaces	NumberWood	22.05	0.00
tblLandUse	LandUseSquareFeet	239,580.00	0.00
tblLandUse	LandUseSquareFeet	0.00	100,800.00
tblLandUse	LotAcreage	13.31	7.00
tblLandUse	LotAcreage	0.00	3.37
tblProjectCharacteristics	OperationalYear	2014	2017
tblSequestration	NumberOfNewTrees	0.00	132.00
tblWoodstoves	NumberCatalytic	2.05	0.00
tblWoodstoves	NumberCatalytic	3.15	0.00
tblWoodstoves	NumberNoncatalytic	2.05	0.00
tblWoodstoves	NumberNoncatalytic	3.15	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.5690	74.8957	50.1999	0.0638	18.2141	3.5856	21.1540	9.9699	3.2987	12.6746	0.0000	6,587.5190	6,587.5190	1.9436	0.0000	6,628.3345
2017	296.6874	27.8176	23.9260	0.0367	0.6411	1.8022	2.4433	0.1718	1.6922	1.8640	0.0000	3,476.1181	3,476.1181	0.7048	0.0000	3,490.9182
Total	303.2564	102.7133	74.1259	0.1005	18.8552	5.3877	23.5973	10.1417	4.9909	14.5386	0.0000	10,063.6371	10,063.6371	2.6484	0.0000	10,119.2528

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	6.5690	74.8957	50.1999	0.0638	18.2141	3.5856	21.1540	9.9699	3.2987	12.6746	0.0000	6,587.5190	6,587.5190	1.9436	0.0000	6,628.3345
2017	296.6874	27.8176	23.9260	0.0367	0.6411	1.8022	2.4433	0.1718	1.6922	1.8640	0.0000	3,476.1181	3,476.1181	0.7048	0.0000	3,490.9182
Total	303.2564	102.7133	74.1259	0.1005	18.8552	5.3877	23.5973	10.1417	4.9909	14.5386	0.0000	10,063.6371	10,063.6371	2.6484	0.0000	10,119.2527

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371
Energy	0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223
Mobile	2.5980	4.5711	23.7594	0.0523	3.6112	0.0622	3.6734	0.9637	0.0572	1.0209		4,353.8959	4,353.8959	0.1820		4,357.7184
Total	8.8918	4.9672	32.6110	0.0546	3.6112	0.2720	3.8833	0.9637	0.2656	1.2293	0.0000	6,939.8854	6,939.8854	0.2468	0.0471	6,959.6777

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371
Energy	0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223
Mobile	2.5980	4.5711	23.7594	0.0523	3.6112	0.0622	3.6734	0.9637	0.0572	1.0209		4,353.8959	4,353.8959	0.1820		4,357.7184
Total	8.8918	4.9672	32.6110	0.0546	3.6112	0.2720	3.8833	0.9637	0.2656	1.2293	0.0000	6,939.8854	6,939.8854	0.2468	0.0471	6,959.6777

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2016	2/11/2016	5	10	
2	Grading	Grading	2/12/2016	3/24/2016	5	30	
3	Building Construction	Building Construction	3/25/2016	5/18/2017	5	300	
4	Paving	Paving	5/19/2017	6/15/2017	5	20	
5	Architectural Coating	Architectural Coating	6/16/2017	7/13/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 353,565; Residential Outdoor: 117,855; Non-Residential Indoor: 30,000; Non-Residential Outdoor: 10,000 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	67.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	5.0771	54.6323	41.1053	0.0391	18.0663	2.9387	21.0049	9.9307	2.7036	12.6343		4,065.0053	4,065.0053	1.2262		4,090.7544

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0806	0.0738	0.9563	1.8900e-003	0.1479	1.1800e-003	0.1491	0.0392	1.0800e-003	0.0403		155.2844	155.2844	7.7500e-003		155.4472
Total	0.0806	0.0738	0.9563	1.8900e-003	0.1479	1.1800e-003	0.1491	0.0392	1.0800e-003	0.0403		155.2844	155.2844	7.7500e-003		155.4472

3.2 Site Preparation - 2016

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0806	0.0738	0.9563	1.8900e-003	0.1479	1.1800e-003	0.1491	0.0392	1.0800e-003	0.0403		155.2844	155.2844	7.7500e-003		155.4472
Total	0.0806	0.0738	0.9563	1.8900e-003	0.1479	1.1800e-003	0.1491	0.0392	1.0800e-003	0.0403		155.2844	155.2844	7.7500e-003		155.4472

3.3 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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	6.4795	74.8137	49.1374	0.0617	8.6733	3.5842	12.2576	3.5965	3.2975	6.8940		6,414.9807	6,414.9807	1.9350		6,455.6154

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0895	0.0820	1.0625	2.1000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2000e-003	0.0448		172.5383	172.5383	8.6100e-003		172.7191
Total	0.0895	0.0820	1.0625	2.1000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2000e-003	0.0448		172.5383	172.5383	8.6100e-003		172.7191

3.3 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	6.4795	74.8137	49.1374	0.0617	8.6733	3.5842	12.2576	3.5965	3.2975	6.8940	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0895	0.0820	1.0625	2.1000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2000e-003	0.0448		172.5383	172.5383	8.6100e-003		172.7191
Total	0.0895	0.0820	1.0625	2.1000e-003	0.1643	1.3100e-003	0.1656	0.0436	1.2000e-003	0.0448		172.5383	172.5383	8.6100e-003		172.7191

3.4 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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1898	1.2609	2.7973	2.8500e-003	0.0905	0.0193	0.1099	0.0257	0.0178	0.0435		281.9522	281.9522	2.2900e-003		282.0003
Worker	0.2999	0.2747	3.5594	7.0300e-003	0.5504	4.4000e-003	0.5548	0.1460	4.0200e-003	0.1500		578.0031	578.0031	0.0289		578.6090
Total	0.4896	1.5355	6.3567	9.8800e-003	0.6409	0.0237	0.6646	0.1717	0.0218	0.1935		859.9553	859.9553	0.0311		860.6093

3.4 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1898	1.2609	2.7973	2.8500e-003	0.0905	0.0193	0.1099	0.0257	0.0178	0.0435		281.9522	281.9522	2.2900e-003		282.0003
Worker	0.2999	0.2747	3.5594	7.0300e-003	0.5504	4.4000e-003	0.5548	0.1460	4.0200e-003	0.1500		578.0031	578.0031	0.0289		578.6090
Total	0.4896	1.5355	6.3567	9.8800e-003	0.6409	0.0237	0.6646	0.1717	0.0218	0.1935		859.9553	859.9553	0.0311		860.6093

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1707	1.1682	2.6495	2.8800e-003	0.0907	0.0168	0.1075	0.0258	0.0154	0.0412		281.1214	281.1214	2.1600e-003		281.1667
Worker	0.2635	0.2437	3.1474	7.0200e-003	0.5504	4.2100e-003	0.5546	0.1460	3.8700e-003	0.1499		555.1914	555.1914	0.0262		555.7407
Total	0.4342	1.4119	5.7968	9.9000e-003	0.6411	0.0210	0.6621	0.1718	0.0193	0.1910		836.3128	836.3128	0.0283		836.9074

3.4 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1707	1.1682	2.6495	2.8800e-003	0.0907	0.0168	0.1075	0.0258	0.0154	0.0412		281.1214	281.1214	2.1600e-003		281.1667
Worker	0.2635	0.2437	3.1474	7.0200e-003	0.5504	4.2100e-003	0.5546	0.1460	3.8700e-003	0.1499		555.1914	555.1914	0.0262		555.7407
Total	0.4342	1.4119	5.7968	9.9000e-003	0.6411	0.0210	0.6621	0.1718	0.0193	0.1910		836.3128	836.3128	0.0283		836.9074

3.5 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	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.6279	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0590	0.0546	0.7046	1.5700e-003	0.1232	9.4000e-004	0.1242	0.0327	8.7000e-004	0.0336		124.2966	124.2966	5.8600e-003		124.4196
Total	0.0590	0.0546	0.7046	1.5700e-003	0.1232	9.4000e-004	0.1242	0.0327	8.7000e-004	0.0336		124.2966	124.2966	5.8600e-003		124.4196

3.5 Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.6279	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0590	0.0546	0.7046	1.5700e-003	0.1232	9.4000e-004	0.1242	0.0327	8.7000e-004	0.0336		124.2966	124.2966	5.8600e-003		124.4196
Total	0.0590	0.0546	0.7046	1.5700e-003	0.1232	9.4000e-004	0.1242	0.0327	8.7000e-004	0.0336		124.2966	124.2966	5.8600e-003		124.4196

3.6 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	296.3040					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	296.6363	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0473	0.6107	1.3600e-003	0.1068	8.2000e-004	0.1076	0.0283	7.5000e-004	0.0291		107.7237	107.7237	5.0700e-003		107.8303
Total	0.0511	0.0473	0.6107	1.3600e-003	0.1068	8.2000e-004	0.1076	0.0283	7.5000e-004	0.0291		107.7237	107.7237	5.0700e-003		107.8303

3.6 Architectural Coating - 2017

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	296.3040					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	296.6363	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0473	0.6107	1.3600e-003	0.1068	8.2000e-004	0.1076	0.0283	7.5000e-004	0.0291		107.7237	107.7237	5.0700e-003		107.8303
Total	0.0511	0.0473	0.6107	1.3600e-003	0.1068	8.2000e-004	0.1076	0.0283	7.5000e-004	0.0291		107.7237	107.7237	5.0700e-003		107.8303

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5980	4.5711	23.7594	0.0523	3.6112	0.0622	3.6734	0.9637	0.0572	1.0209		4,353.8959	4,353.8959	0.1820		4,357.7184
Unmitigated	2.5980	4.5711	23.7594	0.0523	3.6112	0.0622	3.6734	0.9637	0.0572	1.0209		4,353.8959	4,353.8959	0.1820		4,357.7184

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	220.20	47.40	19.60	398,747	398,747
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	392.37	413.28	359.57	1,119,095	1,119,095
User Defined Residential	0.00	0.00	0.00		
Total	612.57	460.68	379.17	1,517,842	1,517,842

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3
User Defined Residential	10.80	7.30	7.50	42.60	21.00	36.40	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.456704	0.078514	0.189610	0.161545	0.075051	0.010626	0.010499	0.000987	0.001369	0.000777	0.008668	0.000749	0.004900

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223
NaturalGas Unmitigated	0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2002.97	0.0216	0.1846	0.0786	1.1800e-003		0.0149	0.0149		0.0149	0.0149		235.6433	235.6433	4.5200e-003	4.3200e-003	237.0774
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1126.58	0.0122	0.1105	0.0928	6.6000e-004		8.3900e-003	8.3900e-003		8.3900e-003	8.3900e-003		132.5383	132.5383	2.5400e-003	2.4300e-003	133.3449
Total		0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.00297	0.0216	0.1846	0.0786	1.1800e-003		0.0149	0.0149		0.0149	0.0149		235.6433	235.6433	4.5200e-003	4.3200e-003	237.0774
User Defined Residential	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.12658	0.0122	0.1105	0.0928	6.6000e-004		8.3900e-003	8.3900e-003		8.3900e-003	8.3900e-003		132.5383	132.5383	2.5400e-003	2.4300e-003	133.3449
Total		0.0338	0.2950	0.1713	1.8400e-003		0.0233	0.0233		0.0233	0.0233		368.1816	368.1816	7.0600e-003	6.7500e-003	370.4223

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	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371
Unmitigated	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2019	1.0000e-005	0.0110	0.0000		0.1395	0.1395		0.1380	0.1380	0.0000	2,202.3529	2,202.3529	0.0422	0.0404	2,215.7561
Landscaping	0.2701	0.1011	8.6692	4.5000e-004		0.0471	0.0471		0.0471	0.0471		15.4550	15.4550	0.0155		15.7810
Total	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1644					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.2019	1.0000e-005	0.0110	0.0000		0.1395	0.1395		0.1380	0.1380	0.0000	2,202.3529	2,202.3529	0.0422	0.0404	2,215.7561
Landscaping	0.2701	0.1011	8.6692	4.5000e-004		0.0471	0.0471		0.0471	0.0471		15.4550	15.4550	0.0155		15.7810
Total	6.2600	0.1011	8.6802	4.5000e-004		0.1866	0.1866		0.1851	0.1851	0.0000	2,217.8080	2,217.8080	0.0577	0.0404	2,231.5371

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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



SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.

