



Date: August 30, 2023
 To: Mr. Vance A. Shannon
 From: M. S. Hatch Consulting, LLC
**Subject: Air Quality Study – Air Quality Study for Quick Quack Car Wash,
 APN: 044-122-005-000, Brace Road & Sierra College Boulevard, Loomis**

M. S. Hatch Consulting, LLC appreciates the opportunity to prepare the air quality study for the proposed construction and operation of the Quick Quack Car Wash, Assessor’s Parcel Number (APN): 044-122-005-000, to be located at Brace Road and Sierra College Boulevard in Loomis, Placer County, CA. This air quality study includes the estimated criteria pollutant and greenhouse gas emissions from the construction and operation of the proposed project.

Executive Summary

Tables 1, 2, and 3 compare the estimated annual and daily emissions summaries from the construction and operation of the proposed project to the Placer County Air Pollution Control District (PCAPCD) Thresholds of Significance, included in Attachment A¹. Greenhouse gas emissions are presented in units of carbon dioxide equivalent (CO₂e). The Placer County Air Pollution Control District (PCAPCD) 2017 California Environmental Quality Act (CEQA) Handbook, Chapter 6, *Special Circumstances for a Project*, included in Attachment B² lists common land use proposals which may be required to conduct a Health Risk Assessment (HRA) for Toxic Air Contaminant (TAC) emissions. These include goods distribution centers, refineries, power generation facilities, chrome platers, dry cleaners using perchloroethylene, and gasoline dispensing facilities. The proposed land use is not one of project types that require an HRA; therefore, TAC emissions were not calculated, and the project was not evaluated for potential health risks to sensitive receptors.

The estimated emissions of criteria pollutants and greenhouse gases from the construction and total operational emissions from the project **are below the applicable thresholds.**

Table 1. Annual Construction and Operational Emissions Summary and Significance Thresholds

Emissions Source	Total Emissions (tons per year)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO ₂ e (MT/year)
Year 1 Construction Emissions (2024)	< 0.01	0.09	0.11	< 0.01	0.01	< 0.01	22
Year 2 Construction Emissions (2025)	0.08	0.54	0.73	< 0.01	0.05	0.03	129
Total Operational Emissions	0.31	0.36	2.35	< 0.01	0.44	0.12	418
Significant Emissions Threshold	--	--	--	--	--	--	10,000

ROG: Reactive Organic Compounds, used interchangeably with Volatile Organic Compounds (VOC); NO_x: oxides of nitrogen; CO: Carbon monoxide; SO_x: Oxides of sulfur; PM_{2.5}: particulate matter less than 2.5 micrometers in diameter; PM₁₀: particulate matter less than 10 micrometers in diameter; CO₂e: Carbon dioxide equivalent

¹ <https://www.placer.ca.gov/DocumentCenter/View/2047/Chapter-2-Thresholds-of-Significance-PDF>

² <https://www.placerair.org/1801/CEQA-Handbook>

Table 2. Daily Construction Emissions Summary and Significance Thresholds

Emissions Source	Total Emissions (pounds per day)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
Year 1 Construction Emissions (2024)	1.70	14.77	18.27	0.04	1.40	0.80	3,698
Year 2 Construction Emissions (2025)	1.90	13.77	18.08	0.04	1.32	0.72	3,668
Significant Emissions Threshold	82	82	--	--	82	--	--

ROG: Reactive Organic Compounds, used interchangeably with Volatile Organic Compounds (VOC); NO_x: oxides of nitrogen; CO: Carbon monoxide; SO_x: Oxides of sulfur; PM_{2.5}: particulate matter less than 2.5 micrometers in diameter; PM₁₀: particulate matter less than 10 micrometers in diameter; CO_{2e}: Carbon dioxide equivalent

Table 3. Daily Operational Emissions Summary and Significance Thresholds

Emissions Source	Total Emissions (pounds per day)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
Total Operational Emissions	2.06	1.83	12.87	0.03	2.51	0.68	2,603
Significant Emissions Threshold	55	55	--	--	82	--	--

ROG: Reactive Organic Compounds, used interchangeably with Volatile Organic Compounds (VOC); NO_x: oxides of nitrogen; CO: Carbon monoxide; SO_x: Oxides of sulfur; PM_{2.5}: particulate matter less than 2.5 micrometers in diameter; PM₁₀: particulate matter less than 10 micrometers in diameter; CO_{2e}: Carbon dioxide equivalent

Project Description

The proposed project includes the construction of a Quick Quack Car Wash, located on a 3.96-acre site, located north of Brace Road and west of Sierra College Boulevard in Loomis, Placer County, CA. The site location is presented in Figure 1 and the proposed site plan is included in Figure 2.

Figure 1. Regional Vicinity

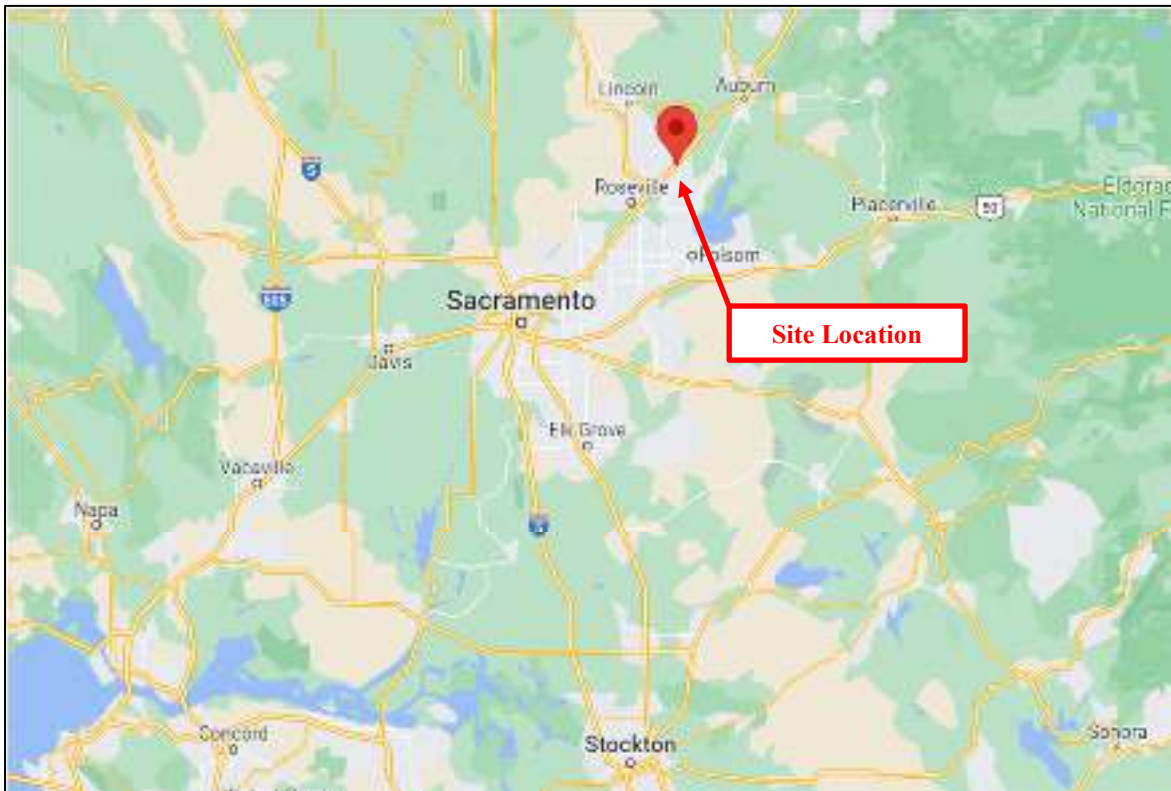
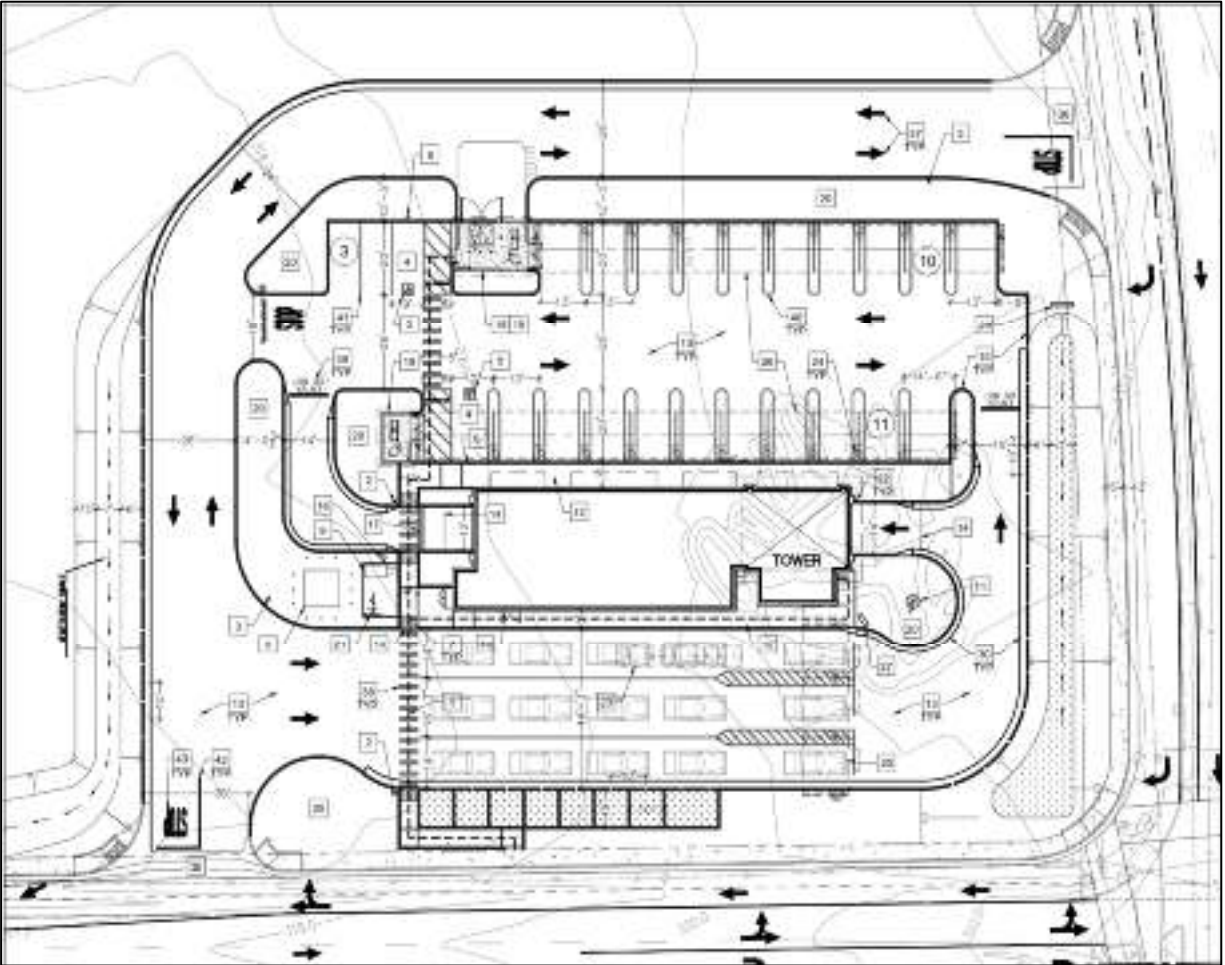


