



BLUE SCAPE
ENVIRONMENTAL

Memorandum

To: Lindsay Brown, DM La Costa Avenue, LLC
From: James Westbrook, BlueScape Environmental
Date: April 1, 2024
Subject: Air Quality Study Results, for Project:
516 La Costa Boutique Hotel
516 La Costa Avenue, Encinitas, California

This memorandum outlines the air quality (AQ) study performed for the 516 La Costa Boutique Hotel project (Project), proposed to be located at 516 La Costa Avenue, in Encinitas, California. This study is being performed at the request of the City of Encinitas, as received by email on May 30, 2023.¹ A greenhouse gas (GHG) study has been completed for this Project, so this AQ study was performed using the same construction and operational assumptions as were made for the GHG study, with natural gas usage assumed for the entire Project.

Project Description

The proposed Project is a 17-room boutique hotel, with a restaurant including 1,165 square feet of indoor and outdoor dining space (including 345 square feet of outdoor dining) and a 451 square foot kitchen; a 17,375 square foot parking lot with 41 parking spaces; and a pool and spa deck at a site in the City of Encinitas. The total Project development will be 12,434 square feet. The site is located at 516 La Costa Avenue in Encinitas. The site is currently vacant. Surrounding land uses consist mostly of single-family homes, farm fields and a gas station.

AQ Study Methodology

The City of Encinitas refers to the County of San Diego's (County's) guidelines for California Environmental Quality Act (CEQA) requirements.² The County uses screening level thresholds (SLTs) to review emissions from construction and operation of a project to determine if a project's criteria pollutant

¹ Email received from I. Zepeda of The Brown Studio, May 30, 2023 at 1:26 pm.

² County of San Diego Guidelines for Determining Significance: Air Quality, County of San Diego, March 19, 2007. <https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/AQ-Guidelines.pdf>

emissions would be significant, thus requiring mitigation to reduce the impacts. These SLTs are based on San Diego Air Pollution Control District (SDAPCD) Rule 20.2, and are shown in Table 1 below:

TABLE 1 SCREENING LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS CONSTRUCTION AND OPERATIONS		
Pollutant	Daily Threshold (lb/day)	Annual Threshold (tons/year)
Criteria Pollutants		
Respirable Particulate Matter (PM ₁₀)	100	15
Fine Particulate Matter (PM _{2.5})	55*	10*
Oxides of Nitrogen (NO _x)	250	40
Oxides of Sulfur (SO _x)	250	40
Carbon Monoxide (CO)	550	100
Volatile Organic Compounds (VOCs)	75**	13.7***

Sources: SDAPCD Rule 20.2; County of San Diego CEQA Thresholds.

* EPA "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards" published September 8, 2005. Also used by the SCAQMD.

** Threshold for VOCs based on the threshold of significance for VOCs from the SCAQMD for the Coachella Valley.

*** 13.7 Tons Per Year threshold based on 75 lbs/day multiplied by 365 days/year and divided by 2000 lbs/ton.

AQ emission estimates were calculated using the California Emissions Estimator Model (Caleemod), software version 2020.4.0.³ Caleemod results are included as an attachment to this memo.

Caleemod Assumptions

Construction Scenario

Construction activities would include grading, construction of the buildings/utilities and related improvements as well as paving parking areas and painting the interiors/exteriors of the buildings. Construction activities would require the use of equipment that would generate criteria air pollutant emissions. For modeling purposes, it was assumed that all construction equipment would be diesel-fuel-powered. Construction emissions associated with the development of the Project site were calculated based on equipment amounts and types that were used for the GHG study originally completed in November 2022. A total of 1,160 cubic yards of demolition debris was input into Caleemod as the amount of material exported. The site was assumed to

³ Caleemod has been updated to a new web-based interface (version 2022.1.1) since the La Costa GHG study was originally modeled in November 2022, but the 2020.4.0 version is used in this AQ study to be consistent with what was used for the GHG study. Nevertheless, use of the 2022.1.1 version is not expected to change the conclusions of this study or of the GHG study.

be watered 3 times per day during the grading phase to comply with SDAPCD Rule 55. The use of low VOC paint was assumed per SDAPCD Rule 67.0.1. The demolition and site preparation phases of construction are not included in CalEEMod, due to the fact that the Project site is vacant and already prepared for grading.

It was estimated that construction would take approximately 22 months to complete from construction permit approvals. The paving and architectural coating phases overlap with the end of the building construction phase, which is consistent with the construction phases in the GHG report. The modeled construction schedule, which assumes a 5-day work week, is as follows:

- Grading (44 days)
- Building Construction (393 days)
- Paving (66 days)
- Architectural Coating (45 days)

Operational Scenario

The first year of Project operations is estimated to be no earlier than the end of calendar year 2024; a conservative assumption of an earlier start date has been made for this analysis.⁴ The land use types selected in CalEEMod for the Project were: Hotel, 17 Rooms, 11,269 sq. ft.; Quality Restaurant, 1,165 sq. ft.; and Parking (Other Asphalt Surfaces), 17,375 sq. ft. Traffic volumes that were determined by Mizuta Traffic Consulting in June 2023⁵ and an updated traffic study by CR Associates in January 2024⁶ were entered into CalEEMod as follows: 170 average daily trips (ADT) for the hotel and 117 ADT for the restaurant.

Solid waste-related emissions are associated with municipal solid waste activities. In 2016, the California legislature adopted SB 1383 which targets a 50 percent reduction in the landfilling of organic waste in 2022, by recycling, composting, and other diversion measures. Since the Project operations will begin in 2024, a 50% reduction in landfill organic waste generation was applied as a Project design feature. No fireplaces or hearths were assumed for the Project. Natural gas usage was assumed for the entire Project.

Construction Emissions

Table 2 shows the modeled maximum daily emissions occurring during the construction period at the site, with a comparison of daily impacts to the County of San Diego CEQA screening level thresholds.

⁴ Although the Project's timeline has been pushed to beyond the end of 2024, the original assumptions were retained from the Scientific Resources Associated GHG analysis report that was submitted to the City in February 2022 to be consistent with the GHG study. This assumption is conservative because emissions from construction equipment and onroad mobile sources will be lower due to equipment and automotive technology advancements.