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2 May 2013

Mr. Jim Davies
Piedmont Oak Estates, LLC
854 Diablo Road
Danville, CA 94526-2760

Phone: 925/ 855-8489

Fax: 925/ 943-7409

Subject: CEQA Evaluation of Potential Air Quality Impacts for the Piedmont Oak Estates Project, El Dorado County, CA.

Dear Mr. Davies:

Sycamore Environmental evaluated potential air quality impacts resulting from planned development of APNs 051-550-40, -47, -48, and -51 totaling approximately 25.89 acres. Attachment A provides the information needed to prepare the Air Quality section of a California Environmental Quality Act (CEQA) Initial Study for the proposed tentative subdivision map. The conclusions are provided below.

Conclusions

The quantitative analysis included an evaluation of reactive organic gases (ROG), nitrogen oxides (NO_x), carbon monoxide (CO), particulate matter 10 microns and smaller (PM₁₀), and other pollutants including toxic air contaminants (TAC) such as naturally occurring asbestos (NOA) for the construction and operation of a residential and commercial development. Air quality impacts resulting from the project independently and cumulatively were evaluated as less than significant with the implementation of the following measures:

- The bid specifications and construction contract should stipulate compliance with applicable El Dorado County AQMD Rules, including the preparation and implementation of a Fugitive Dust Control Plan.
- To reduce potential construction-related impacts resulting from ROG, NO_x, and Diesel PM, the bid specifications and construction contract should stipulate implementation of Avoidance Measures 1 and 2 in the Air Quality Impacts Evaluation.

Thank you for the opportunity of evaluating your project. If you have any questions, please call.

Yours truly,



Jeffery Little
Vice President

c: Mr. Peter Thorne, P.E. BTConsulting, Inc.

Attachment A. CEQA Evaluation of Potential Air Quality Impacts for the Piedmont Oak Estates
Project, El Dorado County, CA.

Attachment A

CEQA Evaluation of Potential Air Quality Impacts for the Piedmont Oak Estates Project

El Dorado County, CA

Introduction

Sycamore Environmental evaluated potential air quality impacts resulting from the planned development on APNs 051-550-40, -47, -48, and -51 totaling approximately 25.89 acres in the community of Diamond Springs in El Dorado County, CA. The Tentative Map and Development Plan (BTConsulting, Inc., 24 April 2009, Revised 16 January 2013) propose the following:

- 65 clustered residential lots, detached living units approximately 1,600 sq ft of living space;
- 43 custom single-family lots with no plans for the single-family homes
- 2 commercial lots with no plans for the commercial units; and
- 8 open space lots.

The project consists of two phases; Phase 1 includes the road network, 62 clustered residential parcels, 21 detached single residential parcels, and one commercial parcel. Phase 2 includes 21 additional detached single residential parcels, and a second commercial lot. A list of conclusions at the end of this report identify the actions needed to ensure that the proposed project results in less than significant impacts to air quality.

Regulatory Setting: California Environmental Quality Act (CEQA)

CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. If the lead agency finds substantial evidence that any aspect of the project, either individually or cumulatively, may have a significant effect on the environment, CEQA mandates that the project implement feasible mitigation measures or alternatives to avoid or reduce significant adverse effects on the environment.

Significance Criteria

The El Dorado County Air Quality Management District (AQMD) has established significance criteria for projects in El Dorado County that are subject to CEQA. These significance criteria are presented in the AQMD's Guide to Air Quality Assessment (CEQA Guide, First Edition, February 2002). The AQMD has established two general categories of significance criteria: qualitative and quantitative. The AQMD recommends supporting air quality impact conclusions with substantial evidence, preferably with explicit, quantitative analyses wherever possible.

Qualitative Significance Criteria

1. CEQA Guidelines Appendix G environmental checklist criteria;
2. Land use conflicts and exposure of sensitive receptors;
3. Compliance with AQMD rules and regulations;
4. Compliance with U.S. EPA conformity regulations; and
5. Odors

Quantitative Significance Criteria

1. Reactive organic gases (ROG) and nitrogen oxides (NO_x), ozone precursors;
2. Other state and national criteria pollutants, including CO, PM10, SO₂, NO₂, sulfates, lead, and hydrogen sulfide;
3. Visibility;
4. Toxic Air Contaminants; and
5. Cumulative impacts, including impacts resulting from emissions of greenhouse gases.

This report addresses each of the above qualitative and quantitative significance criteria for the construction and operational phases of the project, in accordance with the procedures described in the AQMD's CEQA Guide. Green House Gases (GHGs) are addressed under a separate cover.

Environmental Setting

The project is located northeast of the intersection of State Highway 49 and Black Rice Road in the community of Diamond Springs in El Dorado County, CA. The project occurs on the Placerville USGS topographic quadrangle (T10N, R11E, Section 19). Its centroid is 38N 42' 10.43" and 120W 48' 29.15" (1983 NAD/WGS84). The project occurs within the Mountain Counties Air Basin, which covers an area of roughly 11,000 square miles along the Sierra Nevada mountain range.

The project area is currently composed of undeveloped land located in a rural residential setting. Existing low-density residential development borders the project area to the northwest, north, and east. An undeveloped parcel and Black Rice Road borders the site to the south and industrial development occurs west of the project area and Highway 49. The area to the southwest of the project area is not developed.

The project area is located in the El Dorado/ Diamond Springs Community Region. Community Regions "define those areas which are appropriate for the highest intensity of self-sustaining compact urban-type development or suburban-type development within the County" (El Dorado County General Plan, 2004). The existing and proposed El Dorado General Plan land use designations and zoning of the four parcels are shown in Table 1.

Table 1. Existing and proposed General Plan land use designations and zoning of the four project parcels

APN	GP Land Use Designations		Zoning	
	Existing ¹	Proposed ¹	Existing ²	Proposed ²
051-550-40	HDR	Same	R1-PD	Same
051-550-47	HDR C	Same	R1-PD, PF, CPO- PD	R1-PD, C
051-550-48	HDR	Same	R1-PD	Same
051-550-51	HDR	Same	R1-PD	Same

¹ C = Commercial
HDR = High Density Residential
MFR = Multi-Family Residential

² C = Commercial
CPO = Professional Office Commercial
DC = Design Control
PD = Planned Development
PF = Public Facilities
R1 = One-Family Residential
R2 = Limited Multifamily Residential
RM = Multifamily Residential

Methods

The El Dorado County AQMD’s CEQA Guide was used to evaluate the proposed project. Other resources used in the analysis include the AQMD’s rules for fugitive dust (Rules 223, 223-1); El Dorado County ordinances for projects in areas that may have naturally occurring asbestos (NOA); California Department of Mines and Geology NOA data; and U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) toxic air contaminants data. California Emissions Estimator Model (CalEEMod) v2011.1.1 was used to model air pollution emissions resulting from the project.

Qualitative Analysis

The AQMD’s CEQA Guide identifies that the CEQA Guidelines Appendix G environmental checklist items, land use conflicts and exposure of sensitive receptors; compliance with AQMD rules and regulations; compliance with U.S. EPA conformity regulations; and odors as topics to be addressed qualitatively. For some of these categories, additional quantitative analyses refine the significance conclusions.

Land Use Conflicts and Exposure of Sensitive Receptors

Locating a project with air pollutant emissions near existing sensitive receptors or locating a new sensitive receptor near an existing source of air pollutants could result in adverse air quality impacts to

sensitive receptors. The AQMD's CEQA Guide lists the following land use conflicts that should be avoided (p. 3-2):

- A sensitive receptor in close proximity to a congested intersection or roadway with high levels of emissions from motor vehicles. High concentrations of carbon monoxide or toxic air contaminants are the most common concerns.
- A sensitive receptor close to a source of toxic air contaminants or to a potential source of accidental releases of hazardous materials.
- A sensitive receptor close to a source of odorous emissions. Although odors generally do not pose a health risk, they can be quite unpleasant and often lead to citizen complaints to the District and to local governments.
- A sensitive receptor close to a source of high levels of nuisance dust emissions.

The CEQA Guide defines sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, and convalescent facilities are examples of sensitive receptors (CEQA Guide page 3-2). The following schools, preschools, and health facilities are located within 2 mi of the project site:

Health Facilities

El Dorado Surgery Center (1.05 mi northwest)

El Dorado Care Center (1.99 mi northeast)

Schools

Independence High School (0.9 mi southwest)

Diamond Springs Christian School (0.98 mi west-southwest)

Herbert Green School (1.21 mi northwest)

Sierra Boys Ranch (1.47 mi west-southwest)

El Dorado Center for the Visually Impaired (1.82 mi southwest)

Charles F. Brown Elementary School (1.86 mi southwest)

Preschools and Daycares

Placerville Preschoolers (1.08 mi west-southwest)

Charles Brown State Preschool (1.86 mi southwest)

The project is not located in close proximity to a congested intersection or roadway with high levels of emissions from motor vehicles. Diesel PM emissions from vehicle traffic on U.S. Highway 49 adjacent to the project site is discussed in more detail below in the Toxic Air Contaminants section.

The project would not generate appreciable amounts of toxic air contaminants nor involve hazardous materials.

The project would not result in odorous emissions.

The project could result in dust emissions during construction. However, the El Dorado AQMD rules and regulations do not allow dust to leave the project site during construction. In addition, AQMD Rule 223-1 requires the applicant to complete a Fugitive Dust Control Plan and submit the plan for approval prior to any ground-disturbing activities. Implementation of AQMD rules and regulations will protect sensitive receptors from construction-related dust emissions.

The property is located within the El Dorado-Diamond Springs General Plan Community Region, which is designated for high-density urban and suburban build-out. Project compliance to the El Dorado County AQMD rules and regulations and implementation of the recommendations in this report, will ensure the project does not have a significant impact on any sensitive receptors.

Compliance with El Dorado County AQMD Rules and Regulations

The CEQA Guide states that “the District considers any proposed project that does not demonstrate compliance with all applicable District rules and regulations, and its permitting requirements in particular, as one that has a significant impact on air quality” (p. 3-3).

Figure 1.1 of the CEQA Guide identifies types of facilities that require permits from the El Dorado County AQMD. Residential and commercial development does not require an Authority to Construct permit or a Permit to Operate.

The following El Dorado County AQMD rules apply during the construction of the project: Rule 215 Architectural Coatings, Rule 223 Fugitive Dust – General, Rule 223-1 Fugitive Dust – Construction, and Rule 224 – Cutback and Emulsified Asphalt. Rule 215 defines the quantities of reactive organic compounds permitted for use in new construction. Rule 223 limits human made fugitive dust to the property line of the construction site. Rule 223-1 requires a Fugitive Dust Control Plan be prepared and submitted to the El Dorado County AQMD prior to ground disturbing activities. Rule 224 defines the types of cutback and emulsified asphalts permitted for use in El Dorado County. Pursuant to Rule 610, the El Dorado County AQMD charges a fee to review the Fugitive Dust Control Plan required by Rule 223-1.

To ensure compliance with applicable El Dorado County AQMD rules, the bid specifications and construction contract should stipulate the following:

The Contractor shall adhere to all applicable El Dorado County AQMD rules, including but not necessarily limited to Rules 215, 223, 223-1, and 224. Copies of these rules are available from the El Dorado County AQMD website (<http://www.co.el-dorado.ca.us/emd/apcd/index.html>). The Contractor shall prepare a Fugitive Dust Control Plan for review and approval by the El Dorado County Air Pollution Control Officer pursuant to Rule 223-1 Fugitive Dust – Construction.