Figure 2. Site Plan – Quick Quack Car Wash – Loomis, CA



Sources of Emissions

The emissions associated with the proposed project consist of construction and operational emissions from the site. Construction emissions are temporary and include emissions of criteria pollutants and greenhouse gases from construction activities during site preparation, grading, building construction, paving, and architectural coatings. Operational emissions consist of area sources (i.e., re-applying architectural coatings, consumer products, and landscaping equipment), energy use (i.e., electricity and natural gas), mobile sources (e.g., vehicle trips to the car wash and drive-through), solid waste disposal, and water and wastewater use (i.e., supplying and treating water and wastewater).

Emissions Estimates

Tables 4, 5, and 6 present the annual and daily emissions summaries from the construction and operation of the proposed project, respectively. Emissions were estimated using CalEEMod Version 2020.4.0. The detailed emissions model outputs are included in Attachment D.

This project is not considered one of the project types that the PCAPCD requires to be evaluated for potentially exposing sensitive receptors to substantial pollutant concentrations. As such, TAC emissions were not calculated, and the project was not evaluated for potential health risks to sensitive receptors.

Table 4. Annual Construction and Operational Emissions Summary

Emissions Source	Total Emissions (tons per year)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e} (MT/year)
Construction Emissions							
Year 1 Construction Emissions (2024)	< 0.01	0.09	0.11	< 0.01	0.01	< 0.01	22
Year 2 Construction Emissions (2025)	0.08	0.54	0.73	< 0.01	0.05	0.03	129
Operational Emissions							
Area Sources	0.02	0.00	< 0.01	0.00	0.00	0.00	< 0.01
Energy	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	6
Mobile	0.29	0.36	2.35	< 0.01	0.44	0.12	403
Waste	N/A	N/A	N/A	N/A	0.00	0.00	7
Water	N/A	N/A	N/A	N/A	0.00	0.00	2
Total Operational Emissions	0.31	0.36	2.35	< 0.01	0.44	0.12	418
Significant Emissions Threshold	--	--	--	--	--	--	10,000

ROG: Reactive Organic Compounds, used interchangeably with Volatile Organic Compounds (VOC); NO_x: oxides of nitrogen; CO: Carbon monoxide; SO_x: Oxides of sulfur; PM_{2.5}: particulate matter less than 2.5 micrometers in diameter; PM₁₀: particulate matter less than 10 micrometers in diameter; CO_{2e}: Carbon dioxide equivalent; MT: metric ton

Table 5. Daily Construction Emissions Summary

Emissions Source	Total Emissions (pounds per day)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
Year 1 Construction Emissions (2024)	1.70	14.77	18.27	0.04	1.40	0.80	3,698
Year 2 Construction Emissions (2025)	1.90	13.77	18.08	0.04	1.32	0.72	3,668
Significant Emissions Threshold	82	82	--	--	82	--	--

Table 6. Daily Operational Emissions Summary

Emissions Source	Total Emissions (pounds per day)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
Area Sources	0.11	< 0.01	< 0.01	0.00	0.00	0.00	< 0.01
Energy	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	21
Mobile	1.95	1.82	12.86	0.02	2.51	0.68	2,582
Waste	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Water	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Operational Emissions	2.06	1.83	12.87	0.03	2.51	0.68	2,603
Significant Emissions Threshold	55	55	--	--	55	--	--

ROG: Reactive Organic Compounds, used interchangeably with Volatile Organic Compounds (VOC); NO_x: oxides of nitrogen; CO: Carbon monoxide; SO_x: Oxides of sulfur; PM_{2.5}: particulate matter less than 2.5 micrometers in diameter; PM₁₀: particulate matter less than 10 micrometers in diameter; CO_{2e}: Carbon dioxide equivalent

Emissions Calculation Methodology

The construction and operational emissions for this project were based on the following CalEEMod land use types: *Automobile Care Center*, *Other Non-Asphalt Surfaces*, *Other Asphalt Surfaces*, and *City Park*. A discussion on the land use types that were used for the emissions modeling is included below.

CalEEMod Land Use Type: Automobile Care Center

The *Automobile Care Center* land use type was used to model the emissions associated with the car wash. The total square footage (3,588 square feet) was provided by Stantec Architecture, Inc. (Stantec).

CalEEMod Land Use Type: Other Non-Asphalt Surfaces

The *Parking Lot* land use type was used to model the emissions associated with the parking lot. The square footage (36,192 square feet) was calculated based on the number and sizes of parking spaces provided by the client and presented below.

- Twenty-four (24) spaces: Twenty (20) 13 ft x 20 ft spaces, two (2) 9 ft x 20 ft spaces, one (1) 9 ft x 20 ft ADA space; and one (1) 12 ft x 20 ft ADA space.

CalEEMod Land Use Type: Other Asphalt Surfaces

The *Other Asphalt Surfaces* land use type was used to model the emissions associated with site's large areas of asphalt not dedicated to parking, such as new streets, driveways, etc. The total square footage (7,328 square feet) was provided by Stantec.

CalEEMod Land Use Type: City Park

The *City Park* land use type was used to model the emissions associated with landscaping within the proposed project. The total square footage (125,333 square feet) was provided by Stantec.

Construction Emissions

Construction emissions were calculated using CalEEMod defaults and input provided by Stantec. Table 7 provides the anticipated construction schedule. Stantec provided the proposed start date (12/9/2024) for the project and stated that work would be conducted five days per week. All phase durations are default values provided by CalEEMod, except for the *Building Construction* phase which was shortened to meet the project end date (5/23/2025) provided by Stantec.

Table 8 provides the anticipated number of construction equipment that will be used during each phase, the hours per day the equipment will be operated, and the horsepower of the equipment. The values in Table 7 are CalEEMod default values.