⁵ *Trip Generation and VMT Analysis for the Proposed La Costa Development Project*, Mizuta Traffic Consulting, June 21, 2023.

⁶ *La Costa Hotel Trip Generation and Vehicle Miles Traveled Analysis – Technical Memorandum*, CR Associates, January 8, 2024.

TABLE 2 MAXIMUM DAILY CONSTRUCTION EMISSIONS						
lb/day						
Year	VOC	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
2023	1.57	12.0	13.0	0.02	2.32	1.39
2024	3.71	18.4	23.9	0.04	1.07	0.83
Screening Threshold (lb/day)	75	250	550	250	100	55
Exceeds Threshold (Yes/No)?	No	No	No	No	No	No

See attached CalEEMod ver. 2020.4.0 computer model output. The higher lb/day value between Winter and Summer results is shown for each pollutant.

Table 3 shows the modeled maximum annual impacts of criteria pollutants at the Project site by year throughout the assumed construction period, with a comparison of each year's annual impacts to the County of San Diego CEQA screening level thresholds.

TABLE 3 MAXIMUM ANNUAL CONSTRUCTION EMISSIONS						
tons/year						
Year	VOC	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
2023	0.14	1.14	1.12	0.002	0.10	0.07
2024	0.23	1.58	1.89	0.003	0.09	0.07
Screening Threshold (tons/year)	13.7	40	100	40	15	10
Exceeds Threshold (Yes/No)?	No	No	No	No	No	No

See attached CalEEMod ver. 2020.4.0 computer model output.

All criteria pollutant emissions are below the daily and annual screening level thresholds, as analyzed for each year of construction. **As such, the Project construction emissions will not significantly contribute to the cumulative nonattainment status of the region, and air quality impacts from the construction of this development would be less than significant under CEQA.**

Operational Emission Sources

Operational emissions include energy use, solid waste, water use, and transportation. Similar to other projects of this nature, the majority of operational emissions are associated with vehicle trips. Area emissions include

landscaping equipment, architectural coatings, and consumer products. Tables 4 and 5 summarize emissions associated with the operation of the Project.

TABLE 4 MAXIMUM DAILY OPERATIONAL EMISSIONS						
(lb/day)						
Category	VOC	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Area	0.29	3.00E-05	0.004	0	1.00E-05	1.00E-05
Energy	0.04	0.35	0.30	0.002	0.027	0.027
Mobile	0.65	0.59	5.00	0.009	0.98	0.27
Total	0.98	0.94	5.29	0.01	1.01	0.29
Screening Threshold (lb/day)	75	250	550	250	100	55
Exceeds Threshold (Yes/No)?	No	No	No	No	No	No

See attached CalEEMod ver. 2020.4.0 computer model output. The higher lb/day value between Winter and Summer results is shown for each pollutant. Slight differences in totals are due to rounding issues.

TABLE 5 MAXIMUM ANNUAL OPERATIONAL EMISSIONS						
(tons/year)						
Category	VOC	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Area	0.05	0	0.0003	0	0	0
Energy	0.007	0.06	0.05	0.0004	0.005	0.005
Mobile	0.11	0.11	0.89	0.002	0.17	0.05
Total	0.17	0.17	0.94	0.002	0.18	0.05
Screening Threshold (tons/year)	13.7	40	100	40	15	10
Exceeds Threshold (Yes/No)?	No	No	No	No	No	No

See attached CalEEMod ver. 2020.4.0 computer model output. Slight differences in totals are due to rounding issues.

As shown in Tables 4 and 5, the operational emissions associated with this development would not exceed the County/SDAPCD CEQA screening level thresholds for VOC, NO_x, CO, SO₂, PM₁₀ or PM_{2.5}. **Therefore, the Project's operational air quality impacts (including impacts related to criteria pollutants, sensitive receptors and violations of air quality standards) would be less than significant under CEQA.**

Conclusions

Criteria pollutant emissions associated with the construction and operation of 516 La Costa Boutique Hotel Project would not exceed the County/SDAPCD thresholds for the criteria pollutants evaluated. Therefore, this study finds that the Project air quality impacts **will be less than significant**.

ATTACHMENT A

CALEEMOD RESULTS

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage
San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	17.38	1000sqft	0.40	17,375.00	0
Hotel	17.00	Room	0.57	11,269.00	0
Quality Restaurant	1.17	1000sqft	0.03	1,165.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	556.22	CH4 Intensity (lb/MWhr)	0.022	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Per client info

Land Use - Land usage from site plan. Restaurant square footage updated from 1,235 sq. ft. to 1,165 sq. ft. in June 2023

Construction Phase - Same as Feb 2022 GHG report except date changes for grading/construction provided by client: GRADING START: FEBRUARY 2023, END APRIL 2023. CONSTRUCTION START: JUNE 2023. CONSTRUCTION FINISH: DECEMBER 2024

Off-road Equipment -

Off-road Equipment - From previous GHG report.

Off-road Equipment -

Off-road Equipment - Per previous GHG report.

Trips and VMT - Per 2022 GHG study, with default haul trips for material export.

Grading - Exported material provided in site plan. Total area graded is from previous GHG report.

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Architectural Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Vehicle Trips - From traffic impact study (Mizuta Traffic Consultants 2023)

Area Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Energy Use - Per client - Restaurant NG usage =6,205 therms/yr; CalEEMod default NG usage assumed for hotel and for restaurant T-24 NG.

Land Use Change -

Sequestration - Project will plant 18 deciduous trees and 23 evergreen trees.

Construction Off-road Equipment Mitigation -

Area Mitigation - SDAPCD Rule 67.0.1 Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic marking paints are listed as 100 g/L VOC.

Energy Mitigation - Per GBO requirements, a minimum 19kWDC PV system must be installed.