Compliance with U.S. EPA Conformity Regulations

Federally funded projects or projects with federal discretionary permits must demonstrate conformity with the State Implementation Plan for achieving and maintaining the federal ambient air quality standards. The project may require a Clean Water Act Section 404 Nationwide permit from the U.S. Army Corps of Engineers (Corps), a federal agency. The Corps has already evaluated the Nationwide

program for conformity pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activities authorized by Nationwide permits will not exceed *de minimis* levels of direct emissions of a criteria pollutant or its precursors and are exempted by 40 CFR 93.153. Any later indirect emissions resulting from Corps-permitted actions are generally not within the Corps' continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons, a conformity determination for future indirect emissions is not required for the Nationwide permit program. The project is in compliance with U.S. EPA conformity regulations.

Odors

The CEQA Guide describes the standard for determining whether a project would have potentially significant impacts resulting from odors that

cause detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property (page 3-3).

Table 3.1 of the CEQA Guide lists common types of facilities that are known to produce odors that potentially cause detriment, nuisance, or annoyance to the public. Residential and commercial uses are not listed as odor generating facilities. The proposed development would not result in significant impacts resulting from odors.

Quantitative Analysis—Construction Activities

Common construction activities include site preparation, earthmoving and general construction. Site preparation includes activities such as general land clearing and grubbing. Earthmoving activities include cut and fill operations, trenching, soil compaction, and grading. General construction includes adding improvements such as roadway surfaces, utilities, structures, and facilities.

Emissions generated from these common construction activities include

- combustion emissions (ROG, NO_x, CO, SO_x, PM10) from mobile heavy-duty diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips;
- combustion emissions from heavy-duty diesel-fueled equipment containing diesel particulate matter (Diesel PM), which has been identified as a potential health risk;
- fugitive dust (PM10) from soil disturbance or demolition; and
- evaporative emissions (ROG) from asphalt paving and architectural coating applications.

Demolition and earth disturbance may also result in airborne entrainment of asbestos, a toxic air contaminant, in areas where there are naturally occurring surface deposits of ultramafic rock. Potential impacts resulting from soil disturbance of NOA are discussed under the Evaluation of Toxic Air Contaminants section below. The pollutants CO, PM10, SO₂, and NO₂ are evaluated under the project operations section below.

The El Dorado County AQMD evaluates the significance of ROG and NO_x emissions during construction based on the maximum amount of fuel that would be used on the peak equipment use day. Table 4.1 in the CEQA Guide lists the range of maximum daily fuel usage for the sum of all equipment, off-road vehicles and auxiliary handheld equipment that can be used to ensure less than significant impacts resulting from ROG and NO_x emissions.

If all of the equipment used (vehicles and hand held) are model year 1995 or older, the maximum daily fuel usage for a less than significant impact is 337 gallons per day (diesel and gasoline). The maximum daily fuel usage for all equipment model year 1996 or newer (vehicles and handheld) for a less than significant impact is 402 gallons per day (diesel and gasoline). A linear interpolation is used between 337 and 402 gallons per day, in proportion to the distribution of equipment into the two age categories, to determine the maximum daily fuel use allowed for a specific fleet mix. For example, a 50/50 age distribution yields allowable fuel use of 370 gallons per day.

The equation to determine the maximum daily fuel usage is expressed as:

Daily maximum fuel usage (diesel and regular gasoline) = $X(65) + 337$, where X equals the number of 1996 and newer equipment divided by the total number of equipment used (off-road vehicles and auxiliary handheld equipment) and 65 is the difference of the maximum gallons permitted for 1996 and newer equipment and the maximum gallons permitted for 1995 and older equipment. For example, if 10 pieces of equipment are used and 3 are 1995 and older and 7 are 1996 and newer, then the ratio of newer equipment to all equipment used is 0.7 ($7/10 = 0.7$). Using the formula $0.7(65) + 337$, the project is allowed to use a maximum of 383 gallons of fuel on that day.

To ensure that construction of the development would result in less than significant air quality impacts during construction, the bid specifications and construction contract should stipulate the following:

Avoidance Measure 1.

On any given day during construction, the contractor shall ensure that all equipment used during that day (off-road vehicles and auxiliary handheld equipment) does not exceed the fuel usage limit (diesel and regular gasoline) established in the El Dorado County Air Pollution Control District CEQA Guide. The maximum amount of fuel that can be used is based on the year that the equipment was built.

- The maximum amount of fuel that can be used in one day if all equipment used is 1995 model year or older is 337 gallons.
- The maximum amount of fuel that can be used in one day if all equipment used is 1996 model year or newer is 402 gallons.
- If a combination of 1995 and older and 1996 and newer equipment is used, then divide the number of 1996 and newer equipment by the total number of equipment used. Multiply that number by 65. Add that number to 337. The sum is the maximum number of gallons of fuel permitted for use on that day.

With implementation of Avoidance Measure 1, ROG and NO_x emissions during construction would be less than significant. The El Dorado County AQMD determined that if ROG and NO_x emissions are less than significant then exhaust emissions of CO is also less than significant. With adherence to Rule 223 and implementation of the Fugitive Dust Control Plan required by Rule 223-1, PM10 emissions would have a less than significant impact on air quality during construction.

Diesel PM has been identified as a potential health risk. Limiting the amount of diesel fuel used during the entire course of a project reduces the potential health risks to a less than significant level. Table 4.2 in the CEQA Guide provides the maximum amount of fuel that can be used that will ensure less than significant health risks. As with the daily fuel limit described above, the maximum amount of diesel fuel allowed over the entire course of project construction is based on the year that the equipment was built. For equipment that is model year 1996 or newer, the maximum amount of diesel fuel allowed is 37,000 gallons. For equipment that is model year 1995 or older the maximum amount of diesel fuel allowed is 3,700.

The equation to determine the maximum project diesel fuel usage is expressed as:

Maximum project diesel fuel usage = $X (33,300) + 3,700$, where X equals the number of 1996 and newer equipment divided by the total number of equipment in the fleet and 33,300 is the difference of the maximum gallons permitted for 1996 and newer equipment and the maximum gallons permitted for 1995 and older equipment. For example, if 10 pieces of equipment are used and 3 are 1995 and older and 7 are 1996 and newer, then the ratio of newer equipment to all equipment used is 0.7 ($7/10 = 0.7$). Using the formula $0.7(33,300) + 3,700$ the project is allowed to use a maximum of 27,010 gallons of diesel fuel over the course of construction.

To ensure that the potential health risk posed by Diesel PM is reduced to less than significant, the bid specifications and construction contract should stipulate the following:

Avoidance Measure 2.

For the entire course of construction, the contractor shall ensure that all diesel-powered equipment used does not exceed the diesel fuel usage limit established in the El Dorado County Air Pollution Control District CEQA Guide. The maximum amount of diesel fuel that can be used is based on the year that the equipment was built.

- The maximum amount of diesel fuel that can be used during the project if all equipment used is 1995 model year or older is 3,700 gallons.
- The maximum amount of diesel fuel that can be used during the project if all equipment used is 1996 model year or newer is 37,000 gallons.
- If a combination of 1995 and older and 1996 and newer equipment is used, then divide the number of 1996 and newer equipment in the fleet by the total number of equipment in the fleet. Multiply that number by 33,300. Add that number to 3,700. The sum is the maximum number of gallons of diesel fuel use permitted.

The El Dorado County AQMD has determined that mass emissions of PM10 do not need to be quantified and may be deemed less than significant (CEQA Guide, page 4-3). Adherence to Rules 223 and 223-1 ensure that PM10 impacts would be less than significant.

Quantitative Analysis—Project Operation

State and National Criteria Pollutant Emissions

Under the mandate of the Clean Air Act, the federal EPA establishes National Ambient Air Quality Standards (NAAQS) for air pollutants considered harmful to public health and the environment. Currently, the EPA has set standards for seven air pollutants. These “criteria” pollutants and their associated NAAQS are listed in Table 2 below. Areas exceeding an individual NAAQS are labeled by EPA as nonattainment for that pollutant. The Mountain Counties Air Basin portion of El Dorado County is currently nonattainment for the national 8-hour ozone standard.

The California Air Resources Board (CARB), under the mandate of the California Clean Air Act, has adopted California Ambient Air Quality Standards (CAAQS), which address the national criteria pollutants discussed above as well as other pollutants not covered by the federal standards. The CAAQS are generally more stringent than the corresponding NAAQS. The CAAQS are listed alongside the NAAQS in Table 2 below. As with the NAAQS, areas exceeding an individual CAAQS are labeled by CARB as nonattainment for that pollutant. The Mountain Counties Air Basin portion of El Dorado County is nonattainment for the following CAAQS: 8-Hour Ozone, 1-Hour Ozone, and 24-Hour PM10.

Because ozone is not usually emitted directly, but rather through ozone precursors such as ROG and NO_x, compliance with the AAQS for ozone is completed indirectly through a mass emissions analysis of ROG and NO_x. For all other criteria pollutants, project emission concentrations are evaluated by comparison against the applicable national and state ambient air quality standards (AAQS).

Table 2. California and National Ambient Air Quality Standards (AAQS)

Pollutant	Averaging Time	California AAQS	National AAQS (Primary)	National AAQS (Secondary)
Ozone	1 Hour	0.09 ppm (180 µg/m ³)	--	--
	8 Hour	0.07 ppm (137 µg/ m ³)	0.075 ppm (147 µg/ m ³)	Same as Primary
Respirable Particulate Matter (PM10)	24 Hour	50 µg/ m ³	150 µg/ m ³	Same as Primary
	Ann. Arith. Mean	20 µg/ m ³	--	--
Fine Particulate Matter (PM2.5)	24 Hour	--	35 µg/ m ³	Same as Primary
	Ann. Arith. Mean	12 µg/ m ³	12.0 µg/ m ³	Same as Primary
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/ m ³)	35 ppm (40 mg/ m ³)	--
	8 Hour	9.0 ppm (10 mg/ m ³)	9 ppm (10 mg/ m ³)	--
	8 Hour (Lake Tahoe)	6 ppm (7 mg/ m ³)	--	--
Nitrogen Dioxide (NO ₂)	1 Hour	0.18 ppm (339 µg/ m ³)	100 ppb (188 µg/m ³)	--
	Ann. Arith. Mean	0.03 ppm (57 µg/ m ³)	0.053 ppm (100 µg/ m ³)	Same as Primary
Sulfur Dioxide (SO ₂)	1 Hour	0.25 ppm (655 µg/ m ³)	75 ppb (196 µg/m ³)	--
	3 Hour	--	--	0.5 ppm (1300 µg/m ³)
	24 Hour	0.04 ppm (105 µg/ m ³)	0.14 ppm (365 µg/ m ³)	--
	Ann. Arith. Mean	--	0.030 ppm (80 µg/ m ³)	--
Lead	30-Day Avg.	1.5 µg/ m ³	--	
	Calendar Quarter	--	1.5 µg/ m ³	Same as Primary
	Rolling 3-Month Avg.	--	0.15 µg/ m ³	Same as Primary
Visibility Reducing Particles	8 Hour	Ten miles visibility	No National Standards	
Sulfates	24 Hour	25 µg/ m ³		
Hydrogen Sulfide	1 Hour	42 µg/ m ³		
Vinyl Chloride	24 Hour	26 µg/ m ³		

ROG and NO_x Emissions

The AQMD’s significance threshold for ROG and NO_x is 82 pounds per day for each ROG and NO_x. Table 5.2 (CEQA Guide, page 5-3) lists the type and size of projects that are likely to result in significant ROG and NO_x emissions. Mixed-use projects are not well-represented in Table 5.2 of the CEQA Guide; therefore, CalEEMod v2011.1.1 was used to model ROG and NO_x emissions for the operational phase of the project.