The project site is vacant and will not require demolition. Based on input from Stantec, the project will require export of 966 cubic yards of material during *Site Preparation*, import of 66 cubic yards of material during *Grading*, and 226 cubic yards of exported material during *Grading*. As such, the emissions for material haul trips were included in the construction emissions. For fugitive dust emissions, CalEEMod defaults do not

include any control of fugitive dust from project construction sites. PCAPCD Rule 228, Fugitive Dust requires the following at minimum:

- Unpaved areas subject to vehicle traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered. In geographic ultramafic rock units, or when naturally-occurring asbestos, ultramafic rock, or serpentine is to be disturbed, the cover material shall contain less than 0.25 percent asbestos as determined using the bulk sampling method for asbestos in Section 502.
- The speed of any vehicles and equipment traveling across unpaved areas must be no more than 15 miles per hour unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust exceeding Ringelmann 2 or visible emissions from crossing the project boundary line.
- Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile.
- Prior to any ground disturbance, including grading, excavating, and land clearing, sufficient water must be applied to the area to be disturbed to prevent emitting dust exceeding Ringelmann 2 and to minimize visible emissions from crossing the boundary line.
- Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt, from being released or tracked offsite.
- When wind speeds are high enough to result in dust emissions crossing the boundary line, despite the application of dust mitigation measures, grading and earthmoving operations shall be suspended.
- No trucks are allowed to transport excavated material off-site unless the trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments, and loads are either: Covered with tarps; or
- Wetted and loaded such that the material does not touch the front,

back, or sides of the cargo compartment at any point less than six inches from the top and that no point of the load extends above the top of the cargo compartment.

- In geographic ultramafic rock units, or when naturally-occurring asbestos, ultramafic rock, or serpentine is disturbed, all equipment must be washed down before moving from the property onto a paved public road.
- In geographic ultramafic rock units, or when naturally-occurring asbestos, ultramafic rock, or serpentine is disturbed, upon completion of the project disturbed surfaces shall be stabilized using one or more of the following methods:
 - Establishment of a vegetative cover;
 - Placement of at least one (1.0) foot of non-asbestos-containing material;
 - Paving;
 - Any other measure deemed sufficient to prevent wind speeds of ten (10) miles per hour or greater from causing visible dust emissions.

PCAPCD Rule 228 does not have a requirement as to the frequency at which water should be applied to exposed surfaces daily, though increased watering frequency is required whenever wind speeds exceed 15 mph as denoted in PCAPCD Recommended Construction Mitigation Measures included in Attachment C³. The proposed project will implement the applicable requirements during the construction phase. These measures were incorporated into CalEEMod, where applicable. For example, watering active sites twice per day and enforcing a speed limit of 15 mph were included in the model.

For architectural coating operations, volatile organic compound (VOC) emissions were calculated based on the assumption that the coatings would be compliant with the VOC content limits of PCAPCD Rule 218⁴.

Table 7. Construction Schedule

Construction Phase	Start Date	End Date	Days/week	Total Days
Site Preparation	12/9/2024	12/13/2024	5	5
Grading	12/14/2024	12/25/2024	5	8
Building Construction	12/26/2024	4/3/2025	5	71
Paving	4/4/2025	4/29/2025	5	18
Architectural Coating	4/30/2025	5/23/2025	5	18

³ <https://www.placerair.org/DocumentCenter/View/2040/Appendix-C-Recommended-Construction-Mitigation-Measures-PDF>

⁴ For building coatings, assumed to be 90% flat paints (50 g/L) and 10% non-flat paints (100 g/L). For the parking lot coatings, assumed to be compliant with the Traffic Marking Coating category (100 g/L). VOC limits based on PCAPCD Rule 218.

Table 8. Construction Equipment

Phase Name	Equipment Type	Number of Equipment	Hours per day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37
Paving	Cement and Mortar Mixers	2	6	9	0.56
Grading	Excavators	1	8	158	0.38
Grading	Graders	1	8	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8	97	0.37
Building Construction	Cranes	1	7	231	0.29
Building Construction	Forklifts	3	8	89	0.20
Building Construction	Generator Sets	1	8	84	0.74
Paving	Pavers	1	8	130	0.42
Paving	Paving Equipment	2	6	132	0.36
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37
Building Construction	Welders	1	8	46	0.45
Paving	Rollers	2	6	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8	97	0.37
Architectural Coating	Air Compressors	1	6	78	0.48

Operational Emissions

Operational emissions consist of area sources (i.e., re-applying architectural coatings, consumer products, fireplaces, and landscaping equipment), energy use (i.e., electricity and natural gas), mobile sources (e.g., vehicle trips to the car wash and drive-through), solid waste disposal, and water and wastewater use (i.e., supplying and treating water and wastewater).

For area-source architectural coating operations (i.e., re-applying coatings), VOC emissions were calculated based on the assumption that the coatings would have a VOC content of 100 g/L.

For mobile source emissions, it was assumed that there would not be any external vehicle trips to the landscaped area within the development, modeled under the *City Park* land use type. For a conservative estimate, vehicle trips were modeled using a traffic study provided by Stantec for a previous similar project. Based on this traffic study, the project is expected to have 695 daily trips, with a breakdown of 55% primary trips, 35% pass-by trips, and 10% internal capture trips. CalEEMod default emission factors and fleet mix were used. All other operational emission sources were calculated using CalEEMod default factors.

Findings

The estimated emissions of criteria pollutants and greenhouse gases from the construction and the total operational emissions **are below the applicable PCAPCD Significant Emissions Thresholds**; therefore, this project does not have a significant air quality impact on the environment. In addition, this project is not expected to expose sensitive receptors to substantial pollutant concentrations. Since the construction and operational emissions are below significance thresholds, emission mitigation measures are not required.

ATTACHMENT A – PCAPCD Thresholds of Significance Table

PM₁₀

CO₂

ROG

O₃

SF₆

NO_x

CO₂E

CH₄

N₂O

H₂O

CH₄

HFC

ROG

O₃

SF₆

NO_x

SF₆

NO_x

CO₂E

CH₄

PM₁₀

CO₂

ROG

O₃

SF₆

Chapter 2: Thresholds of Significance

Thresholds of Significance

2.1. Significance Thresholds for CEQA Projects

Thresholds of Significance are used to determine if a land use project's construction and/or operational emissions would result in potential air quality impacts. CEQA encourages each public agency to develop and publish thresholds of significance to use in the determination of significance of environmental effects. The development of the thresholds of significance should be supported by substantial scientific evidence.

On October 13, 2016, the District's Board of Directors adopted the [Review of Land Use Projects under CEQA Policy](#) (Policy).

The Policy established the thresholds of significance for criteria pollutants as well as greenhouse gases (GHG). In setting these thresholds, the District considered the health-based air quality standards, strategies for attaining air quality standards, historical CEQA project review data in Placer County, statewide regulations to achieve emission reduction targets for GHG, and Placer County's special geographic and land use features.

The District recommends that lead agencies, within Placer County, consider using the District's adopted thresholds for determining the significance of criteria pollutants and GHG impacts from new projects subject to CEQA. The lead agency can adopt its own significance thresholds pursuant to CEQA Section 15064.7 (b)(c) and the District will recognize and use them in the CEQA review process.

Factors to Consider

- Direct effects
- Reasonably foreseeable indirect effects
- Expert disagreement
- "Considerable" contribution to cumulative effects
- Special thresholds for historical and archaeological resources

2.2. District Adopted Significance Thresholds for Criteria Pollutants

Placer County is located within the Sacramento Federal Ozone Nonattainment Area (SFONA) – an area where the air quality does not currently meet the federal 8-hour ozone standard. This standard was established by U.S. EPA, as a requirement of the federal Clean Air Act, to adopt standards for pollutants harmful to public health and the environment.

It is the District's position that any "nonattainment designation" based on the federal or state air quality standards is a significant air quality environmental issue since all sources in the area, including direct and indirect sources, contribute emissions that result in air quality deterioration. Therefore, the nonattainment status should be addressed in environmental documents within the CEQA process as a basis to establish thresholds of significance. The questions which evaluate air quality impacts on the CEQA Guideline's "Environmental Checklist Form"¹⁵ affirms this position.

The District has concluded that there is a direct nexus between "direct" emissions from stationary sources and "indirect" emissions associated with land use sources, where the emissions from a stationary source are no different than the emissions from a land use project. It is indistinguishable if the pollution is emitted by a stationary facility, or land use project vehicle activities. The impacts from either one or both sources influences the region's ability to attain health-based air quality standards.