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	NumDays	100.00	393.00
tblConstructionPhase	NumDays	2.00	44.00
tblConstructionPhase	NumDays	5.00	66.00

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblEnergyUse	LightingElect	4.50	0.21
tblEnergyUse	LightingElect	6.78	0.31
tblEnergyUse	NT24E	3.67	2.02
tblEnergyUse	NT24E	23.69	5.25
tblEnergyUse	NT24NG	138.46	532.62
tblEnergyUse	T24E	4.27	2.40
tblEnergyUse	T24E	7.35	3.64
tblGrading	AcresOfGrading	33.00	1.17
tblGrading	MaterialExported	0.00	1,160.00
tblLandUse	LandUseSquareFeet	17,380.00	17,375.00
tblLandUse	LandUseSquareFeet	24,684.00	11,269.00
tblLandUse	LandUseSquareFeet	1,170.00	1,165.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	4.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.022
tblProjectCharacteristics	CO2IntensityFactor	539.98	556.22
tblSequestration	NumberOfNewTrees	0.00	23.00
tblSequestration	NumberOfNewTrees	0.00	18.00
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	90.04	100.00
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	71.97	100.00
tblVehicleTrips	WD_TR	8.36	10.00
tblVehicleTrips	WD_TR	83.84	100.00

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2023	1.5648	11.9468	13.0003	0.0240	4.6718	0.5164	5.0959	2.5195	0.4986	2.9098						
2024	3.7029	18.4005	23.8773	0.0416	0.2721	0.7951	1.0672	0.0730	0.7575	0.8304						
Maximum	3.7029	18.4005	23.8773	0.0416	4.6718	0.7951	5.0959	2.5195	0.7575	2.9098						

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					
2023	1.5648	11.9468	13.0003	0.0240	1.8973	0.5164	2.3214	1.0029	0.4986	1.3932						
2024	3.7029	18.4005	23.8773	0.0416	0.2721	0.7951	1.0672	0.0730	0.7575	0.8304						
Maximum	3.7029	18.4005	23.8773	0.0416	1.8973	0.7951	2.3214	1.0029	0.7575	1.3932						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.12	0.00	45.02	58.50	0.00	40.55	0.00	0.00	0.00	0.00	0.00	0.00

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0388	0.3531	0.2966	2.1200e-003		0.0268	0.0268		0.0268	0.0268						
Mobile	0.6504	0.5447	4.7386	9.4100e-003	0.9721	7.4200e-003	0.9795	0.2589	6.9200e-003	0.2659						
Total	0.9789	0.8978	5.0388	0.0115	0.9721	0.0343	1.0063	0.2589	0.0338	0.2927						

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	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0387	0.3515	0.2953	2.1100e-003		0.0267	0.0267		0.0267	0.0267						
Mobile	0.6504	0.5447	4.7386	9.4100e-003	0.9721	7.4200e-003	0.9795	0.2589	6.9200e-003	0.2659						
Total	0.9787	0.8963	5.0375	0.0115	0.9721	0.0342	1.0062	0.2589	0.0337	0.2926						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.02	0.17	0.03	0.09	0.00	0.32	0.01	0.00	0.33	0.04	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	Grading	Grading	12/6/2023	4/6/2023	5	44	
2	Building Construction	Building Construction	6/1/2023	12/2/2024	5	393	
3	Paving	Paving	9/2/2024	12/2/2024	5	66	
4	Architectural Coating	Architectural Coating	10/1/2024	12/2/2024	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.17

Acres of Paving: 0.4

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,651; Non-Residential Outdoor: 6,217; Striped Parking Area: 1,043 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	3	8.00	0.00	145.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	13.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					4.5485	0.0000	4.5485	2.4863	0.0000	2.4863							
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865							
Total	0.9335	10.1789	5.5516	0.0141	4.5485	0.4201	4.9686	2.4863	0.3865	2.8728							

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	7.4600e-003	0.4311	0.1184	1.9700e-003	0.0576	3.6600e-003	0.0613	0.0158	3.5000e-003	0.0193							
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
Worker	0.0219	0.0136	0.1920	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.2000e-004	0.0178							
Total	0.0293	0.4447	0.3104	2.5500e-003	0.1234	4.0100e-003	0.1274	0.0332	3.8200e-003	0.0371							

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Grading - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					1.7739	0.0000	1.7739	0.9697	0.0000	0.9697							
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865							
Total	0.9335	10.1789	5.5516	0.0141	1.7739	0.4201	2.1940	0.9697	0.3865	1.3561							

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	7.4600e-003	0.4311	0.1184	1.9700e-003	0.0576	3.6600e-003	0.0613	0.0158	3.5000e-003	0.0193							
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
Worker	0.0219	0.0136	0.1920	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.2000e-004	0.0178							
Total	0.0293	0.4447	0.3104	2.5500e-003	0.1234	4.0100e-003	0.1274	0.0332	3.8200e-003	0.0371							

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/day			
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968						
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	5.9700e-003	0.2143	0.0772	1.0200e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2500e-003	0.0110						
Worker	0.0355	0.0221	0.3120	9.4000e-004	0.1068	5.7000e-004	0.1074	0.0283	5.3000e-004	0.0289						
Total	0.0415	0.2364	0.3892	1.9600e-003	0.1407	1.8800e-003	0.1425	0.0381	1.7800e-003	0.0399						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968						
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	5.9700e-003	0.2143	0.0772	1.0200e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2500e-003	0.0110						
Worker	0.0355	0.0221	0.3120	9.4000e-004	0.1068	5.7000e-004	0.1074	0.0283	5.3000e-004	0.0289						
Total	0.0415	0.2364	0.3892	1.9600e-003	0.1407	1.8800e-003	0.1425	0.0381	1.7800e-003	0.0399						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/day			
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348						
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	5.7500e-003	0.2129	0.0754	1.0000e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2600e-003	0.0110						
Worker	0.0334	0.0198	0.2911	9.1000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						
Total	0.0391	0.2327	0.3665	1.9100e-003	0.1407	1.8500e-003	0.1425	0.0381	1.7600e-003	0.0398						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348						
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	5.7500e-003	0.2129	0.0754	1.0000e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2600e-003	0.0110						
Worker	0.0334	0.0198	0.2911	9.1000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						
Total	0.0391	0.2327	0.3665	1.9100e-003	0.1407	1.8500e-003	0.1425	0.0381	1.7600e-003	0.0398						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Paving - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594						
Paving	0.0159					0.0000	0.0000		0.0000	0.0000						
Total	0.6338	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0334	0.0198	0.2911	9.1000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						
Total	0.0334	0.0198	0.2911	9.1000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Paving - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594						
Paving	0.0159					0.0000	0.0000		0.0000	0.0000						
Total	0.6338	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0334	0.0198	0.2911	9.1000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						
Total	0.0334	0.0198	0.2911	9.1000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Architectural Coating - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Archit. Coating	1.3881						0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003			0.0609	0.0609		0.0609	0.0609						
Total	1.5689	1.2188	1.8101	2.9700e-003			0.0609	0.0609		0.0609	0.0609						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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							
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
Worker	7.7000e-003	4.5800e-003	0.0672	2.1000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003							
Total	7.7000e-003	4.5800e-003	0.0672	2.1000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003							