The Mountain Counties Air Basin was selected as the default CalEEMod file to be used as the base for the project. CEQA requires analysis of impacts from all reasonably foreseeable elements of a proposed project. The 43 custom single-family lots and the 2 commercial lots will be sold individually and developed by the future owners. The air pollutant emissions model must include a hypothetical build-out scenario on these parcels. Generally, a maximum build-out scenario is used so as not to underestimate the total potential emissions resulting from the project. Thus, the modeling assumptions used in CalEEMod included:

- 65 clustered residential lots with two-story, detached living units with 1,600 sq ft of living space;
- 43 custom single-family units;
- 1 14,000-sq-ft hardware store on commercial Lot 1; and
- 1 2,500-sq-ft 24 hr convenience store on commercial Lot 2.

The two commercial uses were chosen from a large list of possible build-out scenarios on those parcels. Other modeling assumptions could be made on these parcels, but a hardware store and a 24 hr convenience store represent a fairly intensive upper limit of emissions because these uses are associated with high vehicle trip rates. The square footage of the two commercial buildings was estimated based on the requirements of the anticipated commercial zoning designation on the parcels, the size of the parcels (total of approximately 2.03 ac), and the amount of available space on the parcels for each building after taking into account space needed for parking. The model also assumed a mix of wood and natural gas fireplaces for the 65 clustered units and 43 custom units.

The results of the air quality modeling with a comparison with the AQMD’s thresholds of significance are in Table 3. Based on the CalEEMod modeling, operation of the proposed development would not have significant impacts resulting from ROG and NO_x emissions. The CalEEMod reports for this model are included in Appendix A.

Table 3. Daily ROG and NO_x emissions during project operation, including emissions from future build-out.

Source	Winter ¹		Summer ¹	
	ROG	NO _x	ROG	NO _x
Operational emissions	77.73	14.43	78.93	13.32
Significance threshold	82	82	82	82
Significant emissions	NA	NA	NA	NA

¹Units for all values are pounds per day.

Other Criteria Pollutant Emissions

The significance of CO, NO₂, PM10, and SO₂ concentrations are evaluated by comparison against the applicable national and state ambient air quality standards (AAQS). The El Dorado County AQMD considers emissions of CO, PM10, and other pollutants from project operation, which are subject to the AAQS significance criteria, significant if:

1. the project's contribution by itself would cause a violation of the AAQS; or
2. the project's contribution plus the background level would result in a violation of the AAQS, and either
 - a. a sensitive receptor is located within a quarter-mile of the project, or
 - b. the project's contribution exceeds five percent of the AAQS.

In accordance with Section 6.3.1 (Project Screening) of the AQMD's CEQA Guide, Development projects of the type and size that fall below the significance cut-points in Table 5.2 in Chapter 5 for ROG and NO_x are also considered to be insignificant for CO, NO₂, PM₁₀, and SO₂. The Project (operational) is below the threshold values for ROG and NO_x (Table 3). Therefore, operational emissions of CO, NO, SO₂, and PM₁₀ are not considered significant. The proposed development does not result in any significant emissions concentrations and no mitigation is required.

The PM_{2.5} AAQS were not in effect when the AQMD's CEQA Guide was published. Therefore, the CEQA Guide gives no guidance on analysis of PM_{2.5}. PM_{2.5} is primarily generated by vehicle trips on unpaved roads. Thus, emissions of PM_{2.5} are likely to be associated with the construction-phase of a project. The proposed Project includes paving all roads constructed. Emissions of PM_{2.5} during the operational phase will be less than significant.

The El Dorado County AQMD considers lead, sulfates, and H₂S less than significant except for industrial sources such as foundries, acid plants, and paper mills (CEQA Guide, page 6-2). The proposed project is a residential/commercial development. Therefore, no impact will occur from lead, sulfates, and H₂S.

The El Dorado County AQMD assumes that visibility impacts from development projects in the Mountain Counties Air Basin portion of the county are not significant (CEQA Guide, page 6-3). Visibility impacts are controlled through state and national regulatory programs governing vehicle emissions, and through mitigation required for ozone precursors and particulate matter for other development projects throughout the County. Therefore, the development will not result in any significant visibility impacts.

Toxic Air Contaminants

Toxic air contaminants (TAC) are pollutants that pose a present or potential hazard to human health. TACs are classified as either carcinogenic or noncarcinogenic. The state and federal governments regulate TACs through statutes and regulations that require maximum or best available technologies be incorporated in the source of the pollutants in order to limit emissions. For example, dry cleaning businesses are regulated in their handling and use of perchloroethylene. The California Air Resources Board (CARB) identified asbestos, including naturally occurring asbestiforms, as a carcinogenic TAC in 1986.

The mapped soil units within the project area are Diamond Springs very fine sandy loam, 3–9% slopes, Diamond Springs very fine sandy loam, 9–15% slopes, Diamond Springs very rocky very fine sandy loam, 3–50% slopes, and placer diggings (Soil Survey of El Dorado Area, Soil Conservation Service 1974). The property is not located in an area known to have naturally occurring asbestos

(NOA), within a quarter mile of a known location of NOA, in an area more likely to contain NOA, or within a quarter mile of an area more likely to contain NOA (El Dorado County Asbestos Review Areas, Western Slope, County of El Dorado, State of California, July 2005). Therefore, an Asbestos Hazard Dust Mitigation Plan is not required. *Note: If NOA is discovered on-site during the course of construction, the El Dorado County AQMD must be notified and an Asbestos Hazard Dust Mitigation Plan must be prepared and implemented. The Plan would include Best Management Practices identified in El Dorado County AQMD District Rule 223-2.* Construction of the project will have no air quality impacts resulting from NOA.

In 1998, CARB identified Diesel PM as a TAC. In the Air Quality and Land Use Handbook: A Community Health Perspective (CARB April 2005), CARB identified land uses that have the potential to generate significant amounts of Diesel PM. These land uses include freeways, urban roads with 100,000 vehicles/day, rural roads with 50,000 vehicles/day, and distribution centers. CARB recommends avoiding siting new sensitive land uses within 500 feet of these transportation corridors or within 1,000 ft of distribution centers. U.S. Highway 49 is a rural route located adjacent to the western property boundary. Caltrans' traffic-count data indicates that average daily traffic on U.S. Highway 49 is 6,200 vehicles per day (<http://traffic-counts.dot.ca.gov/>), well under the 50,000 vehicles/day cutoff identified by CARB. There are no distribution centers within 1,000 ft of the project. The project will not result in the exposure of residents to significant health hazards from Diesel PM.

Cumulative Impacts Analysis

El Dorado County AQMD's primary criterion for determining whether a project has significant cumulative impacts is based on the project's consistency with an approved plan or mitigation program of District-wide or regional application for pollutants emitted by the project (CEQA Guide, page 8-1).

ROG and NO_x

The Project's ROG and NO_x emission estimates are below the quantitative significance thresholds and are therefore project impacts from ROG and NO_x emission are considered less than significant. The 1994 Sacramento Area Regional Ozone Attainment Plan (or, Air Quality Attainment Plan, AQAP) was developed for application in the Sacramento Region, including the Mountain Counties Air Basin portion of El Dorado County, to bring the region into ROG and NO_x attainment as required by the federal and California Clean Air Acts. The AQAP assumes annual increases in air pollutant emissions resulting from regional growth. At the time, the Sacramento region, including the majority of El Dorado County, was nonattainment for the 1-hour ozone NAAQS. Thus, the AQAP, through its incorporation into the State Implementation Plan, demonstrated to the EPA that the region was working toward attainment.

In 2004, the EPA established attainment classifications for the newer 8-hour ozone standard, and in 2005, the existing 1-hour standard was revoked. The Sacramento region has been designated nonattainment for the newer 8-hour NAAQS. The new rule contained an anti-backsliding provision that requires 8-hour ozone nonattainment areas to remain subject to control measure commitments that

applied under the 1-hour ozone standard. Thus the provisions of the original 1994 AQAP remain relevant within the current regulatory setting.

In 2008, the region's air management districts completed the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan and submitted the plan to the California Air Resources Board for approval and inclusion into the State Implementation Plan. In 2009, the Plan was approved and incorporated.

The El Dorado County AQMD considers projects to be consistent with the adopted AQAPs if the following conditions are met (CEQA Guide page 8-2):

1. The project does not require a change in the existing land use designation (e.g., a general plan amendment or rezone) and projected emissions of ROG and NO_x from the proposed project are equal to or less than the emissions anticipated for the site if developed under the existing land use designation;
2. The project does not exceed the "project alone" significance criteria;
3. The Applicant agrees to include applicable emission reduction measures; and
4. The bid specifications and contract will stipulate that the contractor shall comply with all applicable district rules and regulations during construction of the project.

The proposed project is consistent with the County General Plan and does not include any change to the existing land use designation of the project parcels. The Project's ROG and NO_x emission estimates are below the quantitative significance threshold of 82 lbs per day. The bid specifications and construction contract will stipulate compliance with applicable El Dorado County AQMD Rules, including the preparation and implementation of a Fugitive Dust Control Plan. The proposed project is consistent with the adopted AQAP and therefore potential air quality impacts from ROG and NO_x emission are less than cumulatively considerable.

Other Pollutants

No applicable air quality plan exists in El Dorado County for pollutants other than ROG and NO_x. Therefore, the AQMD applies pollutant-specific criteria for determining whether a project has cumulatively considerable emissions of these pollutants.

CO is an attainment pollutant in El Dorado County, and local CO concentrations are expected to decline even further in the future as more stringent CO standards for motor vehicles take effect (CEQA Guide, page 8-2). The El Dorado County AQMD does not consider CO to be an area-wide or regional pollutant that is likely to have cumulative effects (*ibid*). Emissions from the proposed project are less than significant. The El Dorado County AQMD considers cumulative contributions of CO from projects with less than significant operational emissions of CO to be less than considerable.

The Mountain Counties Air Basin portion of El Dorado County is nonattainment for the state 24-hour PM10 standard, which dictates the use of a relatively sensitive criterion for identifying cumulative effects on PM10 ambient concentrations. PM10 directly emitted from a project can have area-wide impacts and can be cumulatively significant even if not significant on a project-alone basis (CEQA

Guide, page 8-3). The County is in attainment for the SO₂ and NO₂ ambient air quality standards, but SO₂ and NO₂ can also contribute to area-wide PM₁₀ impacts through their transformation into sulfate and nitrate particulate aerosols (CEQA Guide, page 8-3). Project contribution of PM₁₀, SO₂, and NO₂ are not evaluated as considerable for the following reasons (CEQA Guide, page 8-3):

1. the proposed development would not exceed the “project alone” significance criteria for these pollutants;
2. the bid specifications and contract will stipulate that the contractor shall comply with all applicable district rules and regulations during construction of the project; and
3. project ROG and NO_x emission are less than cumulatively considerable.

TACs are typically localized and do not occur region-wide. Therefore, the El Dorado County AQMD considers project contribution of TAC emissions cumulatively significant if a large development project occurs on contiguous parcels and each one is emitting TAC (CEQA Guide, 8-4) concurrently. The proposed project is not contiguous with another large, concurrent development project and TAC emissions would be negligible. Therefore, the project would not have a cumulatively significant impact resulting from emissions of TACs.

Conclusions

The quantitative analysis included an evaluation of ROG, NO_x, CO, PM₁₀, and other pollutants including TAC. The emissions were evaluated for the construction and operation of a residential and commercial development on 25.89 acres. Air quality impacts resulting from the project independently and cumulatively were evaluated as less than significant with the implementation of the following measures:

- The bid specifications and construction contract should stipulate compliance with applicable El Dorado County AQMD Rules, including the preparation and implementation of a Fugitive Dust Control Plan.
- To reduce potential construction-related impacts resulting from ROG, NO_x, and Diesel PM, the bid specifications and construction contract should stipulate implementation of Avoidance Measures 1 and 2 in this Air Quality Impacts Evaluation.

Appendix A: CalEEMod Emissions Reports

The following CalEEMod reports are for the build-out scenario defined on p. 11 of this report.