Historically, the District has applied its new source review (NSR) rule requirement as the recommend significance thresholds for criteria pollutants under the CEQA review program. The NSR rule requires stationary sources to offset emissions when they emit pollutants in excess of the

15 CEQA Guideline Appendix G "Environmental Checklist Form", Section III-Air Quality question (c). http://resources.ca.gov/ceqa/guidelines/Appendix_G.html

PM₁₀
CO₂
ROG
O₃
SF₆
NO_x
CO₂E
CH₄
N₂O
H₂O
CH₄
HFC
ROG
O₃
CO₂
ROG
SF₆
NO_x
SF₆
NO_x
CO₂E
CH₄
PM₁₀
O₃
SF₆
SF₆
NO_x

PM₁₀
CO₂
ROG
O₃
SF₆
NO_x
CO₂E
CH₄
N₂O
H₂O
CH₄
HFC
ROG
O₃
SF₆
NO_x
SF₆
NO_x
CO₂E
CH₄
PM₁₀
CO₂
ROG
O₃
SF₆

identified emission offset threshold requirements which are based on the nonattainment classification for the air quality standards. The current emission offset thresholds of 10 tons per year (or 55 pounds per day) for ROG and NOx and 15 tons per year (or 82 pounds per day) for PM10 are required by District Rule 502¹⁶. These offset requirements are the most stringent of both the federal and state regulations. This is the foundation of the criteria pollutant's significance thresholds for CEQA projects within Placer County. Please note that the unit of pounds per day will be referred to as lbs/day in the following discussion.

The District evaluated the current regional goal to attain the federal and state ambient air quality standards, the CEQA projects reviewed by the District over the last thirteen years (2003-2015), and the CEQA significance thresholds adopted by other air districts in the Sacramento area. District staff was able to demonstrate that the NSR emission offset requirements are appropriate in addressing the potential air quality impacts from new land use projects in Placer County.

The detailed analyses and justification report can be found at <http://www.placerair.org/landuseandceqa/ceqathresholdsandreviewprinciples>. Table 2-1 shows the construction phase project-level, and cumulative-level significance thresholds, adopted by the District, related to the air quality impacts of construction and operational emissions associated with land use projects.

Table 2-1: PCAPCD Significance Thresholds for Criteria Pollutants

Construction Phase Project-Level			Operational Phase Project-Level			Operational Phase Cumulative-Level		
ROG	NOx	PM10	ROG	NOx	PM10	ROG	NOx	PM10
(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)
82	82	82	55	55	82	55	55	82

Table 2-2 presents the approximate size of a project for selected land use categories which would result in NOx operational emissions equal to the threshold of 55 lbs/day. The detailed modeling scenario assumptions, settings, and modeling outputs are presented in the [PCAPCD Threshold Justification Report Appendix B](#). This table serves as the preliminary screening methodology and it does not include ROG operational emissions. It may be used in place of an air quality analysis with appropriate discussion to determine the level of significance for a project's air quality impacts. Please note that, depending on the location of the project as well as the project's proposed land use categories, design features, and buildout year, different conclusions may be reached other than the ones shown in Table 2-2.

Table 2-2: Corresponding Size of a Project for 55 lbs/day of NOx Emissions

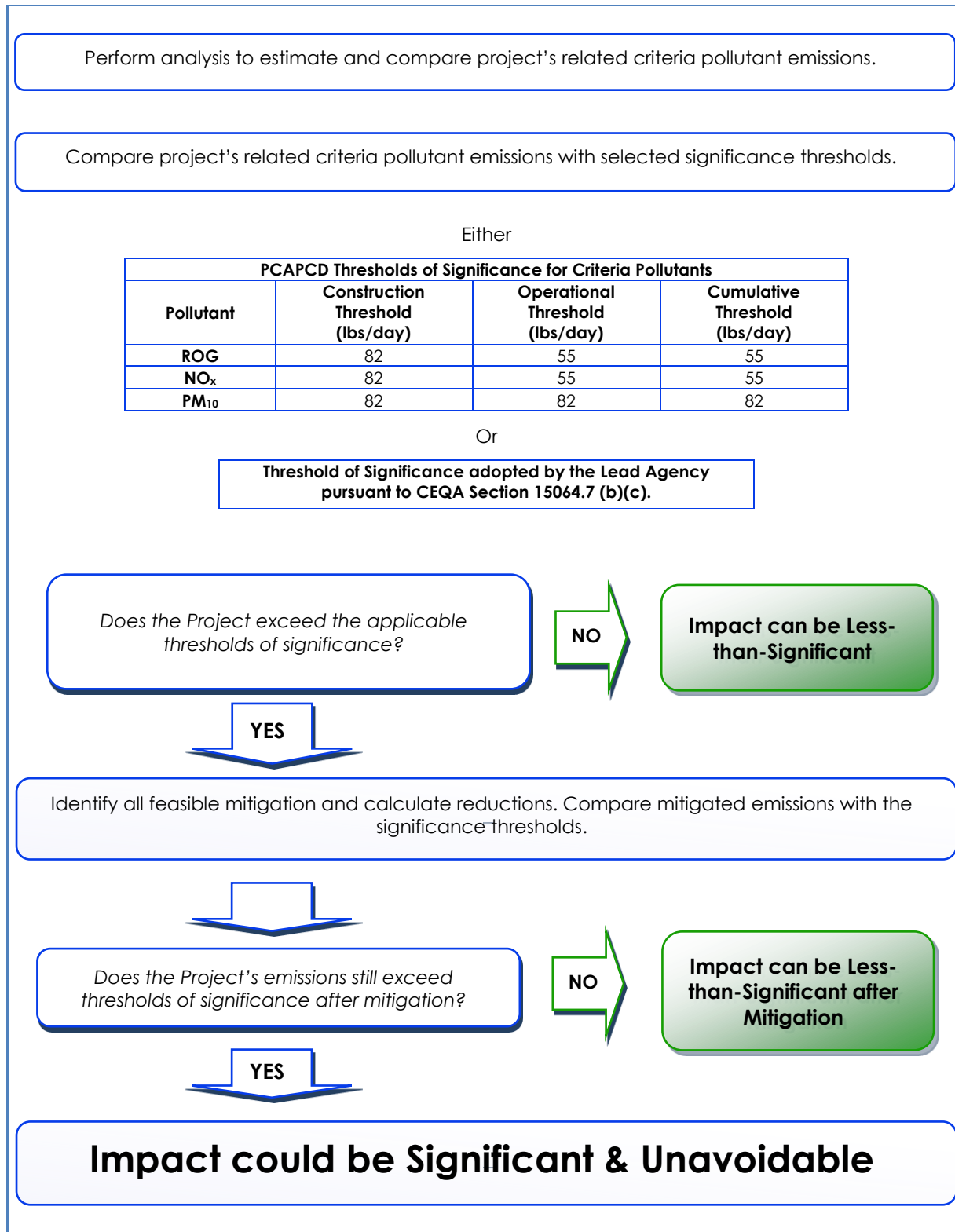
Residential (# of units)			Commercial/Industrial (sf)		
Single Family	Condo	Apartment	General Commercial	General Office	General Industrial
617	868	911	249,099	648,661	894,262

16 PCAPCD Rule 502 New Source Review Section 303.1 Emission Offset Requirements <http://www.placerair.org/~media/apc/documents/rules/reg%205/rule502newsourcereview.pdf?la=en>

2.3. Significance Determination for Criteria Pollutant Impacts

Figure 2-1 represents the general steps for evaluating and determining the level of significance for a project's related air quality impacts.

Figure 2-1: Significance Determination Flowchart for Criteria Pollutants



PM₁₀
CO₂
ROG
O₃
SF₆
NO_x
CO₂E
CH₄
N₂O
H₂O
CH₄
HFC
ROG
O₃
CO₂
ROG
SF₆
NO_x
SF₆
NO_x
CO₂E
CH₄
PM₁₀
O₃
SF₆
SF₆
NO_x

2.4. District Adopted Significance Thresholds for Greenhouse Gases

On June 1, 2005, Governor Arnold Schwarzenegger issued Executive Order S-3-05¹⁷. Although it was not included in state law, Executive Order S-3-05 set an ultimate goal for California to reduce GHG emissions to 80 percent below 1990 levels by 2050.