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Architectural Coating - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.3881						0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003			0.0609	0.0609		0.0609	0.0609						
Total	1.5689	1.2188	1.8101	2.9700e-003			0.0609	0.0609		0.0609	0.0609						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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							
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
Worker	7.7000e-003	4.5800e-003	0.0672	2.1000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003							
Total	7.7000e-003	4.5800e-003	0.0672	2.1000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003							

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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	0.6504	0.5447	4.7386	9.4100e-003	0.9721	7.4200e-003	0.9795	0.2589	6.9200e-003	0.2659						
Unmitigated	0.6504	0.5447	4.7386	9.4100e-003	0.9721	7.4200e-003	0.9795	0.2589	6.9200e-003	0.2659						

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Hotel	170.00	170.00	170.00	322,988	322,988	322,988	322,988
Other Asphalt Surfaces	0.00	0.00	0.00				
Quality Restaurant	117.00	117.00	117.00	138,782	138,782	138,782	138,782
Total	287.00	287.00	287.00	461,770	461,770	461,770	461,770

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Other Asphalt Surfaces	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Quality Restaurant	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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	0.0387	0.3515	0.2953	2.1100e-003		0.0267	0.0267		0.0267	0.0267						
NaturalGas Unmitigated	0.0388	0.3531	0.2966	2.1200e-003		0.0268	0.0268		0.0268	0.0268						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	1787.6	0.0193	0.1753	0.1472	1.0500e-003		0.0133	0.0133		0.0133	0.0133						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Quality Restaurant	1813.51	0.0196	0.1778	0.1494	1.0700e-003		0.0135	0.0135		0.0135	0.0135						
Total		0.0388	0.3531	0.2966	2.1200e-003		0.0268	0.0268		0.0268	0.0268						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
Hotel	1.77315	0.0191	0.1738	0.1460	1.0400e-003		0.0132	0.0132		0.0132	0.0132						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Quality Restaurant	1.81237	0.0196	0.1777	0.1493	1.0700e-003		0.0135	0.0135		0.0135	0.0135						
Total		0.0387	0.3515	0.2953	2.1100e-003		0.0267	0.0267		0.0267	0.0267						

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Unmitigated	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0171					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.2722					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.3000e-004	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0171					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.2722					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.3000e-004	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage
San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	17.38	1000sqft	0.40	17,375.00	0
Hotel	17.00	Room	0.57	11,269.00	0
Quality Restaurant	1.17	1000sqft	0.03	1,165.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	556.22	CH4 Intensity (lb/MWhr)	0.022	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Per client info

Land Use - Land usage from site plan. Restaurant square footage updated from 1,235 sq. ft. to 1,165 sq. ft. in June 2023

Construction Phase - Same as Feb 2022 GHG report except date changes for grading/construction provided by client: GRADING START: FEBRUARY 2023, END APRIL 2023. CONSTRUCTION START: JUNE 2023. CONSTRUCTION FINISH: DECEMBER 2024

Off-road Equipment -

Off-road Equipment - From previous GHG report.

Off-road Equipment -

Off-road Equipment - Per previous GHG report.

Trips and VMT - Per 2022 GHG study, with default haul trips for material export.

Grading - Exported material provided in site plan. Total area graded is from previous GHG report.

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Architectural Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Vehicle Trips - From traffic impact study (Mizuta Traffic Consultants 2023)

Area Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Energy Use - Per client - Restaurant NG usage =6,205 therms/yr; CalEEMod default NG usage assumed for hotel and for restaurant T-24 NG.

Land Use Change -

Sequestration - Project will plant 18 deciduous trees and 23 evergreen trees.

Construction Off-road Equipment Mitigation -

Area Mitigation - SDAPCD Rule 67.0.1 Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic marking paints are listed as 100 g/L VOC.

Energy Mitigation - Per GBO requirements, a minimum 19kWDC PV system must be installed.

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	NumDays	100.00	393.00
tblConstructionPhase	NumDays	2.00	44.00
tblConstructionPhase	NumDays	5.00	66.00

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblEnergyUse	LightingElect	4.50	0.21
tblEnergyUse	LightingElect	6.78	0.31
tblEnergyUse	NT24E	3.67	2.02
tblEnergyUse	NT24E	23.69	5.25
tblEnergyUse	NT24NG	138.46	532.62
tblEnergyUse	T24E	4.27	2.40
tblEnergyUse	T24E	7.35	3.64
tblGrading	AcresOfGrading	33.00	1.17
tblGrading	MaterialExported	0.00	1,160.00
tblLandUse	LandUseSquareFeet	17,380.00	17,375.00
tblLandUse	LandUseSquareFeet	24,684.00	11,269.00
tblLandUse	LandUseSquareFeet	1,170.00	1,165.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	4.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.022
tblProjectCharacteristics	CO2IntensityFactor	539.98	556.22
tblSequestration	NumberOfNewTrees	0.00	23.00
tblSequestration	NumberOfNewTrees	0.00	18.00
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	90.04	100.00
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	71.97	100.00
tblVehicleTrips	WD_TR	8.36	10.00
tblVehicleTrips	WD_TR	83.84	100.00

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2023	1.5676	11.9585	12.9871	0.0240	4.6718	0.5164	5.0959	2.5195	0.4986	2.9098						
2024	3.7092	18.4150	23.8485	0.0415	0.2721	0.7951	1.0672	0.0730	0.7575	0.8304						
Maximum	3.7092	18.4150	23.8485	0.0415	4.6718	0.7951	5.0959	2.5195	0.7575	2.9098						

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					
2023	1.5676	11.9585	12.9871	0.0240	1.8973	0.5164	2.3214	1.0029	0.4986	1.3932						
2024	3.7092	18.4150	23.8485	0.0415	0.2721	0.7951	1.0672	0.0730	0.7575	0.8304						
Maximum	3.7092	18.4150	23.8485	0.0415	1.8973	0.7951	2.3214	1.0029	0.7575	1.3932						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.12	0.00	45.02	58.50	0.00	40.55	0.00	0.00	0.00	0.00	0.00	0.00