Piedmont Oaks
El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Other Asphalt Surfaces	5.5	Acre
Single Family Housing	43	Dwelling Unit
User Defined Residential	65	Dwelling Unit
Convenience Market (24 Hour)	2.5	1000sqft
Hardware/Paint Store	14	1000sqft

1.2 Other Project Characteristics

Urbanization Urban **Wind Speed (m/s)** 2.7 **Utility Company** Pacific Gas & Electric Company
Climate Zone 1 **Precipitation Freq (Days)** 70

1.3 User Entered Comments

Project Characteristics -

Land Use - User Defined Res = Clustered homes. Lot Agerage Based on current TM design (16Jan2013). Sq ft of used defined residential assumed to be 1,600.

Construction Phase - Demolition Phase Not needed, phase removed

Demolition -

Grading - Total Acres Disturbed based on most recent site layout (16Jan2013). The total estimate grading volume is 46,000 cy balanced. Since the cut/fill are balanced there is no import/ export.

Woodstoves -

Land Use Change -

Sequestration -

Area Mitigation -

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.83	5.50	4.28	0.01	0.31	0.31	0.62	0.11	0.31	0.42						
2015	3.29	1.55	1.38	0.00	0.03	0.10	0.14	0.00	0.10	0.10						
Total	4.12	7.05	5.66	0.01	0.34	0.41	0.76	0.11	0.41	0.52						

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.83	5.50	4.28	0.01	0.23	0.31	0.54	0.11	0.31	0.42						
2015	3.29	1.55	1.38	0.00	0.00	0.10	0.10	0.00	0.10	0.10						
Total	4.12	7.05	5.66	0.01	0.23	0.41	0.64	0.11	0.41	0.52						

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	7.89	0.10	9.17	0.00		0.00	1.18		0.00	1.18						
Energy	0.01	0.06	0.03	0.00		0.00	0.00		0.00	0.00						
Mobile	2.03	1.95	14.96	0.02	1.78	0.06	1.84	0.08	0.06	0.13						
Waste						0.00	0.00		0.00	0.00						
Water						0.00	0.00		0.00	0.00						
Total	9.93	2.11	24.16	0.02	1.78	0.06	3.02	0.08	0.06	1.31						

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.89	0.10	9.17	0.00		0.00	1.18		0.00	1.18						
Energy	0.01	0.06	0.03	0.00		0.00	0.00		0.00	0.00						
Mobile	2.03	1.95	14.96	0.02	1.78	0.06	1.84	0.08	0.06	0.13						
Waste						0.00	0.00		0.00	0.00						
Water						0.00	0.00		0.00	0.00						
Total	9.93	2.11	24.16	0.02	1.78	0.06	3.02	0.08	0.06	1.31						

2.3 Vegetation

Vegetation

	ROG	NOx	CO	SO2	CO2e
Category	tons				MT
New Trees					
Vegetation Land Change					
Total					

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.09	0.00	0.09	0.05	0.00	0.05						
Off-Road	0.05	0.37	0.22	0.00		0.02	0.02		0.02	0.02						
Total	0.05	0.37	0.22	0.00	0.09	0.02	0.11	0.05	0.02	0.07						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

3.2 Site Preparation - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.09	0.00	0.09	0.05	0.00	0.05						
Off-Road	0.05	0.37	0.22	0.00		0.02	0.02		0.02	0.02						
Total	0.05	0.37	0.22	0.00	0.09	0.02	0.11	0.05	0.02	0.07						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

3.3 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.13	0.00	0.13	0.05	0.00	0.05						
Off-Road	0.17	1.36	0.76	0.00		0.06	0.06		0.06	0.06						
Total	0.17	1.36	0.76	0.00	0.13	0.06	0.19	0.05	0.06	0.11						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

3.3 Grading - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.13	0.00	0.13	0.05	0.00	0.05						
Off-Road	0.17	1.36	0.76	0.00		0.06	0.06		0.06	0.06						
Total	0.17	1.36	0.76	0.00	0.13	0.06	0.19	0.05	0.06	0.11						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

3.4 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.52	3.54	2.56	0.00		0.22	0.22		0.22	0.22						
Total	0.52	3.54	2.56	0.00		0.22	0.22		0.22	0.22						

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	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						
Vendor	0.03	0.18	0.30	0.00	0.01	0.00	0.02	0.00	0.00	0.01						
Worker	0.05	0.05	0.41	0.00	0.08	0.00	0.08	0.00	0.00	0.01						
Total	0.08	0.23	0.71	0.00	0.09	0.00	0.10	0.00	0.00	0.02						

3.4 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.52	3.54	2.56	0.00		0.22	0.22		0.22	0.22						
Total	0.52	3.54	2.56	0.00		0.22	0.22		0.22	0.22						

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	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						
Vendor	0.03	0.18	0.30	0.00	0.00	0.00	0.01	0.00	0.00	0.01						
Worker	0.05	0.05	0.41	0.00	0.00	0.00	0.01	0.00	0.00	0.01						
Total	0.08	0.23	0.71	0.00	0.00	0.00	0.02	0.00	0.00	0.02						

3.4 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	tons/yr										MT/yr					
Off-Road	0.17	1.15	0.91	0.00		0.07	0.07		0.07	0.07						
Total	0.17	1.15	0.91	0.00		0.07	0.07		0.07	0.07						

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						
Vendor	0.01	0.06	0.10	0.00	0.00	0.00	0.01	0.00	0.00	0.00						
Worker	0.02	0.01	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.00						
Total	0.03	0.07	0.23	0.00	0.03	0.00	0.04	0.00	0.00	0.00						

3.4 Building Construction - 2015

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	1.15	0.91	0.00		0.07	0.07		0.07	0.07						
Total	0.17	1.15	0.91	0.00		0.07	0.07		0.07	0.07						

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						
Vendor	0.01	0.06	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.02	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Total	0.03	0.07	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

3.5 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	tons/yr										MT/yr					
Off-Road	0.05	0.30	0.21	0.00		0.03	0.03		0.03	0.03						
Paving	0.01					0.00	0.00		0.00	0.00						
Total	0.06	0.30	0.21	0.00		0.03	0.03		0.03	0.03						

Unmitigated Construction Off-Site

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

3.5 Paving - 2015

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	0.05	0.30	0.21	0.00		0.03	0.03		0.03	0.03						
Paving	0.01					0.00	0.00		0.00	0.00						
Total	0.06	0.30	0.21	0.00		0.03	0.03		0.03	0.03						

Mitigated Construction Off-Site

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

3.6 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	tons/yr										MT/yr					
Archit. Coating	3.03					0.00	0.00		0.00	0.00						
Off-Road	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00						
Total	3.03	0.03	0.02	0.00		0.00	0.00		0.00	0.00						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

3.6 Architectural Coating - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.03					0.00	0.00		0.00	0.00						
Off-Road	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00						
Total	3.03	0.03	0.02	0.00		0.00	0.00		0.00	0.00						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.03	1.95	14.96	0.02	1.78	0.06	1.84	0.08	0.06	0.13						
Unmitigated	2.03	1.95	14.96	0.02	1.78	0.06	1.84	0.08	0.06	0.13						
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	1,844.98	2,157.75	1896.13	1,444,684	1,444,684
Hardware/Paint Store	718.06	1,155.28	961.10	1,185,975	1,185,975
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	411.51	433.44	377.11	1,173,685	1,173,685
User Defined Residential	0.00	0.00	0.00		
Total	2,974.55	3,746.47	3,234.34	3,804,344	3,804,344

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00
Hardware/Paint Store	9.50	7.30	7.30	13.60	67.40	19.00
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40
User Defined Residential	10.80	7.30	7.50	42.60	21.00	36.40

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00						
Electricity Unmitigated						0.00	0.00		0.00	0.00						
NaturalGas Mitigated	0.01	0.06	0.03	0.00		0.00	0.00		0.00	0.00						
NaturalGas Unmitigated	0.01	0.06	0.03	0.00		0.00	0.00		0.00	0.00						
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
Convenience Market (24 Hour)	18975	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Hardware/Paint Store	106260	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00						
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Single Family Housing	1.15113e+006	0.01	0.05	0.02	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						
Total		0.01	0.06	0.02	0.00		0.00	0.00		0.00	0.00						

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Convenience Market (24 Hour)	18975	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Hardware/Paint Store	106260	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00						
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Single Family Housing	1.15113e+006	0.01	0.05	0.02	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						
Total		0.01	0.06	0.02	0.00		0.00	0.00		0.00	0.00						

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			
Convenience Market (24 Hour)	38350								
Hardware/Paint Store	214760								
Other Asphalt Surfaces	0								
Single Family Housing	288447								
User Defined Residential	0								
Total									

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Convenience Market (24 Hour)	38350								
Hardware/Paint Store	214760								
Other Asphalt Surfaces	0								
Single Family Housing	288447								
User Defined Residential	0								
Total									

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.89	0.10	9.17	0.00		0.00	1.18		0.00	1.18						
Unmitigated	7.89	0.10	9.17	0.00		0.00	1.18		0.00	1.18						
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	0.30					0.00	0.00		0.00	0.00						
Consumer Products	0.77					0.00	0.00		0.00	0.00						
Hearth	6.79	0.09	8.35	0.00		0.00	1.18		0.00	1.18						
Landscaping	0.03	0.01	0.83	0.00		0.00	0.00		0.00	0.00						
Total	7.89	0.10	9.18	0.00		0.00	1.18		0.00	1.18						

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.30					0.00	0.00		0.00	0.00						
Consumer Products	0.77					0.00	0.00		0.00	0.00						
Hearth	6.79	0.09	8.35	0.00		0.00	1.18		0.00	1.18						
Landscaping	0.03	0.01	0.83	0.00		0.00	0.00		0.00	0.00						
Total	7.89	0.10	9.18	0.00		0.00	1.18		0.00	1.18						

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated								
Unmitigated								
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			
Convenience Market (24 Hour)	0.185181 / 0.113498								
Hardware/Paint Store	1.03702 / 0.63559								
Other Asphalt Surfaces	0 / 0								
Single Family Housing	2.80162 / 1.76624								
User Defined Residential	0 / 0								
Total									

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Convenience Market (24 Hour)	0.185181 / 0.113498								
Hardware/Paint Store	1.03702 / 0.63559								
Other Asphalt Surfaces	0 / 0								
Single Family Housing	2.80162 / 1.76624								
User Defined Residential	0 / 0								
Total									

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated								
Unmitigated								
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			
Convenience Market (24 Hour)	7.51								
Hardware/Paint Store	155.25								
Other Asphalt Surfaces	0								
Single Family Housing	30.75								
User Defined Residential	0								
Total									

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Convenience Market (24 Hour)	7.51								
Hardware/Paint Store	155.25								
Other Asphalt Surfaces	0								
Single Family Housing	30.75								
User Defined Residential	0								
Total									

9.0 Vegetation

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons				MT			
Unmitigated								
Total	NA	NA	NA	NA	NA	NA	NA	NA

9.1 Vegetation Land Change

Vegetation Type

	Initial/Final	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	Acres	tons				MT			
Grassland	2.99 / 0.71								
Scrub	1.23 / 0.34								
Trees	23.17 / 6.42								
Total									

9.1 Net New Trees

Species Class

	Number of Trees	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
		tons				MT			
Mixed Hardwood	132								
Total									

Piedmont Oaks
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Other Asphalt Surfaces	5.5	Acre
Single Family Housing	43	Dwelling Unit
User Defined Residential	65	Dwelling Unit
Convenience Market (24 Hour)	2.5	1000sqft
Hardware/Paint Store	14	1000sqft

1.2 Other Project Characteristics

Urbanization Urban **Wind Speed (m/s)** 2.7 **Utility Company** Pacific Gas & Electric Company
Climate Zone 1 **Precipitation Freq (Days)** 70

1.3 User Entered Comments

Project Characteristics -

Land Use - User Defined Res = Clustered homes. Lot Acreage Based on current TM design (16Jan2013). Sq ft of used defined residential assumed to be 1,600.