The California Global Warming Solutions Act (AB32) signed into law in September 2006, required statewide GHG emissions to be reduced to 1990 levels by 2020¹⁸. AB32 established regulatory, reporting, and market mechanisms to achieve this goal and provide guidance to help attain quantifiable reductions in emissions efficiently, without limiting population and economic growth. CARB is the state agency primarily responsible for implementing AB32. In order to implement AB32, CARB adopted a Scoping Plan in 2008¹⁹ that outlined actions necessary to reduce statewide GHG emissions. The Scoping Plan estimated that California would need to reduce emissions by 29 percent from a “business as usual” scenario to achieve AB32 emission reduction goals.

With the enactment of Senate Bill (SB) 97, California's lawmakers identified the need to analyze greenhouse gas emissions as a part of the CEQA process. The Office of Planning and Research (OPR) amended the CEQA Guidelines to include the analysis and mitigation of GHG emissions, which became effective on March 18, 2010²⁰. Even in the absence of adopted CEQA thresholds for GHG emissions, lead agencies are required to analyze the GHG emissions of proposed projects and must reach a conclusion regarding the significance of those emissions.

Senate Bill (SB) 32 was signed by Governor Jerry Brown, on September 8, 2016, to establish a California GHG reduction target of 40 percent below 1990 levels by 2030²¹. California is on track to meet or exceed this current target, as established in the California Global Warming Solutions Act of 2006 (AB 32). This new emission reduction target will make it possible to reach the ultimate goal of reducing emissions 80 percent under 1990 levels by 2050.

To develop the GHG significance thresholds, the District considered the following factors: 1) the significance thresholds adopted by the other air districts, 2) the CEQA projects reviewed by the District over the last 13 years, 3) the applicable statewide regulatory requirements required by 2030, and 4) the special geographic features in Placer County. The District's adopted GHG significance thresholds include three components: 1) Bright-line Thresholds of 10,000 metric tons (MT) of carbon dioxide equivalent per year (CO₂e/yr), 2) Efficiency Matrix for residential and non-residential development, and 3) De Minimis Level for the operational phase of 1,100 MT CO₂e/yr).

Table 2-3 shows the District's adopted Bright-line thresholds for different projects' construction phase and the stationary source projects' operational phase GHG emissions. The Bright-line threshold is the point at which a project would be deemed to have a cumulatively considerable²² contribution to global climate change. Table 2-4 shows the adopted 3-tier significance thresholds for the land use operational phase GHG emissions. Detailed technical analyses for the GHG significance threshold development can be found at <http://www.placerair.org/landuseandceqa/ceqathresholdsandreviewprinciples>.

¹⁷ California Executive Order S-3-05, (June 2005) <https://www.gov.ca.gov/news.php?id=1861>

¹⁸ California Assembly Bill No. 32 <https://www.arb.ca.gov/cc/docs/ab32text.pdf>

¹⁹ AB32 required CARB to adopt a Scoping Plan to describe the approach that California will take to reduce statewide GHG emissions to 1990 levels by 2020. http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf

²⁰ https://www.opr.ca.gov/s_ceqaandclimatechange.php

²¹ California Senate Bill No. 32 https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32

²² CEQA Guidelines §15064 (h)(1)

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Table 2-3: PCAPCD GHG Significance Thresholds for Different Construction and Stationary Source Operational Phases

All Construction Project-Level	Stationary Source Operational Project-Level
10,000 MT CO ₂ e/yr	

Table 2-4: PCAPCD GHG Significance Thresholds for Land Use Operational Phase Only

Bright-Line Thresholds			
10,000 MT CO ₂ e/yr			
Efficiency Matrix			
Residential		Non-Residential	
urban	rural	urban	rural
(MT CO ₂ e/capita)		(MT CO ₂ e/1,000 sf)	
4.5	5.5	26.5	27.3
De Minimis Level			
1,100 MT CO ₂ e/yr			

The District's Bright-line GHG Threshold of 10,000 MT CO₂e/yr is applied to land use projects' construction phase and stationary source projects' construction and operational phases. In general, GHG emissions from a project (either the construction or operational phase) that exceed 10,000 MT CO₂e/yr would be deemed to have a cumulatively considerable contribution to global climate change.

The Efficiency Matrix and De Minimis Level are only applied to a land use project's operational phase. For a land use project, it can be considered as less than cumulatively considerable and be excluded from future GHG impact analysis if its operational phase GHG emissions are equal to or less than 1,100 MT CO₂e/yr. A land use project with GHG operational emissions between 1,100 MT and 10,000 MT CO₂e/yr can still be found less than cumulatively considerable when the results of the project's related efficiency analysis meets one of conditions in the efficiency matrix for that applicable land use setting and land use type. The detailed discussion of GHG efficiency matrix development in Placer County is presented in the [PCAPCD Threshold Justification Report Appendix C](#).

Tables 2-5 and 2-6 presents the approximate size of a project for some of the land use categories which would result in GHG operational emissions equal to the Bright-line threshold of 10,000 MT CO₂e/yr and the De Minimis Level of 1,100 MT CO₂e/yr. The detailed modeling scenario assumptions, settings, and modeling outputs are presented in the [PCAPCD Threshold Justification Report Appendix D](#). These two tables serve as a preliminary screening methodology and should not be used in place of an analysis to determine the level of significance for a project's related GHG impact. Please note that, depending on the location of the project as well as the project's proposed land use categories and design features, different conclusions may be reached other than the ones shown in Tables 2-5 and 2-6.

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Table 2-5: Corresponding Size of a Project for Bright-Line Thresholds of 10,000 MT CO₂e/yr

Residential (# of units)			Commercial/Industrial (sf)		
Single Family	Condo	Apartment	General Commercial	General Office	General Industrial
646	957	1,044	323,955	756,170	901,709

Table 2-6: Corresponding Size of a Project for De Minimis Level of 1,100 MT CO₂e/yr

Residential (# of units)			Commercial/Industrial (sf)		
Single Family	Condo	Apartment	General Commercial	General Office	General Industrial
71	105	115	35,635	83,180	99,189

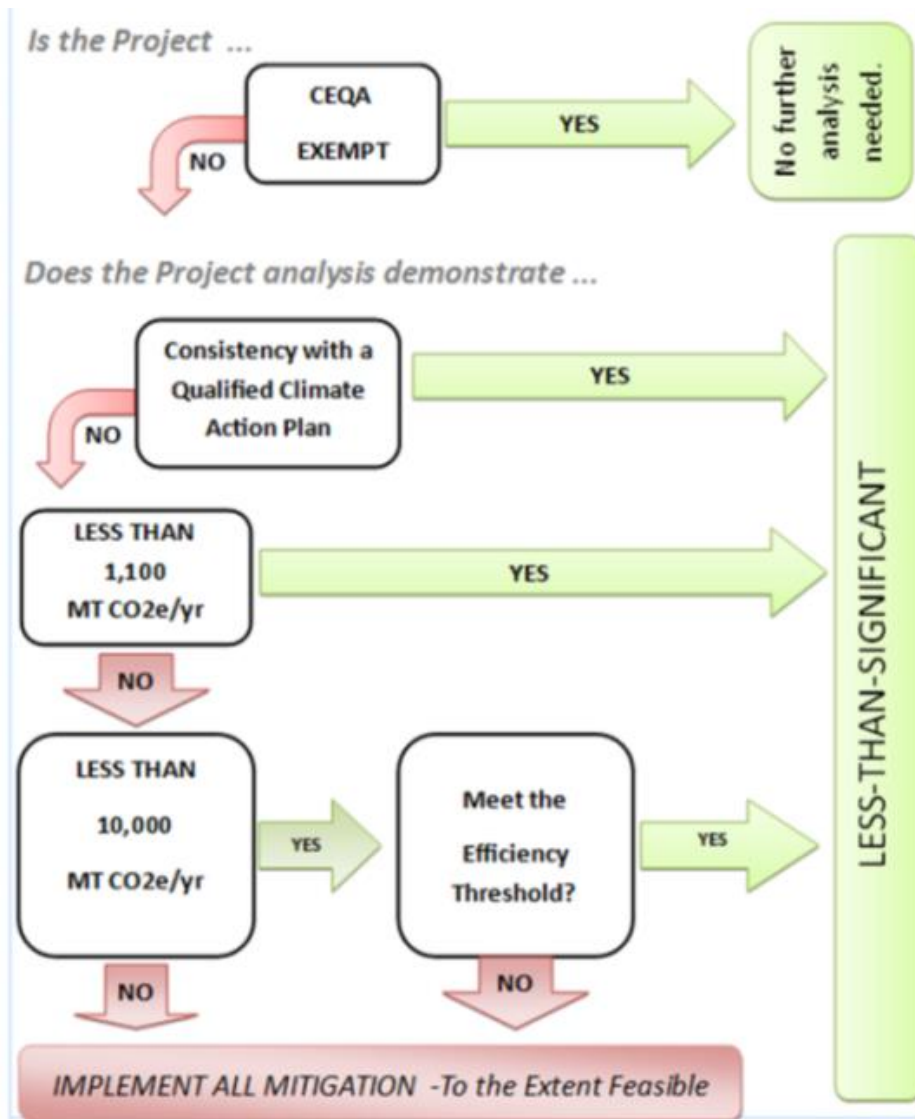
The District believes that the adopted GHG thresholds which were developed based on Placer County's special conditions can facilitate a uniform process for local jurisdictions in Placer County to analyze and identify potentially significant GHG impacts from land use projects. This uniform process will assist local jurisdictions in demonstrating a balance between the future growth in Placer County and the assumed responsibility in assisting California to achieve its GHG reduction goals.