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0388	0.3531	0.2966	2.1200e-003		0.0268	0.0268		0.0268	0.0268						
Mobile	0.6269	0.5920	4.9951	9.0100e-003	0.9721	7.4300e-003	0.9795	0.2589	6.9200e-003	0.2659						
Total	0.9554	0.9451	5.2952	0.0111	0.9721	0.0343	1.0064	0.2589	0.0338	0.2927						

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	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Energy	0.0387	0.3515	0.2953	2.1100e-003		0.0267	0.0267		0.0267	0.0267						
Mobile	0.6269	0.5920	4.9951	9.0100e-003	0.9721	7.4300e-003	0.9795	0.2589	6.9200e-003	0.2659						
Total	0.9552	0.9436	5.2940	0.0111	0.9721	0.0342	1.0062	0.2589	0.0337	0.2926						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.02	0.16	0.02	0.09	0.00	0.32	0.01	0.00	0.33	0.04	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	Grading	Grading	12/6/2023	4/6/2023	5	44	
2	Building Construction	Building Construction	6/1/2023	12/2/2024	5	393	
3	Paving	Paving	9/2/2024	12/2/2024	5	66	
4	Architectural Coating	Architectural Coating	10/1/2024	12/2/2024	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.17

Acres of Paving: 0.4

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,651; Non-Residential Outdoor: 6,217; Striped Parking Area: 1,043 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	3	8.00	0.00	145.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	13.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					4.5485	0.0000	4.5485	2.4863	0.0000	2.4863							
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865							
Total	0.9335	10.1789	5.5516	0.0141	4.5485	0.4201	4.9686	2.4863	0.3865	2.8728							

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	7.0200e-003	0.4485	0.1199	1.9700e-003	0.0576	3.6700e-003	0.0613	0.0158	3.5100e-003	0.0193							
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
Worker	0.0237	0.0153	0.1824	5.5000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.2000e-004	0.0178							
Total	0.0307	0.4638	0.3023	2.5200e-003	0.1234	4.0200e-003	0.1274	0.0332	3.8300e-003	0.0371							

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Grading - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/day			
Fugitive Dust					1.7739	0.0000	1.7739	0.9697	0.0000	0.9697						
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865						
Total	0.9335	10.1789	5.5516	0.0141	1.7739	0.4201	2.1940	0.9697	0.3865	1.3561						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/day			
Hauling	7.0200e-003	0.4485	0.1199	1.9700e-003	0.0576	3.6700e-003	0.0613	0.0158	3.5100e-003	0.0193						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0237	0.0153	0.1824	5.5000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.2000e-004	0.0178						
Total	0.0307	0.4638	0.3023	2.5200e-003	0.1234	4.0200e-003	0.1274	0.0332	3.8300e-003	0.0371						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/day			
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968						
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	5.8100e-003	0.2234	0.0796	1.0300e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2600e-003	0.0110						
Worker	0.0385	0.0248	0.2965	8.9000e-004	0.1068	5.7000e-004	0.1074	0.0283	5.3000e-004	0.0289						
Total	0.0443	0.2482	0.3760	1.9200e-003	0.1407	1.8800e-003	0.1425	0.0381	1.7900e-003	0.0399						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968						
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	5.8100e-003	0.2234	0.0796	1.0300e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2600e-003	0.0110						
Worker	0.0385	0.0248	0.2965	8.9000e-004	0.1068	5.7000e-004	0.1074	0.0283	5.3000e-004	0.0289						
Total	0.0443	0.2482	0.3760	1.9200e-003	0.1407	1.8800e-003	0.1425	0.0381	1.7900e-003	0.0399						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day												lb/day			
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348						
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	5.5700e-003	0.2219	0.0778	1.0100e-003	0.0339	1.3200e-003	0.0352	9.7500e-003	1.2600e-003	0.0110						
Worker	0.0363	0.0223	0.2771	8.6000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						
Total	0.0418	0.2442	0.3549	1.8700e-003	0.1407	1.8600e-003	0.1425	0.0381	1.7600e-003	0.0398						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348						
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	5.5700e-003	0.2219	0.0778	1.0100e-003	0.0339	1.3200e-003	0.0352	9.7500e-003	1.2600e-003	0.0110						
Worker	0.0363	0.0223	0.2771	8.6000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						
Total	0.0418	0.2442	0.3549	1.8700e-003	0.1407	1.8600e-003	0.1425	0.0381	1.7600e-003	0.0398						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Paving - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594						
Paving	0.0159					0.0000	0.0000		0.0000	0.0000						
Total	0.6338	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0363	0.0223	0.2771	8.6000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						
Total	0.0363	0.0223	0.2771	8.6000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Paving - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594						
Paving	0.0159					0.0000	0.0000		0.0000	0.0000						
Total	0.6338	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	0.0363	0.0223	0.2771	8.6000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						
Total	0.0363	0.0223	0.2771	8.6000e-004	0.1068	5.4000e-004	0.1073	0.0283	5.0000e-004	0.0288						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Architectural Coating - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Archit. Coating	1.3881						0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003			0.0609	0.0609		0.0609	0.0609						
Total	1.5689	1.2188	1.8101	2.9700e-003			0.0609	0.0609		0.0609	0.0609						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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							
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
Worker	8.3700e-003	5.1500e-003	0.0640	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003							
Total	8.3700e-003	5.1500e-003	0.0640	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003							

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Architectural Coating - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.3881						0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003			0.0609	0.0609		0.0609	0.0609						
Total	1.5689	1.2188	1.8101	2.9700e-003			0.0609	0.0609		0.0609	0.0609						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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							
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
Worker	8.3700e-003	5.1500e-003	0.0640	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003							
Total	8.3700e-003	5.1500e-003	0.0640	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003							

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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	0.6269	0.5920	4.9951	9.0100e-003	0.9721	7.4300e-003	0.9795	0.2589	6.9200e-003	0.2659						
Unmitigated	0.6269	0.5920	4.9951	9.0100e-003	0.9721	7.4300e-003	0.9795	0.2589	6.9200e-003	0.2659						