Construction Phase - Demolition Phase Not needed, phase removed

Demolition -

Grading - Total Acres Disturbed based on most recent site layout (16Jan2013). The total estimate grading volume is 46,000 cy balanced. Since the cut/ fill are balanced there is no import/ export.

Woodstoves -

Land Use Change -

Sequestration -

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	11.37	90.76	52.02	0.10	18.30	4.18	21.91	9.94	4.18	13.55						
2015	303.13	30.93	28.64	0.05	1.02	2.55	2.87	0.04	2.55	2.55						
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.1 Overall Construction (Maximum Daily Emission)

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	11.37	90.76	52.02	0.10	18.08	4.18	21.69	9.94	4.18	13.55						
2015	303.13	30.93	28.64	0.05	0.04	2.55	2.55	0.04	2.55	2.55						
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	63.15	1.12	93.31	0.08		0.00	12.29		0.00	12.29						
Energy	0.04	0.32	0.15	0.00		0.00	0.03		0.00	0.03						
Mobile	15.74	11.88	93.35	0.14	15.09	0.37	15.46	0.50	0.37	0.87						
Total	78.93	13.32	186.81	0.22	15.09	0.37	27.78	0.50	0.37	13.19						

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	63.15	1.12	93.31	0.08		0.00	12.29		0.00	12.29						
Energy	0.04	0.32	0.15	0.00		0.00	0.03		0.00	0.03						
Mobile	15.74	11.88	93.35	0.14	15.09	0.37	15.46	0.50	0.37	0.87						
Total	78.93	13.32	186.81	0.22	15.09	0.37	27.78	0.50	0.37	13.19						

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 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					18.07	0.00	18.07	9.93	0.00	9.93						
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61						
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.14	0.10	1.07	0.00	0.23	0.01	0.24	0.01	0.01	0.01						
Total	0.14	0.10	1.07	0.00	0.23	0.01	0.24	0.01	0.01	0.01						

3.2 Site Preparation - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61						
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.14	0.10	1.07	0.00	0.01	0.01	0.01	0.01	0.01	0.01						
Total	0.14	0.10	1.07	0.00	0.01	0.01	0.01	0.01	0.01	0.01						

3.3 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					8.67	0.00	8.67	3.31	0.00	3.31						
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18						
Total	11.22	90.65	50.83	0.10	8.67	4.18	12.85	3.31	4.18	7.49						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.15	0.11	1.19	0.00	0.26	0.01	0.27	0.01	0.01	0.02						
Total	0.15	0.11	1.19	0.00	0.26	0.01	0.27	0.01	0.01	0.02						

3.3 Grading - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18						
Total	11.22	90.65	50.83	0.10	8.67	4.18	12.85	3.31	4.18	7.49						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.15	0.11	1.19	0.00	0.01	0.01	0.02	0.01	0.01	0.02						
Total	0.15	0.11	1.19	0.00	0.01	0.01	0.02	0.01	0.01	0.02						

3.4 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02						
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02						

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						
Vendor	0.26	1.59	2.29	0.00	0.13	0.04	0.17	0.01	0.04	0.05						
Worker	0.52	0.38	4.04	0.01	0.89	0.02	0.91	0.03	0.02	0.05						
Total	0.78	1.97	6.33	0.01	1.02	0.06	1.08	0.04	0.06	0.10						

3.4 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02						
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02						

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						
Vendor	0.26	1.59	2.29	0.00	0.01	0.04	0.05	0.01	0.04	0.05						
Worker	0.52	0.38	4.04	0.01	0.03	0.02	0.05	0.03	0.02	0.05						
Total	0.78	1.97	6.33	0.01	0.04	0.06	0.10	0.04	0.06	0.10						

3.4 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80						
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80						

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						
Vendor	0.24	1.44	2.01	0.00	0.13	0.04	0.17	0.01	0.04	0.05						
Worker	0.48	0.34	3.64	0.01	0.89	0.02	0.91	0.03	0.02	0.05						
Total	0.72	1.78	5.65	0.01	1.02	0.06	1.08	0.04	0.06	0.10						

3.4 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80						
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80						

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						
Vendor	0.24	1.44	2.01	0.00	0.01	0.04	0.05	0.01	0.04	0.05						
Worker	0.48	0.34	3.64	0.01	0.03	0.02	0.05	0.03	0.02	0.05						
Total	0.72	1.78	5.65	0.01	0.04	0.06	0.10	0.04	0.06	0.10						

3.5 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						
Paving	0.72					0.00	0.00		0.00	0.00						
Total	5.61	30.10	20.54	0.03		2.54	2.54		2.54	2.54						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.11	0.07	0.80	0.00	0.20	0.00	0.20	0.01	0.00	0.01						
Total	0.11	0.07	0.80	0.00	0.20	0.00	0.20	0.01	0.00	0.01						

3.5 Paving - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54						
Paving	0.72					0.00	0.00		0.00	0.00						
Total	5.61	30.10	20.54	0.03		2.54	2.54		2.54	2.54						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.11	0.07	0.80	0.00	0.01	0.00	0.01	0.01	0.00	0.01						
Total	0.11	0.07	0.80	0.00	0.01	0.00	0.01	0.01	0.00	0.01						

3.6 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	302.62					0.00	0.00		0.00	0.00						
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22						
Total	303.03	2.57	1.90	0.00		0.22	0.22		0.22	0.22						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.10	0.07	0.75	0.00	0.18	0.00	0.19	0.01	0.00	0.01						
Total	0.10	0.07	0.75	0.00	0.18	0.00	0.19	0.01	0.00	0.01						

3.6 Architectural Coating - 2015

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	302.62					0.00	0.00		0.00	0.00						
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22						
Total	303.03	2.57	1.90	0.00		0.22	0.22		0.22	0.22						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.10	0.07	0.75	0.00	0.01	0.00	0.01	0.01	0.00	0.01						
Total	0.10	0.07	0.75	0.00	0.01	0.00	0.01	0.01	0.00	0.01						

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	15.74	11.88	93.35	0.14	15.09	0.37	15.46	0.50	0.37	0.87						
Unmitigated	15.74	11.88	93.35	0.14	15.09	0.37	15.46	0.50	0.37	0.87						
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	1,844.98	2,157.75	1896.13	1,444,684	1,444,684
Hardware/Paint Store	718.06	1,155.28	961.10	1,185,975	1,185,975
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	411.51	433.44	377.11	1,173,685	1,173,685
User Defined Residential	0.00	0.00	0.00		
Total	2,974.55	3,746.47	3,234.34	3,804,344	3,804,344

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00
Hardware/Paint Store	9.50	7.30	7.30	13.60	67.40	19.00
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40
User Defined Residential	10.80	7.30	7.50	42.60	21.00	36.40

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	0.04	0.32	0.15	0.00		0.00	0.03		0.00	0.03						
NaturalGas Unmitigated	0.04	0.32	0.15	0.00		0.00	0.03		0.00	0.03						
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Convenience Market (24 Hour)	51.9863	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00						
Hardware/Paint Store	291.123	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00						
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Single Family Housing	3153.79	0.03	0.29	0.12	0.00		0.00	0.02		0.00	0.02						
User Defined Residential	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Total		0.03	0.33	0.14	0.00		0.00	0.02		0.00	0.02						

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Convenience Market (24 Hour)	0.0519863	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00						
Hardware/Paint Store	0.291123	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00						
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Single Family Housing	3.15379	0.03	0.29	0.12	0.00		0.00	0.02		0.00	0.02						
User Defined Residential	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Total		0.03	0.33	0.14	0.00		0.00	0.02		0.00	0.02						

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	63.15	1.12	93.31	0.08		0.00	12.29		0.00	12.29						
Unmitigated	63.15	1.12	93.31	0.08		0.00	12.29		0.00	12.29						
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	1.66					0.00	0.00		0.00	0.00						
Consumer Products	4.24					0.00	0.00		0.00	0.00						
Hearth	56.96	1.01	84.13	0.08		0.00	12.24		0.00	12.24						
Landscaping	0.29	0.11	9.19	0.00		0.00	0.05		0.00	0.05						
Total	63.15	1.12	93.32	0.08		0.00	12.29		0.00	12.29						

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.66					0.00	0.00		0.00	0.00						
Consumer Products	4.24					0.00	0.00		0.00	0.00						
Hearth	56.96	1.01	84.13	0.08		0.00	12.24		0.00	12.24						
Landscaping	0.29	0.11	9.19	0.00		0.00	0.05		0.00	0.05						
Total	63.15	1.12	93.32	0.08		0.00	12.29		0.00	12.29						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Piedmont Oaks
El Dorado-Mountain County County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Other Asphalt Surfaces	5.5	Acre
Single Family Housing	43	Dwelling Unit
User Defined Residential	65	Dwelling Unit
Convenience Market (24 Hour)	2.5	1000sqft
Hardware/Paint Store	14	1000sqft

1.2 Other Project Characteristics

Urbanization Urban **Wind Speed (m/s)** 2.7 **Utility Company** Pacific Gas & Electric Company
Climate Zone 1 **Precipitation Freq (Days)** 70

1.3 User Entered Comments

Project Characteristics -

Land Use - User Defined Res = Clustered homes. Lot Acreage Based on current TM design (16Jan2013). Sq ft of used defined residential assumed to be 1,600.

Construction Phase - Demolition Phase Not needed, phase removed

Demolition -

Grading - Total Acres Disturbed based on most recent site layout (16Jan2013). The total estimate grading volume is 46,000 cy balanced. Since the cut/ fill are balanced there is no import/ export.

Woodstoves -

Land Use Change -

Sequestration -

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	11.38	90.77	51.91	0.10	18.30	4.18	21.91	9.94	4.18	13.55						
2015	303.13	31.02	28.74	0.05	1.02	2.55	2.87	0.04	2.55	2.55						
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.1 Overall Construction (Maximum Daily Emission)

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	11.38	90.77	51.91	0.10	18.08	4.18	21.69	9.94	4.18	13.55						
2015	303.13	31.02	28.74	0.05	0.04	2.55	2.55	0.04	2.55	2.55						
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	63.15	1.12	93.31	0.08		0.00	12.29		0.00	12.29						
Energy	0.04	0.32	0.15	0.00		0.00	0.03		0.00	0.03						
Mobile	14.54	12.99	99.06	0.12	15.09	0.37	15.46	0.50	0.37	0.87						
Total	77.73	14.43	192.52	0.20	15.09	0.37	27.78	0.50	0.37	13.19						

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	63.15	1.12	93.31	0.08		0.00	12.29		0.00	12.29						
Energy	0.04	0.32	0.15	0.00		0.00	0.03		0.00	0.03						
Mobile	14.54	12.99	99.06	0.12	15.09	0.37	15.46	0.50	0.37	0.87						
Total	77.73	14.43	192.52	0.20	15.09	0.37	27.78	0.50	0.37	13.19						

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 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					18.07	0.00	18.07	9.93	0.00	9.93						
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61						
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.14	0.11	0.97	0.00	0.23	0.01	0.24	0.01	0.01	0.01						
Total	0.14	0.11	0.97	0.00	0.23	0.01	0.24	0.01	0.01	0.01						

3.2 Site Preparation - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61						
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.14	0.11	0.97	0.00	0.01	0.01	0.01	0.01	0.01	0.01						
Total	0.14	0.11	0.97	0.00	0.01	0.01	0.01	0.01	0.01	0.01						

3.3 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					8.67	0.00	8.67	3.31	0.00	3.31						
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18						
Total	11.22	90.65	50.83	0.10	8.67	4.18	12.85	3.31	4.18	7.49						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.16	0.12	1.08	0.00	0.26	0.01	0.27	0.01	0.01	0.02						
Total	0.16	0.12	1.08	0.00	0.26	0.01	0.27	0.01	0.01	0.02						

3.3 Grading - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18						
Total	11.22	90.65	50.83	0.10	8.67	4.18	12.85	3.31	4.18	7.49						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.16	0.12	1.08	0.00	0.01	0.01	0.02	0.01	0.01	0.02						
Total	0.16	0.12	1.08	0.00	0.01	0.01	0.02	0.01	0.01	0.02						