2.5. Qualified Climate Action Plan

Alternatively, in lieu of applying the District's adopted GHG significance thresholds, local jurisdictions in Placer County can develop their own climate action plans pursuant to the CEQA requirement. If a jurisdiction has a qualified climate action plan (CAP) or greenhouse gas reduction plan (GHGRP) that meets all the criteria stated in CEQA Guidelines Section 15183.5 (b), the qualified plan can be used to determine the project's GHG impact in lieu of applying the District's adopted GHG significance thresholds. If a land use project can demonstrate consistency with the mitigation strategies identified in that jurisdiction's qualified CAP or GHGRP, the project can be deemed as less than cumulatively considerable for its associated GHG impacts.

Figure 2-2 represents the general steps for evaluating and determining the level of significance for a project's related GHG impacts

Figure 2-2: Significance Determination Flowchart for GHGs



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**ATTACHMENT B – PCAPCD 2017 CEQA Handbook, Chapter 6, Special Circumstances
for a Project**

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Chapter 6: Special Circumstances for a Project

Special Circumstances for a Project

6.1. Projects with Existing or New Stationary Source Operations

Occasionally, a land use project may include equipment or a process that is considering a stationary source operation which means that a permit from the District is required. Emissions from stationary source operations should be part of the project's air quality analysis. The District strongly recommends that the project's applicant consult with the District prior to attempting any emission calculations.

If there is an existing operational stationary source associated with the project, it may already be under a District Permit to Operate, depending on the type of stationary source and the District's regulatory requirements. A Permit to Operate includes the type of equipment/process/device being regulated, the equipment/process operational conditions, emission limitations, and associated emission factors used to determine the equipment/process emissions. The project's air quality analysis should identify the emissions from its stationary source operation as the baseline condition, which can be determined by the historical operational emissions from related stationary sources. The District can provide the historical emissions data through a [public information request](#). Please note that the existing stationary source emissions identified in the project's baseline conditions should be based on the actual emissions, not the allowed or the potential maximum emissions that may be identified in the District's permit.

- ✓ For more information regarding the Request for Public Information please go to: <http://www.placerair.org/publicrecordsrequest>.

If a project proposes to install new equipment, a device or a new process that will release air pollutants as part of the project, it will be subject to the District's permitting program and must apply for and obtain an Authority to Construct and Permit to Operate before installation or operation. The District's engineer will need to evaluate the proposed device/equipment/process to determine the potential emissions since the District will act as a responsible agency.

The emission estimation for the proposed stationary source should get concurrence from the District. For this reason, the project applicant should contact the District's engineer prior to conducting an analysis to ensure that the emission calculation will be consistent with the results from the District's permit evaluation. Please note that the emission estimation presented in the project's CEQA document will be used during the District's permit application evaluation process unless changes to the project have occurred since the last CEQA document was produced and in that case any significant inconsistencies may require an update to the CEQA document.

- ✓ For more information regarding the Request for the District permit requirement, please go to: <http://www.placerair.org/Placer%20Air/PermitsandFAQ>

6.2. Projects with Toxic Air Contaminants Emissions

Toxic Air Contaminants (TACs) or hazardous air pollutants (HAPs) are airborne pollutants that may be expected to result in "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health"³¹. TACs can be emitted by a wide range of sources from industrial plants to households which emit but are not classified as criteria air pollutants with no ambient air quality standards established for them. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, or genetic damage or short-term acute effects such as watering eyes, respiratory irritation, throat pain, or headaches.

³¹ California Health and Safety Code §39655

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Both federal and state agencies have established processes to identify toxic air contaminants and regulate them through risk management programs. These programs are designed to eliminate, avoid, or minimize the risk of adverse health effects from exposures to TACs. The following are the web links to both the federal and state air toxics program:

- ✓ [National Air Toxics Assessments](#)
- ✓ [California Air Toxic program](#)
- ✓ [California Toxic Air Contaminant Identification List](#)

TACs can be separated into carcinogens and non-carcinogens based on the nature of the physiological degradation associated with exposure to the pollutant. Carcinogens are defined as the substances that cause cancer to humans. Non-carcinogens are the substances that are not associated with human cancer but will cause acute and chronic health effects such as birth defects, organ damage, or death.

The Air Toxics “Hot Spots” Information and Assessment Act (AB 2588), which is known as the “Air Toxics Hot Spots” program, was enacted in 1987³². The Act requires that California air districts evaluate existing stationary sources of emissions (i.e. facilities and businesses) for significant risks to the public, and if significant, the Act requires a reduction in risk to non-significant levels. The Act also requires updated reviews of potentially significant emission sources every four years and the evaluation of new stationary sources after 12 months of operation. The District Board has adopted the significant risk threshold of 10 in a million³³. This risk threshold is used by the District to evaluate potential risks for both existing and new stationary sources in Placer County.

When a land use project proposes a new stationary source that will emit TACs, the project might be required to identify its potential risk to the nearby communities. Common stationary source types which emit TAC emissions include gasoline stations, dry cleaners, and diesel backup generators. These are also subject to District permit requirements along with an evaluation for TACs.

A project may also involve other associated non-stationary sources that may discharge TAC emissions such as diesel delivery trucks and off-road construction equipment. Stationary sources and non-stationary sources of TACs as well as consumer products all contribute to TACs in the air. Each of these sources may contribute a minor increase in risk individually but the risks from all sources could become a cumulatively considerable health impact to the communities. Screening tools such as a Health Risk Assessment (HRA) for the evaluation of associated cumulative community risk and hazard impacts should be considered. The following are common land use proposals which may be required to conduct a HRA for its TAC emissions:

- Goods Distribution Centers,
- Refineries,
- Power Generation Facilities,
- Chrome Platers,
- Dry Cleaners using Perchloroethylene, and
- Gasoline Dispensing Facilities.

³² CARB AB 2588 Air Toxics “Hot Spots” Program. <https://www.arb.ca.gov/ab2588/ab2588.htm>

³³ PCAPCD Board adopted the significant toxic risk thresholds in April 2002.

In order to ascertain the risk evaluation appropriately, the Office of Environmental Health Hazard Assessment (OEHHA) developed a guidance manual which describes the algorithms, exposure variates, and modeling protocols needed to prepare a HRA. The latest guidance manual was released by OEHHA on March 6, 2015. The CARB along with the CAPCOA updated the guidance document that provides procedures for the performance of risk assessments, incorporating the new OEHHA health risk assessment methodology. These two documents are references for a project in which might a health risk assessment for potential toxic emissions needs to be prepared.

- ✓ [OEHHA Air Toxics Hot Spots Program Guidance Manual \(March 2015\)](#)
- ✓ [CARB/CAPCOA Risk Management Guidance for Stationary Sources of Air Toxics \(July 2015\)](#)

The project specific information needed to prepare a HRA are listed but not limited to:

- Proposed equipment/process,
- Types of TACs emitted by the proposed equipment/process and associated health variates,
- Emission factors of TACs applied to the proposed equipment/process,
- Proposed operational duration such as number of hours per day or seasons,
- Location of equipment or process staging area,
- Distance to the nearest sensitive receptors such as schools, day-care centers, hospitals, or residential areas,
- Selected computer models, and
- Meteorological data including predominant wind direction, speed, mixing heights, and temperature for the modeling analysis.



Prior to conducting a HRA, the project applicant/consultant should discuss with the District the data inputs and modeling techniques to ensure the HRA evaluates the project's health risk appropriately.

6.3. Projects Siting in the Vicinity of Existing TAC Sources

Unlike stationary source projects, a project proposing new residential houses, apartments, schools, or day care facilities may not involve any stationary device or emissions from its stationary device component are small and would not cause considerable health concerns. However, sometimes these types of land use proposals may be located in an area surrounded by nearby existing TAC sources which could cause long-term serious health problems to future house owners, children, students, or patients. Although the District does not establish any health risk related thresholds for such types of land use projects, it is especially important that lead agencies be aware of the potential health impacts with the proposed land use projects.