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Hotel	170.00	170.00	170.00	322,988	322,988	322,988	322,988
Other Asphalt Surfaces	0.00	0.00	0.00				
Quality Restaurant	117.00	117.00	117.00	138,782	138,782	138,782	138,782
Total	287.00	287.00	287.00	461,770	461,770	461,770	461,770

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Other Asphalt Surfaces	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Quality Restaurant	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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	0.0387	0.3515	0.2953	2.1100e-003		0.0267	0.0267		0.0267	0.0267						
NaturalGas Unmitigated	0.0388	0.3531	0.2966	2.1200e-003		0.0268	0.0268		0.0268	0.0268						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	1787.6	0.0193	0.1753	0.1472	1.0500e-003		0.0133	0.0133		0.0133	0.0133						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Quality Restaurant	1813.51	0.0196	0.1778	0.1494	1.0700e-003		0.0135	0.0135		0.0135	0.0135						
Total		0.0388	0.3531	0.2966	2.1200e-003		0.0268	0.0268		0.0268	0.0268						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
Hotel	1.77315	0.0191	0.1738	0.1460	1.0400e-003		0.0132	0.0132		0.0132	0.0132						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Quality Restaurant	1.81237	0.0196	0.1777	0.1493	1.0700e-003		0.0135	0.0135		0.0135	0.0135						
Total		0.0387	0.3515	0.2953	2.1100e-003		0.0267	0.0267		0.0267	0.0267						

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005							
Unmitigated	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005							

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day											lb/day					
Architectural Coating	0.0171					0.0000	0.0000		0.0000	0.0000							
Consumer Products	0.2722					0.0000	0.0000		0.0000	0.0000							
Landscaping	3.3000e-004	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005							
Total	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005							

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0171					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.2722					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.3000e-004	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						
Total	0.2897	3.0000e-005	3.6200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005						

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	17.38	1000sqft	0.40	17,375.00	0
Hotel	17.00	Room	0.57	11,269.00	0
Quality Restaurant	1.17	1000sqft	0.03	1,165.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	556.22	CH4 Intensity (lb/MWhr)	0.022	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Per client info

Land Use - Land usage from site plan. Restaurant square footage updated from 1,235 sq. ft. to 1,165 sq. ft. in June 2023

Construction Phase - Same as Feb 2022 GHG report except date changes for grading/construction provided by client: GRADING START: FEBRUARY 2023, END APRIL 2023. CONSTRUCTION START: JUNE 2023. CONSTRUCTION FINISH: DECEMBER 2024

Off-road Equipment -

Off-road Equipment - From previous GHG report.

Off-road Equipment -

Off-road Equipment - Per previous GHG report.

Trips and VMT - Per 2022 GHG study, with default haul trips for material export.

Grading - Exported material provided in site plan. Total area graded is from previous GHG report.

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Architectural Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Vehicle Trips - From traffic impact study (Mizuta Traffic Consultants 2023)

Area Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Energy Use - Per client - Restaurant NG usage =6,205 therms/yr; CalEEMod default NG usage assumed for hotel and for restaurant T-24 NG.

Land Use Change -

Sequestration - Project will plant 18 deciduous trees and 23 evergreen trees.

Construction Off-road Equipment Mitigation -

Area Mitigation - SDAPCD Rule 67.0.1 Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic marking paints are listed as 100 g/L VOC.

Energy Mitigation - Per GBO requirements, a minimum 19kWDC PV system must be installed.

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	NumDays	100.00	393.00
tblConstructionPhase	NumDays	2.00	44.00
tblConstructionPhase	NumDays	5.00	66.00

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblEnergyUse	LightingElect	4.50	0.21
tblEnergyUse	LightingElect	6.78	0.31
tblEnergyUse	NT24E	3.67	2.02
tblEnergyUse	NT24E	23.69	5.25
tblEnergyUse	NT24NG	138.46	532.62
tblEnergyUse	T24E	4.27	2.40
tblEnergyUse	T24E	7.35	3.64
tblGrading	AcresOfGrading	33.00	1.17
tblGrading	MaterialExported	0.00	1,160.00
tblLandUse	LandUseSquareFeet	17,380.00	17,375.00
tblLandUse	LandUseSquareFeet	24,684.00	11,269.00
tblLandUse	LandUseSquareFeet	1,170.00	1,165.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	4.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.022
tblProjectCharacteristics	CO2IntensityFactor	539.98	556.22
tblSequestration	NumberOfNewTrees	0.00	23.00
tblSequestration	NumberOfNewTrees	0.00	18.00
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	90.04	100.00
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	71.97	100.00
tblVehicleTrips	WD_TR	8.36	10.00
tblVehicleTrips	WD_TR	83.84	100.00

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
2023	0.1401	1.1428	1.1157	2.1900e-003	0.1132	0.0486	0.1617	0.0583	0.0465	0.1047						
2024	0.2333	1.5841	1.8934	3.4300e-003	0.0205	0.0652	0.0857	5.5500e-003	0.0626	0.0681						
Maximum	0.2333	1.5841	1.8934	3.4300e-003	0.1132	0.0652	0.1617	0.0583	0.0626	0.1047						

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					
2023	0.1401	1.1428	1.1157	2.1900e-003	0.0521	0.0486	0.1007	0.0249	0.0465	0.0714						
2024	0.2333	1.5841	1.8934	3.4300e-003	0.0205	0.0652	0.0857	5.5500e-003	0.0626	0.0681						
Maximum	0.2333	1.5841	1.8934	3.4300e-003	0.0521	0.0652	0.1007	0.0249	0.0626	0.0714						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	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	45.65	0.00	24.67	52.30	0.00	19.31	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-6-2023	5-5-2023	0.2487	0.2487
2	5-6-2023	8-5-2023	0.3185	0.3185
3	8-6-2023	11-5-2023	0.4441	0.4441
4	11-6-2023	2-5-2024	0.4347	0.4347
5	2-6-2024	5-5-2024	0.4103	0.4103
6	5-6-2024	8-5-2024	0.4191	0.4191
7	8-6-2024	9-30-2024	0.3229	0.3229
		Highest	0.4441	0.4441