3.4 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02						
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02						

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						
Vendor	0.29	1.65	2.75	0.00	0.13	0.04	0.17	0.01	0.04	0.05						
Worker	0.54	0.41	3.66	0.01	0.89	0.02	0.91	0.03	0.02	0.05						
Total	0.83	2.06	6.41	0.01	1.02	0.06	1.08	0.04	0.06	0.10						

3.4 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02						
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02						

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						
Vendor	0.29	1.65	2.75	0.00	0.01	0.04	0.05	0.01	0.04	0.05						
Worker	0.54	0.41	3.66	0.01	0.03	0.02	0.05	0.03	0.02	0.05						
Total	0.83	2.06	6.41	0.01	0.04	0.06	0.10	0.04	0.06	0.10						

3.4 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	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80						
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80						

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						
Vendor	0.26	1.49	2.48	0.00	0.13	0.04	0.17	0.01	0.04	0.05						
Worker	0.50	0.37	3.28	0.01	0.89	0.02	0.91	0.03	0.02	0.05						
Total	0.76	1.86	5.76	0.01	1.02	0.06	1.08	0.04	0.06	0.10						

3.4 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80						
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80						

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						
Vendor	0.26	1.49	2.48	0.00	0.01	0.04	0.05	0.01	0.04	0.05						
Worker	0.50	0.37	3.28	0.01	0.03	0.02	0.05	0.03	0.02	0.05						
Total	0.76	1.86	5.76	0.01	0.04	0.06	0.10	0.04	0.06	0.10						

3.5 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						
Paving	0.72					0.00	0.00		0.00	0.00						
Total	5.61	30.10	20.54	0.03		2.54	2.54		2.54	2.54						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.11	0.08	0.72	0.00	0.20	0.00	0.20	0.01	0.00	0.01						
Total	0.11	0.08	0.72	0.00	0.20	0.00	0.20	0.01	0.00	0.01						

3.5 Paving - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.89	30.10	20.54	0.03		2.54	2.54		2.54	2.54						
Paving	0.72					0.00	0.00		0.00	0.00						
Total	5.61	30.10	20.54	0.03		2.54	2.54		2.54	2.54						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.11	0.08	0.72	0.00	0.01	0.00	0.01	0.01	0.00	0.01						
Total	0.11	0.08	0.72	0.00	0.01	0.00	0.01	0.01	0.00	0.01						

3.6 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	302.62					0.00	0.00		0.00	0.00						
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22						
Total	303.03	2.57	1.90	0.00		0.22	0.22		0.22	0.22						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.10	0.08	0.68	0.00	0.18	0.00	0.19	0.01	0.00	0.01						
Total	0.10	0.08	0.68	0.00	0.18	0.00	0.19	0.01	0.00	0.01						

3.6 Architectural Coating - 2015

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	302.62					0.00	0.00		0.00	0.00						
Off-Road	0.41	2.57	1.90	0.00		0.22	0.22		0.22	0.22						
Total	303.03	2.57	1.90	0.00		0.22	0.22		0.22	0.22						

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						
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Worker	0.10	0.08	0.68	0.00	0.01	0.00	0.01	0.01	0.00	0.01						
Total	0.10	0.08	0.68	0.00	0.01	0.00	0.01	0.01	0.00	0.01						

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	14.54	12.99	99.06	0.12	15.09	0.37	15.46	0.50	0.37	0.87						
Unmitigated	14.54	12.99	99.06	0.12	15.09	0.37	15.46	0.50	0.37	0.87						
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market (24 Hour)	1,844.98	2,157.75	1896.13	1,444,684	1,444,684
Hardware/Paint Store	718.06	1,155.28	961.10	1,185,975	1,185,975
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	411.51	433.44	377.11	1,173,685	1,173,685
User Defined Residential	0.00	0.00	0.00		
Total	2,974.55	3,746.47	3,234.34	3,804,344	3,804,344

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Convenience Market (24 Hour)	9.50	7.30	7.30	0.90	80.10	19.00
Hardware/Paint Store	9.50	7.30	7.30	13.60	67.40	19.00
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40
User Defined Residential	10.80	7.30	7.50	42.60	21.00	36.40

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	0.04	0.32	0.15	0.00		0.00	0.03		0.00	0.03						
NaturalGas Unmitigated	0.04	0.32	0.15	0.00		0.00	0.03		0.00	0.03						
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Convenience Market (24 Hour)	51.9863	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00						
Hardware/Paint Store	291.123	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00						
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Single Family Housing	3153.79	0.03	0.29	0.12	0.00		0.00	0.02		0.00	0.02						
User Defined Residential	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Total		0.03	0.33	0.14	0.00		0.00	0.02		0.00	0.02						

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Convenience Market (24 Hour)	0.0519863	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00						
Hardware/Paint Store	0.291123	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00						
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Single Family Housing	3.15379	0.03	0.29	0.12	0.00		0.00	0.02		0.00	0.02						
User Defined Residential	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00						
Total		0.03	0.33	0.14	0.00		0.00	0.02		0.00	0.02						

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	63.15	1.12	93.31	0.08		0.00	12.29		0.00	12.29						
Unmitigated	63.15	1.12	93.31	0.08		0.00	12.29		0.00	12.29						
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	1.66					0.00	0.00		0.00	0.00						
Consumer Products	4.24					0.00	0.00		0.00	0.00						
Hearth	56.96	1.01	84.13	0.08		0.00	12.24		0.00	12.24						
Landscaping	0.29	0.11	9.19	0.00		0.00	0.05		0.00	0.05						
Total	63.15	1.12	93.32	0.08		0.00	12.29		0.00	12.29						

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.66					0.00	0.00		0.00	0.00						
Consumer Products	4.24					0.00	0.00		0.00	0.00						
Hearth	56.96	1.01	84.13	0.08		0.00	12.24		0.00	12.24						
Landscaping	0.29	0.11	9.19	0.00		0.00	0.05		0.00	0.05						
Total	63.15	1.12	93.32	0.08		0.00	12.29		0.00	12.29						

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation



SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.

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12 February 2013

Mr. Jim Davies
Piedmont Oak Estates, LLC
854 Diablo Road
Danville, CA 94526-2760

Phone: 925/ 855-8489

Fax: 925/ 943-7409

Subject: Memorandum Regarding Greenhouse Gases for the Piedmont Oak Estates Project, El Dorado County, CA.

Dear Mr. Davies:

Sycamore Environmental evaluated the proposed project's need to address greenhouse gas (GHG) emissions in the California Environmental Quality Act (CEQA) Initial Study for the proposed tentative subdivision map. Senate Bill 375 (SB 375) was passed on 30 September 2008 and provides, among other provisions, a streamlined CEQA review and analysis for certain transit projects, residential, or mixed-use residential projects that are consistent with an adopted Sustainable Communities Strategy (SCS). A project that qualifies for the streamlined CEQA review is not required to reference, describe or discuss: growth-inducing impacts, impacts on transportation or climate change of increased car and truck vehicle miles travelled (VMT) induced by project, and a reduced density alternative to project. El Dorado County as the lead CEQA agency is responsible for making the final determination regarding the application of the appropriate CEQA streamlining.

The Sacramento Area Council of Governments adopted the Metropolitan Transportation Plan/Sustainable Communities Strategy 2035 (MTP/SCS) on 19 April 2012. The California Air Resources Board issued an acceptance of GHG Quantification Determination for the SACOG MTP/SCS on 12 June 2012. El Dorado County is one of the six counties and 28 cities that are addressed in the MTP/SCS.

A project qualifies for the CEQA streamlining benefits of SB 375 if it is found consistent with the adopted SCS. Determining a project's consistency with the SCS, requires that a jurisdiction find it consistent with the general land use, density, intensity, and any applicable land use policies of the SCS. To assist in this determination the SACOG provides a *Determination of MTP/SCS Consistency Worksheet* (worksheet). A completed worksheet is included in Attachment A.

In accordance with the Section 3.C.1 of the worksheet the project is consistent with the MTP/SCS based on the methods outlined in Option B, which states:

"The Project is located in a **Center and Corridor Community** or an **Established Community** and the Project uses have been reviewed in the context of, and are found to be consistent with, the general land use, density, and intensity information provided for this Community Type in Appendix E-3 of the MTP/SCS. Therefore, the Project is consistent with the MTP/SCS."

Section 3.C.1 of the worksheet says a project is consistent with the MTP/SCS if it has been reviewed in the context of, and found to be consistent with, the general land use, density, and intensity information provided for this Community Type in Appendix E-3 of the MTP/SCS. The proposed Project is qualified as a mixed-use residential project (residential building square footage = 91.66%) and is located in an "Established Community" type as per MTP/SCS Appendix E-3 and Figure 3.2 (Diamond Springs Area).

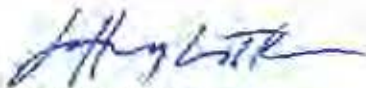
The MTP/SCS Established Community type includes density's ranging from 2 to 25 units (single or multi-family) per acre. The proposed project results in a density of 4.5 residential dwelling units per ac, and is consistent with the MTP/SCS.

The MTP/SCS Established Community type includes a general range of building intensities from a Floor Area Ratios (FAR) of 0.2 to 0.6, up to 2.0 in mixed-use buildings. The County's maximum FAR for commercial is 0.85 (El Dorado County 2009). The proposed Project does not include changes to the existing land use designations of the project parcels. Building intensity on the two commercial lots would be consistent with the range provided in the SCS and will not exceed the County maximum FAR. The proposed Project intensity is consistent with the MTP/SCS.

The Project qualifies for CEQA streamlining under SB 375. The CEQA document for the proposed Project need not describe or discuss growth-inducing impacts, impacts on transportation or climate change (greenhouse gases) of increased car and truck VMT induced by project, and a reduced density alternative to the project.

Thank you for the opportunity of evaluating your project. If you have any questions, please call.

Yours truly,



Jeffery Little
Vice President

c: Mr. Peter Thorne, P.E. BTConsulting, Inc.

Attachment A. Determination of MTP/SCS Consistency Worksheet.

Attachment A
Determination of MTP/SCS Consistency Worksheet
for the
Piedmont Oak Estates Project

El Dorado County, CA

Information relevant to Project is highlighted in yellow and starts in Section 2 (Residential or Mixed-Use Residential Project) of the worksheet.

DETERMINATION OF MTP/SCS CONSISTENCY WORKSHEET
For Qualifying Transit Priority Projects and Residential/Mixed-Use Residential Projects
As of July 31, 2012ⁱ

Background: Pursuant to SB 375, streamlined CEQA review and analysis is available to Transit Priority Projects (TPPs) and residential or mixed-use residential projects that are consistent with the SCS. The SCS was adopted by the Sacramento Area Council of Governments (SACOG) Board as part of the Metropolitan Transportation Plan/Sustainable Communities Strategy for 2035 on April 19, 2012. The California Air Resources Board issued an Acceptance of GHG Quantification Determination for the SACOG SCS on June 12, 2012.

Streamlined CEQA review available to TPPs consists of one of the following: 1) a Sustainable Communities Environmental Assessment (SCEA) pursuant to Public Resources Code (PRC) § 21155.2(b) or 2) an EIR pursuant to PRC § 21155.2(c).ⁱⁱ

Streamlined CEQA review available to residential or mixed-use residential projects consists of an EIR pursuant to PRC § 21159.28(a).

Purpose: The purpose of this worksheet is to provide lead agencies with assistance on three issues:

1. Whether a proposed project qualifies as a TPP;
2. Whether a proposed project qualifies as a residential or mixed-use residential project (at least 75 percent of the total building square footage is residential);
3. Whether the TPP or residential/mixed-use residential project is consistent with the general land use designation, density, intensity and applicable policies of the MTP/SCS for 2035 adopted by the Sacramento Area Council of Governments (SACOG).