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For the above reason, the CARB prepared the [Air Quality and Land Use Handbook](#) (CARB Land Use Handbook) which characterizes some common air pollution sources and provides recommendations to lead agencies to avoid siting sensitive land uses such as residences, schools, day care centers, playgrounds, and medical facilities near these types of air pollution sources. These common air pollution sources identified by the CARB Land Use Handbook are as follows:

- High Traffic Freeways and Roads,
- Goods Distribution Centers,
- Rail Yards,
- Ports,
- Refineries,
- Chrome Plating Facilities,
- Dry Cleaners using Perchloroethylene, and
- Large Gasoline Dispensing Facilities.

From the review of related scientific studies, the CARB Land Use Handbook recommends buffer distances between those air pollution sources and sensitive land uses. Table 6-1 summarizes the CARB Handbook's recommendations³⁴. Please note that these recommendations with qualitative analysis are advisory, lead agencies may have to balance other considerations.

Table 6-1: CARB Recommended Minimum Separations for Sensitive Land Uses

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week).
	Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard.
	Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air Districts or the CARB on the status of pending analyses of health risks.
Refineries	Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air Districts and other local agencies to determine an appropriate separation.
Chrome Platers	Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air District.
	Do not site new sensitive land uses in the same building with Perc dry cleaning operations.
Gasoline Dispensing Facilities	Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

In April 2017, CARB released a technical advisory as a supplement to its previous Land Use Handbook. This advisory is to provide planners and other stakeholders involved in land use

³⁴ CARB Air Quality and Land Use Handbook Table 1-1. <https://www.arb.ca.gov/ch/handbook.pdf>

planning and decision-making with information on scientifically based strategies to reduce exposure to traffic emissions near high-volume roadways in order to protect public health and promote equity and environmental justice. Strategies to reduce exposure include practices and technologies that reduce traffic emissions, increasing dispersion of traffic pollution (or the dilution of pollution in the air), or remove pollution from the air. The document compiles a list of recommended strategies including detailed discussion. The technical advisory can be downloaded from the following:

- ✓ [CARB Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways Guide](#)

In addition to the CARB Handbook, CAPCOA has also developed the [Health Risk Assessments for Proposed Land Use Projects](#) guidance which describes when and how a health risk assessment should be prepared and what to do with the results. The CAPCOA guidance outlines the recommended procedures to identify when a project should undergo further risk evaluation, how to conduct a HRA, how to engage the public, what to do with the results from the HRA, and what mitigation measures may be appropriate for various land use projects under CEQA. [APPENDIX G](#) summarizes the procedures from the CAPCOA guidance on preparing HRAs for land use projects. Detailed information regarding the CAPCOA guidance can be found in the following:

- ✓ [CAPCOA Health Risk Assessments for Proposed Land Use Projects](#)

Recently, the California Supreme Court ruled that lead agencies are not required by CEQA to analyze the impact of the existing environmental conditions on a project's future users or residents unless the project will exacerbate the existing environmental hazards or conditions³⁵. Some lead agencies may limit their CEQA analysis of existing TAC source impacts on a proposed project's new users, but the District maintains that siting new sensitive land uses within the vicinity of existing TAC sources could cause potential health concerns. Specifically, if a project involves the purchase of a school site or the construction of a new elementary or secondary school, the project's environmental document shall identify whether any existing TAC sources are around the proposed school site which would result in potential public health concerns, pursuant to Public Resources Code requirements³⁶. The District recommends that these situations be analyzed and necessary measures be identified to reduce the potential health impacts through the lead agency's CEQA review process, or least within their use permit structure. The District is available to work with lead agencies closely to identify existing TAC sources near the proposed project and provide any necessary assistance for its health risk assessment.

6.4. Projects Siting in an Area with Naturally Occurring Asbestos

Naturally occurring asbestos (NOA) was identified as a TAC in 1986 by the CARB. NOA is located in many parts of California and is commonly associated with ultramafic rocks, according to the California Department of Geology's special publication titled [Guidelines for Geologic Investigations of Naturally Occurring Asbestos in California](#). Asbestos is the common name for a complete group of naturally occurring fibrous silicate minerals that can be separated into thin but strong and durable fibers. Ultramafic rocks form in high-temperature environments well below the surface of the earth. By the time they are exposed, at the surface by geologic uplift and erosion, ultramafic rocks may be partially altered into a type of metamorphic rock called serpentinite. Sometimes the metamorphic conditions are right for the formation of chrysotile asbestos or tremolite-actinolite asbestos in the bodies of these rocks or along their boundaries.

³⁵ California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal. 4th 369

³⁶ California Public Resources Code §21151.8 (a)(2)

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For individuals living in areas of NOA, there are many potential pathways for airborne exposure. Exposures to soil dust containing asbestos can occur under a variety of scenarios, including children playing in the dirt, dust raised from unpaved roads and driveways covered with crushed serpentine, grading and earth disturbance associated with construction activity, quarrying, gardening, and other human activities.

People exposed to low levels of asbestos may be at elevated risk (e.g., above background rates) of lung cancer and mesothelioma. The risk is proportional to the cumulative inhaled dose (quantity of fibers), and also increases with time since first exposure. Although there are a number of factors that influence the disease causing potency of any given asbestos (such as fiber length and width, fiber type, and fiber chemistry), all forms are carcinogens.

NOA is present in several foothill areas of Placer County. The District recommends the applicant should identify if the proposed project is located in areas where NOA is most likely found. District NOA maps show where serpentine rock formations could be found in Placer County. If a project located within the most likely to contain NOA area and the project involves earth-disturbing construction activity, the project may have the potential to expose people to airborne asbestos. A Naturally-Occurring Asbestos Dust Mitigation Plan (ADMP) will need to be developed to comply with the requirements listed in the CARB's Asbestos Air Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations. The ADMP guidance can be reviewed on the District's website. The following are websites which contain NOA information for the land use projects in Placer County:

- ✓ [Placer NOA Maps](#)
- ✓ [Placer ADMP guidance](#)
- ✓ [CARB Asbestos ATCM](#)

6.5. Projects with Odors or Siting Near to Existing Odor Sources



The District is responsible for odor complaints/nuisance. The types of facilities that can cause odor complaints are varied and can range from small commercial facilities to large industrial facilities, and may include waste disposal and recycling operations. Odors can cause health symptoms such as nausea and headaches. Some common sources of odors emitted by facilities are sulfur compounds, organic solvents, and the decomposition/digestion of biological materials. With the subjective nature of a receptor's sensitivity to a particular type of odor, there is no specific rule for assigning appropriate separations from odor sources. Under the right meteorological conditions, some odors may still be offensive several miles from the source.

Certain facilities such as sanitary landfills, paint and/or coating operations, and wastewater treatment facilities might have the potential to cause significant odor impacts. The followings are the common land use types that typically generate significant odor impacts:

- Wastewater Treatment Plants,
- Sanitary Landfills,
- Composting/Green Waste Facilities,
- Recycling Facilities,
- Chemical Manufacturing Plants,
- Painting/Coating Operations,

- Agricultural Operations, and
- Slaughterhouse/Food Packaging Plants.

If a land use project proposes any of the above type of land uses, which have the potential to cause significant odor impacts, the odor impacts should be identified and discussed in the environmental document so mitigation measures may be identified. New development projects such as residential subdivisions or other sensitive receptors may also have the potential to be affected when the project is located downwind of the above types of land uses. In this case, the District recommends that odor issues are discussed early in the site design process so that any potential odor impacts could be mitigated.

One of the most important factors influencing odor impacts is the distance between the odor source and receptors, referred to as a buffer zone or setback. The greater the distance between an odor source and receptor, the less odor impact when it reaches the receptor. Table 6-2 is a recommended Odor Screening Distances table used by a neighboring air district³⁷ in the Sacramento Region which lists suggested buffer distances for a variety of odor-generating facilities. In addition to distance, the potential for a significant odor impact relies on a variety of factors. Lead agencies should not apply the recommended screening distances as the only factor to determine the significance of the potential odor impact.

Table 6-2: Odor Screening Distances

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	2 miles
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	4 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	2 miles
Metal Smelting Plants	1 mile

Source: SMAQMD: CEQA Guide to Air Quality Assessment, Chapter 7, Odors / Recommended Odor Screening Distances.