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0528	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	7.0900e-003	0.0644	0.0541	3.9000e-004		4.9000e-003	4.9000e-003		4.9000e-003	4.9000e-003						
Mobile	0.1117	0.1062	0.8852	1.6500e-003	0.1727	1.3500e-003	0.1741	0.0461	1.2600e-003	0.0474						
Waste						0.0000	0.0000		0.0000	0.0000						
Water						0.0000	0.0000		0.0000	0.0000						
Total	0.1716	0.1707	0.9397	2.0400e-003	0.1727	6.2500e-003	0.1790	0.0461	6.1600e-003	0.0523						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0528	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Energy	7.0600e-003	0.0642	0.0539	3.8000e-004		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003						
Mobile	0.1117	0.1062	0.8852	1.6500e-003	0.1727	1.3500e-003	0.1741	0.0461	1.2600e-003	0.0474						
Waste						0.0000	0.0000		0.0000	0.0000						
Water						0.0000	0.0000		0.0000	0.0000						
Total	0.1716	0.1704	0.9394	2.0300e-003	0.1727	6.2300e-003	0.1790	0.0461	6.1400e-003	0.0522						

	ROG	NOx	CO	SO2	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	0.02	0.16	0.02	0.49	0.00	0.32	0.01	0.00	0.32	0.04	0.00	0.00	0.00	0.00	0.00	0.00

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
New Trees	
Total	

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	2/6/2023	4/6/2023	5	44	
2	Building Construction	Building Construction	6/1/2023	12/2/2024	5	393	
3	Paving	Paving	9/2/2024	12/2/2024	5	66	
4	Architectural Coating	Architectural Coating	10/1/2024	12/2/2024	5	45	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 1.17****Acres of Paving: 0.4****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,651; Non-Residential Outdoor: 6,217; Striped Parking Area: 1,043 (Architectural Coating – sqft)****OffRoad Equipment**

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	3	8.00	0.00	145.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	13.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT/yr			
Fugitive Dust					0.1001	0.0000	0.1001	0.0547	0.0000	0.0547						
Off-Road	0.0205	0.2239	0.1221	3.1000e-004		9.2400e-003	9.2400e-003		8.5000e-003	8.5000e-003						
Total	0.0205	0.2239	0.1221	3.1000e-004	0.1001	9.2400e-003	0.1093	0.0547	8.5000e-003	0.0632						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.6000e-004	9.8400e-003	2.6200e-003	4.0000e-005	1.2400e-003	8.0000e-005	1.3200e-003	3.4000e-004	8.0000e-005	4.2000e-004						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	4.8000e-004	3.3000e-004	4.0100e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004						
Total	6.4000e-004	0.0102	6.6300e-003	5.0000e-005	2.6500e-003	9.0000e-005	2.7400e-003	7.2000e-004	9.0000e-005	8.0000e-004						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.2 Grading - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0390	0.0000	0.0390	0.0213	0.0000	0.0213						
Off-Road	0.0205	0.2239	0.1221	3.1000e-004		9.2400e-003	9.2400e-003		8.5000e-003	8.5000e-003						
Total	0.0205	0.2239	0.1221	3.1000e-004	0.0390	9.2400e-003	0.0483	0.0213	8.5000e-003	0.0298						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.6000e-004	9.8400e-003	2.6200e-003	4.0000e-005	1.2400e-003	8.0000e-005	1.3200e-003	3.4000e-004	8.0000e-005	4.2000e-004						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	4.8000e-004	3.3000e-004	4.0100e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004						
Total	6.4000e-004	0.0102	6.6300e-003	5.0000e-005	2.6500e-003	9.0000e-005	2.7400e-003	7.2000e-004	9.0000e-005	8.0000e-004						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1158	0.8900	0.9584	1.6800e-003		0.0391	0.0391		0.0378	0.0378						
Total	0.1158	0.8900	0.9584	1.6800e-003		0.0391	0.0391		0.0378	0.0378						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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						
Vendor	4.5000e-004	0.0169	5.9500e-003	8.0000e-005	2.5200e-003	1.0000e-004	2.6200e-003	7.3000e-004	1.0000e-004	8.2000e-004						
Worker	2.6700e-003	1.8500e-003	0.0225	7.0000e-005	7.9200e-003	4.0000e-005	7.9700e-003	2.1100e-003	4.0000e-005	2.1500e-003						
Total	3.1200e-003	0.0187	0.0285	1.5000e-004	0.0104	1.4000e-004	0.0106	2.8400e-003	1.4000e-004	2.9700e-003						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1158	0.8900	0.9584	1.6800e-003		0.0391	0.0391		0.0378	0.0378						
Total	0.1158	0.8900	0.9584	1.6800e-003		0.0391	0.0391		0.0378	0.0378						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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						
Vendor	4.5000e-004	0.0169	5.9500e-003	8.0000e-005	2.5200e-003	1.0000e-004	2.6200e-003	7.3000e-004	1.0000e-004	8.2000e-004						
Worker	2.6700e-003	1.8500e-003	0.0225	7.0000e-005	7.9200e-003	4.0000e-005	7.9700e-003	2.1100e-003	4.0000e-005	2.1500e-003						
Total	3.1200e-003	0.0187	0.0285	1.5000e-004	0.0104	1.4000e-004	0.0106	2.8400e-003	1.4000e-004	2.9700e-003						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1711	1.3332	1.5083	2.6600e-003		0.0543	0.0543		0.0524	0.0524						
Total	0.1711	1.3332	1.5083	2.6600e-003		0.0543	0.0543		0.0524	0.0524						

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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						
Vendor	6.8000e-004	0.0266	9.2200e-003	1.2000e-004	4.0000e-003	1.6000e-003	4.1600e-004	1.1600e-003	1.5000e-004	1.3100e-003						
Worker	3.9800e-003	2.6400e-003	0.0334	1.0000e-004	0.0126	7.0000e-005	0.0126	3.3400e-003	6.0000e-005	3.4000e-003						
Total	4.6600e-003	0.0292	0.0426	2.2000e-004	0.0166	2.3000e-004	0.0168	4.5000e-003	2.1000e-004	4.7100e-003						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Building Construction - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1711	1.3332	1.5083	2.6600e-003		0.0543	0.0543		0.0524	0.0524						
Total	0.1711	1.3332	1.5083	2.6600e-003		0.0543	0.0543		0.0524	0.0524						