The lead agency has responsibility to make the final determination on these matters and to determine the applicable and appropriate CEQA streamlining, if any.

Directions: This worksheet should be completed by the lead agency, relying on the project description of the proposed project, MTP/SCS Chapters 3 and 4, and MTP/SCS Appendix E-3. Regardless of whether this worksheet is used, pursuant to PRC § 21155(a) and PRC § 21159.28(a), a project can only be consistent with the MTP/SCS if it is consistent with the general land use designation, density, building intensity, and applicable policies specified for the project area in the adopted SCS. This worksheet only applies to the MTP/SCS for 2035 (adopted April 19, 2012); subsequent MTP/SCS adoptions may require updates to this form.

Lead agencies are welcome to contact SACOG for assistance in completing this worksheet. For assistance, contact Kacey Lizon at klizon@sacog.org or 916-340-6265.

DETERMINATION OF MTP/SCS CONSISTENCY WORKSHEET
For Qualifying Transit Priority Projects and Residential/Mixed-Use Residential Projects
As of July 31, 2012ⁱ

Project Title: Piedmont Oaks Project

Proposed project is located in (city/county name): El Dorado/ Diamond Springs
Community Region (an Established Community type), El Dorado County

1. Transit Priority Project Designation (PRC § 21155(b)) - NA

A project must meet the requirements of items **1.A, 1.B, 1.C, and 1.D**, below, to qualify as a Transit Priority Project. **For items 1.C and 1.D**, the definition of an MTP/SCS Transit Priority Area is: the area within one-half mile of a rail station stop or a high-quality transit corridor included in the MTP/SCS. A high-quality transit corridor has fixed route bus service with service intervals of 15 minutes or less during peak commute hours. See MTP/SCS Chapter 3 for the map of Transit Priority Areas.

1.A. [] The Project has a minimum net densityⁱⁱⁱ of 20 dwelling units per acre.

Calculation:

Total housing units proposed in Project ____ ÷ Total Project parcel area (in netⁱⁱ acres) ____
= _____ (Should be ≥ 20 du/ac)

1.B. [] At least 50 percent of the Project's total building square footage is in residential use, **AND**,

[] The total building square footage of the Project has 25 percent or less non-residential use, or, if it has between 26 and 50 percent in non-residential use, has a minimum FAR of 0.75.

Calculations:

Total Project residential square footage ____ ÷ Total Project building square footage ____
= _____ (Should be ≥ 50%)

Total Project building square footage ____ ÷ Total Project parcel(s) area square footage ____
= _____ (Should be ≥ 0.75)

1.C. [] The Project is located within an MTP/SCS Transit Priority Area and the qualifying transit service is *(transit route name/applicable street name/number or light rail stop name as identified in the adopted MTP/SCS):* _____

1.D. [] No more than 25 percent of the area of the Project parcels are farther than one-half mile from the TPA transit stop/corridor and no more than 10 percent of the residential units or 100 units, whichever is less, in the project are farther than one-half mile from the TPA transit stop/corridor.

Calculations:

Project area outside of ½ mile TPA ____ ÷ Total Project area ____
= _____ (Should be ≤ 25%)

DETERMINATION OF MTP/SCS CONSISTENCY WORKSHEET
For Qualifying Transit Priority Projects and Residential/Mixed-Use Residential Projects
As of July 31, 2012ⁱ

Project area outside of ½ mile TPA _____ ÷ Total Project area ____
= _____ (Should be ≤ 10% or less than 100 units)

SECTION 1 CONCLUSION: Not Applicable

- The proposed project meets the requirements of 1.A, 1.B, 1.C, and 1.D and therefore qualifies as a Transit Priority Project.
- The proposed project does not meet all the requirements of 1.A, 1.B, 1.C, and 1.D and therefore does not qualify as a Transit Priority Project.

2. Residential or Mixed-Use Residential Project Designation for Projects Located Outside of an MTP/SCS TPA 21159.28(a)

A residential or mixed-use residential project using the streamlined CEQA review to complete an EIR pursuant to PRC § 21159.28(a) must meet the following requirement:

- 2.A.** At least 75 percent of the total building square footage of the project consists of residential use.

Calculation:

Total Project residential square footage **181,400** ÷ Total Project building square footage **197,900** = **0.9166 or 91.66 %** (Should be ≥ 75%)

SECTION 2 CONCLUSION:

- The proposed project meets the requirements of 2.A and therefore qualifies as a residential or mixed-use residential project.
- The proposed project does not meet the requirements of 2.A and therefore does not qualify as a residential or mixed-use residential project.

IF A PROJECT DOES NOT QUALIFY AS EITHER A TRANSIT PRIORITY PROJECT (UNDER SECTION 1) OR A RESIDENTIAL OR MIXED-USE RESIDENTIAL PROJECT (UNDER SECTION 2), THE PROJECT DOES NOT QUALIFY FOR SB 375 CEQA STREAMLINING. DO NOT PROCEED TO SECTION 3.

3. Required Consistency with the SCS: General Use Designation, Density and Intensity, and Applicable MTP/SCS Policies (PRC § 21155(a) and PRC § 21159.28(a))

3.A. Applicable MTP/SCS Policies. For the purposes of determining SCS consistency, the policies of the MTP/SCS are embedded in the metrics and growth forecast assumptions of the MTP/SCS. Projects consistent with the growth forecast assumptions of the MTP/SCS, as determined by

DETERMINATION OF MTP/SCS CONSISTENCY WORKSHEET
For Qualifying Transit Priority Projects and Residential/Mixed-Use Residential Projects
As of July 31, 2012ⁱ

application of items 3.B. and 3.C, are consistent with the MTP/SCS and its policies.

3.B. Applicable Community Type. The MTP/SCS land use forecast is illustrated using Community Types. In order to determine the general use designation, density and intensity of the Project area within the MTP/SCS, the Project must be located within a Community Type designated in the MTP/SCS. The MTP/SCS defines density/building intensity in terms of the amount of growth (residential and non- residential) forecasted and the amount of build out potential within each Community Type area. SACOG monitors development activity on an annual basis to check that the amount of development is consistent with the growth forecast of the MTP/SCS.

For the purposes of the lead agency's determination of SCS consistency, use MTP/SCS Appendix E-3 to identify the Community Type for the Project and fill in the applicable information, below for 3.B.1 and 3.B.2.

3.B.1. The Project is located in the following Community Type:

- Center and Corridor Community
- Established Community (**MTP/SCS Appendix E-3, Diamond Springs Area**)
- Developing Community (*list the specific name of the Developing Community as identified in the jurisdiction narrative in Appendix E-3*): _____
- Rural Residential Community

3.B.2 Development from the project when added to other entitled projects will not exceed the MTP/SCS build out assumptions for the area within this Community Type, which is **6,198** new housing units and **14,925** new employees^{iv}.

3.C. General Use Designation, Density and Building Intensity. The foundation of the land use designations for the MTP/SCS is adopted and proposed local general plans, community plans, specific plans and other local policies and regulations. A project is consistent with the MTP/SCS if its uses are identified in the applicable MTP/SCS Community Type **and** its uses meet the general density and building intensity assumptions for the Community Type. The proposed project does not have to include all allowed uses in the MTP/SCS.

DETERMINATION OF MTP/SCS CONSISTENCY WORKSHEET
For Qualifying Transit Priority Projects and Residential/Mixed-Use Residential Projects
As of July 31, 2012ⁱ

3.C.1. Determine consistency of the Project using one of the methods below:

Option A:

The Project is located in a **Center and Corridor Community or an Established Community** and the Project uses are consistent with the allowed uses of the applicable adopted local land use plan as it existed in 2012 and are at least 80 percent of the allowed density or intensity of the allowed uses. Therefore, the Project is consistent with the MTP/SCS.^v

OR

Option B:

The Project is located in a **Center and Corridor Community or an Established Community** and the Project uses have been reviewed in the context of, and are found to be consistent with, the general land use, density, and intensity information provided for this Community Type in Appendix E-3 of the MTP/SCS. Therefore, the Project is consistent with the MTP/SCS.

OR

Option C:

The Project is located in a **Rural Residential Community** and the Project residential density does not exceed the maximum density of one unit per acre as specified in the MTP/SCS, and employment development in the Project is at least 80 percent of the allowed intensity of the land use designations of the adopted general plan. Therefore, the Project is consistent with the MTP/SCS.

OR

Option D:

The Project is located in a **Developing Community** and the Project's average net density meets or exceed the average net density described for this specific Developing Community (as referenced by name of applicable specific plan, master plan, or special plan in MTP/SCS Appendix E-3) and employment development in the Project is consistent with the general employment land uses described for this specific Developing Community.^{vi} Therefore, the Project is consistent with the MTP/SCS.

DETERMINATION OF MTP/SCS CONSISTENCY WORKSHEET
For Qualifying Transit Priority Projects and Residential/Mixed-Use Residential Projects
As of July 31, 2012ⁱ

The proposed project is consistent with the General Use Designation, Density and Intensity, and Applicable MTP/SCS Policies for the following reasons (*summarize findings on use designation, density and intensity for the Project evaluation completed in Section 3*):

SECTION 3 CONCLUSION:

The proposed project is consistent with the General Use Designation, Density and Intensity, and Applicable MTP/SCS Policies for the following reasons (*summarize findings on use designation, density and intensity for the Project evaluation completed in Section 3*):

As per Option B above, a project is consistent with the MTP/SCS if it has been reviewed in the context of, and found to be consistent with, the general land use, density, and intensity information provided for this Community Type in Appendix E-3 of the MTP/SCS. The proposed Project is qualified as a mixed-use residential project (residential building square footage = 91.66%) and is located in an "Established Community" type as per MTP/SCS Appendix E-3 and Figure 3.2 (Diamond Springs Area).

The MTP/SCS Established Community type includes density's ranging from 2 to 25 units (single or multi-family) per acre. The proposed project results in a density of 4.5 residential dwelling units per ac, and is consistent with the MTP/SCS.

The MTP/SCS Established Community type includes a general range of building intensities from a Floor Area Ratios (FAR) of 0.2 to 0.6, up to 2.0 in mixed-use buildings. The County maximum FAR for commercial is 0.85 (El Dorado County 2009). The proposed Project does not include changes to the existing land use designations of the project parcels. Building intensity on the two commercial lots would be consistent with the range provided in the SCS and will not exceed the County maximum FAR. The proposed Project intensity is consistent with the MTP/SCS.

El Dorado County. Adopted 19 July 2004 (amended December 2009). El Dorado County general plan, a plan for managed growth and open roads; a plan for quality neighborhoods and traffic relief, land use element. El Dorado County Planning Department, Placerville, CA.

ⁱ This document may be updated as users provide feedback on its utility.

ⁱⁱ If a TPP complies with an additional series of requirements set forth in PRC § 21155.1, it qualifies as a Sustainable Communities Project and becomes eligible for a complete exemption from CEQA. This worksheet does not address Sustainable Communities Projects.

ⁱⁱⁱ *Net density* is not defined in PRC §2115(b). In the MTP/SCS, net density is defined as follows: Housing units divided by the acres on which housing is built, exclusive of public rights-of-ways, parks, schools and public areas (MTP/SCS Appendix E-3, pg. 34).

^{iv} The MTP/SCS build out for each Community Type assumes development that is entitled as of January 1, 2008. SACOG monitors housing permits on an annual basis and will ensure that housing and employment projects relying on the SB 375 CEQA benefits will not exceed the capacity assumed in the MTP/SCS.

^v The MTP/SCS general land use, density and intensity in Center and Corridor Communities and Established Communities is based on 80 percent of the allowed density or intensity of the land use designations in adopted general plans as they existed in 2012, unless otherwise noted in Appendix E-3.

^{vi} The MTP/SCS land use forecast in Developing Communities was modeled according to adopted and proposed specific plans, master plans, and special plans as they existed in 2012, and is based on the housing and employment totals and the average net density of these plans, as outlined in Appendix E-3.