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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						
Vendor	6.8000e-004	0.0266	9.2200e-003	1.2000e-004	4.0000e-003	1.6000e-003	4.1600e-004	1.1600e-003	1.5000e-004	1.3100e-003						
Worker	3.9800e-003	2.6400e-003	0.0334	1.0000e-004	0.0126	7.0000e-005	0.0126	3.3400e-003	6.0000e-005	3.4000e-003						
Total	4.6600e-003	0.0292	0.0426	2.2000e-004	0.0166	2.3000e-004	0.0168	4.5000e-003	2.1000e-004	4.7100e-003						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Paving - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0204	0.1934	0.2912	4.5000e-004			9.2700e-003	9.2700e-003		8.5600e-003	8.5600e-003					
Paving	5.2000e-004						0.0000	0.0000		0.0000	0.0000					
Total	0.0209	0.1934	0.2912	4.5000e-004			9.2700e-003	9.2700e-003		8.5600e-003	8.5600e-003					

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	1.0900e-003	7.2000e-004	9.1300e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004						
Total	1.0900e-003	7.2000e-004	9.1300e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Paving - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0204	0.1934	0.2912	4.5000e-004			9.2700e-003	9.2700e-003		8.5600e-003	8.5600e-003					
Paving	5.2000e-004						0.0000	0.0000		0.0000	0.0000					
Total	0.0209	0.1934	0.2912	4.5000e-004			9.2700e-003	9.2700e-003		8.5600e-003	8.5600e-003					

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	1.0900e-003	7.2000e-004	9.1300e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004						
Total	1.0900e-003	7.2000e-004	9.1300e-003	3.0000e-005	3.4400e-003	2.0000e-005	3.4600e-003	9.1000e-004	2.0000e-005	9.3000e-004						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Architectural Coating - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0312						0.0000	0.0000		0.0000	0.0000					
Off-Road	4.0700e-003	0.0274	0.0407	7.0000e-005			1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003					
Total	0.0353	0.0274	0.0407	7.0000e-005			1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003					

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	1.7000e-004	1.1000e-004	1.4400e-003	0.0000	5.4000e-004	0.0000	5.4000e-004	1.4000e-004	0.0000	1.5000e-004						
Total	1.7000e-004	1.1000e-004	1.4400e-003	0.0000	5.4000e-004	0.0000	5.4000e-004	1.4000e-004	0.0000	1.5000e-004						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Architectural Coating - 2024****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0312						0.0000	0.0000		0.0000	0.0000					
Off-Road	4.0700e-003	0.0274	0.0407	7.0000e-005			1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003					
Total	0.0353	0.0274	0.0407	7.0000e-005			1.3700e-003	1.3700e-003		1.3700e-003	1.3700e-003					

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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						
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Worker	1.7000e-004	1.1000e-004	1.4400e-003	0.0000	5.4000e-004	0.0000	5.4000e-004	1.4000e-004	0.0000	1.5000e-004						
Total	1.7000e-004	1.1000e-004	1.4400e-003	0.0000	5.4000e-004	0.0000	5.4000e-004	1.4000e-004	0.0000	1.5000e-004						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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	0.1117	0.1062	0.8852	1.6500e-003	0.1727	1.3500e-003	0.1741	0.0461	1.2600e-003	0.0474						
Unmitigated	0.1117	0.1062	0.8852	1.6500e-003	0.1727	1.3500e-003	0.1741	0.0461	1.2600e-003	0.0474						

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Hotel	170.00	170.00	170.00	322,988	322,988	322,988	322,988
Other Asphalt Surfaces	0.00	0.00	0.00				
Quality Restaurant	117.00	117.00	117.00	138,782	138,782	138,782	138,782
Total	287.00	287.00	287.00	461,770	461,770	461,770	461,770

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Other Asphalt Surfaces	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Quality Restaurant	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable 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						
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						
NaturalGas Mitigated	7.0600e-003	0.0642	0.0539	3.8000e-004		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003						
NaturalGas Unmitigated	7.0900e-003	0.0644	0.0541	3.9000e-004		4.9000e-003	4.9000e-003		4.9000e-003	4.9000e-003						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
Hotel	652475	3.5200e-003	0.0320	0.0269	1.9000e-004		2.4300e-003	2.4300e-003		2.4300e-003	2.4300e-003						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Quality Restaurant	661930	3.5700e-003	0.0325	0.0273	1.9000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003						
Total		7.0900e-003	0.0644	0.0541	3.8000e-004		4.9000e-003	4.9000e-003		4.9000e-003	4.9000e-003						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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					
Hotel	647201	3.4900e-003	0.0317	0.0267	1.9000e-004		2.4100e-003	2.4100e-003		2.4100e-003	2.4100e-003						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Quality Restaurant	661515	3.5700e-003	0.0324	0.0272	1.9000e-004		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003						
Total		7.0600e-003	0.0642	0.0539	3.8000e-004		4.8700e-003	4.8700e-003		4.8700e-003	4.8700e-003						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	52175.5				
Other Asphalt Surfaces	0				
Quality Restaurant	10718				
Total					

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	26303.8				
Other Asphalt Surfaces	0				
Quality Restaurant	5410.7				
Total					

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0528	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Unmitigated	0.0528	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.1200e-003					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.0497					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.0000e-005	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0528	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**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	3.1200e-003					0.0000	0.0000		0.0000	0.0000						
Consumer Products	0.0497					0.0000	0.0000		0.0000	0.0000						
Landscaping	3.0000e-005	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						
Total	0.0528	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000						

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated				
Unmitigated				

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	0.431235 / 0.047915				
Other Asphalt Surfaces	0 / 0				
Quality Restaurant	0.355134 / 0.0226682				
Total					

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	0.344988 / 0.0449922				
Other Asphalt Surfaces	0 / 0				
Quality Restaurant	0.284108 / 0.0212854				
Total					

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated				
Unmitigated				

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	9.31				
Other Asphalt Surfaces	0				
Quality Restaurant	1.07				
Total					

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	4.655				
Other Asphalt Surfaces	0				
Quality Restaurant	0.535				
Total					

9.0 Operational Offroad

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

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

AQ Analysis for Boutique Hotel_with Hotel/Restaurant NG Usage - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**11.0 Vegetation**

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	:	:	:	:
	:	:	:	:

11.2 Net New Trees**Species Class**

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Pine	23	:	:	:	:
Spruce	18	:	:	:	:
Total					