The District recommends that a significance determination for odor impact be made on a case-by-case basis with all the parameters considered. The parameters include distance, the downwind/upwind situation, dominant wind direction, and a facilities odor compliant history. Lead agencies should clearly present the evidence in the discussion to support its significance determination. Please note that the issuance of a land use permit cannot prevent a third party from bringing a nuisance action against another party, and the outcomes of such litigation would be based on the facts of the situation.

³⁷ Sacramento Metropolitan Air Quality Management District (SMAQMD) CEQA Guide Chapter 7 Odor Screening Table <http://www.airquality.org/LandUseTransportation/Documents/Ch7ScreeningDistancesFINAL12-2009.pdf>

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ATTACHMENT C – PCAPCD Recommended Construction Mitigation Measures

APPENDIX C. Recommended Construction Mitigation Measures

The following mitigation measures are provided as general guidance for the types of measures that could potentially be proposed for land use projects. Please note that these measures may or may not be applicable to any specific project. This appendix is intended to be utilized as a “menu” of potential measures.

1. Maintain all construction equipment properly according to manufacturer's specifications.
2. Fuel all off-road and portable diesel powered equipment with CARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).
3. Comply with the State off-Road Regulation by using diesel construction equipment meeting CARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines.
4. Comply with the State On-Road Regulation by using on-road heavy-duty trucks that meet the CARB's Tier 3 standard for on-road heavy-duty diesel engines.
5. All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and/or job sites to remind drivers and operators of the 5 minute idling limit.
6. Diesel idling within 1,000 feet of sensitive receptors is not permitted.
7. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors.
8. Use Electrified equipment when feasible.
9. Substitute gasoline-powered in place of diesel-powered equipment, where feasible.
10. Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.
11. Require contractors to repower equipment with the cleanest engines available.
12. Require construction equipment use installed California Verified Diesel Emission Control Strategies. These strategies are listed at:
<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>
13. Require the contractor to prepare a dust control plan when the disturbed area is more than one (1) acre.
14. Reduce the amount of the disturbed area where possible.
15. Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency is required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible.
16. All dirt stock-pile areas should be sprayed daily as needed.
17. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible, with building pads laid as soon as possible after grading unless seeding or soil binders are used.

18. All fugitive dust mitigation measures shall be shown on grading and building plans.

19. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.

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ROG
O₃
CO₂
ROG
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CO₂

ROG

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The followings are samples of construction mitigation measures used in the project's environmental documents. Please note that mitigation measure language may be different than those listed here based on any agreement between the local jurisdictions, project developers, and the District.

1. 1a. Prior to the approval of Grading or Improvement Plans, (whichever occurs first), on project sites greater than one acre, the applicant shall submit a Construction Emission / Dust Control Plan to the Placer County Air Pollution Control District. If the District does not respond within twenty (20) days of the plan being accepted as complete, the plan shall be considered approved. The applicant shall provide written evidence, provided by the District, to the local jurisdiction (city or county) that the plan has been submitted to the District. It is the responsibility of the applicant to deliver the approved plan to the local jurisdiction. The applicant shall not begin the construction prior to receiving District approval of the Construction Emission / Dust Control Plan, and delivering that approval to the local jurisdiction.

1b. Include the following standard note on the Grading Plan or Improvement Plans, or as an attached form: The prime contractor shall submit to the District a comprehensive inventory (e.g., make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower or greater) that will be used in aggregate of 40 or more hours for the construction project. If any new equipment is added after submission of the inventory, the prime contractor shall contact the District prior to the new equipment being utilized. At least three business days prior to the use of heavy-duty off-road equipment, the project representative shall provide the District with the anticipated construction timeline including start date, name, and phone number of the property owner, project manager, and on-site foreman.

1c. Prior to the approval of Grading or Improvement Plans, whichever occurs first, the applicant shall provide a written calculation to the District for approval demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average of 20% of NO_x and 45% of DPM reduction as compared to CARB statewide fleet average emissions. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The following link shall be used to calculate compliance with this condition and shall be submitted to the District as described above: [Construction Emissions Mitigation](#).

2. Include the following standard note on the Improvement/Grading Plan, or as an attached form: During construction the contractor shall utilize existing power sources (e.g., power poles) or clean fuel (e.g., gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators.

3. Include the following standard note on the Improvement/Grading Plan, or as an attached form: During construction, the contractor shall minimize the idling time to a maximum of 5 minutes for all diesel powered equipment.

4. Prior to the approval of grading or improvement plans, the applicant shall retain a qualified geologist or geotechnical engineer to conduct additional geologic evaluations of the project site to determine the presence or absence of naturally-occurring asbestos onsite. These evaluations shall include the project site and each offsite parcel where infrastructure construction or installation would occur. These evaluations shall be completed and submitted to the District prior to issuance of any grading and/or improvement plans.

5. If naturally-occurring asbestos is located onsite, the following measures shall be implemented prior to the approval of a grading/improvement plans:
 - a. The applicant shall prepare an Asbestos Dust Mitigation Plan pursuant to CCR Title 17 Section 93105 ("Asbestos Airborne Toxic Control Measures for Construction, Grading, Quarrying, and Surface Mining Operations") and obtain approval by the Placer County APCD. The Plan shall include all measures required by the State of California and the Placer County APCD.
 - b. If asbestos is found in concentrations greater than 5 percent, the material shall not be used as surfacing material as stated in state regulation CCR Title 17 Section 93106 ("Asbestos Airborne Toxic Control Measure-Asbestos Containing Serpentine"). The material with naturally-occurring asbestos can be reused at the site for sub-grade material if it is covered by other non-asbestos-containing material.
 - c. Each subsequent individual lot developer shall prepare an Asbestos Dust Mitigation Plan when the construction area is equal to or greater than one acre.
 - d. The project developer and each subsequent lot seller must disclose the presence of this environmental hazard during any subsequent real estate transaction processes. The disclosure must include a copy of the CARB pamphlet entitled ["Asbestos-Containing Rock and Soil –What California Homeowners and Renters Need to Know,"](#) or other similar fact sheet. 📄 (pdf)
6. Signs shall be posted in the designated queuing areas of the construction site to remind off-road equipment operators that idling is limited to a maximum of 5 minutes.
7. Idling of construction related equipment and construction related vehicles are not recommended within 1,000 feet of any sensitive receptor.

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ATTACHMENT D – CalEEMod Emissions Model Output

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Annual

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

**Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd.,
Placer County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	3.59	1000sqft	0.08	3,588.00	0
Other Asphalt Surfaces	0.17	Acre	0.17	7,328.00	0
Other Non-Asphalt Surfaces	0.83	Acre	0.83	36,192.00	0
City Park	2.88	Acre	2.88	125,333.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Information provided by client.

Construction Phase - An estimated start date of 12/09/2024 and end date of 05/23/25 was provided by client.

Off-road Equipment - Removal of Rubber Tired Dozers during Site Preparation was provided by client.

Grading - Material import and export information provided on data request form.

Architectural Coating - VOC limits from PCAPCD Rule 218. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L.

Off-road Equipment -

Off-road Equipment -

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Annual

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

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Vehicle Trips - All areas modeled as a City Park are within the housing development and no vehicle trips are expected. Trip rates for the Automobile Care Center land use type are based on generation trip data provided by the client for a similar previous project.

Area Coating - VOC limits from PCAPCD Rule 218. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L.

Construction Off-road Equipment Mitigation - Assumes that construction site will be watered 2 times per day and a speed limit of 15 mph when traveling across unpaved areas to be in compliance with PCAPCD Rule 228.

Area Mitigation - -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	55.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	55.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	55.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	55.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	55
tblAreaCoating	Area_EF_Nonresidential_Interior	100	55
tblAreaCoating	Area_EF_Residential_Exterior	100	55
tblAreaCoating	Area_EF_Residential_Interior	100	55
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	230.00	71.00
tblConstructionPhase	PhaseEndDate	11/1/2026	5/23/2025
tblConstructionPhase	PhaseEndDate	11/12/2025	4/3/2025
tblConstructionPhase	PhaseEndDate	12/8/2025	4/29/2025
tblConstructionPhase	PhaseStartDate	12/9/2025	4/30/2025
tblConstructionPhase	PhaseStartDate	11/13/2025	4/4/2025
tblGrading	AcresOfGrading	0.00	2.50
tblGrading	AcresOfGrading	4.00	8.00
tblGrading	MaterialExported	0.00	966.00
tblGrading	MaterialExported	0.00	226.00

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Annual

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

tblGrading	MaterialImported	0.00	66.00
tblLandUse	LandUseSquareFeet	7,405.20	7,328.00
tblLandUse	LandUseSquareFeet	36,154.80	36,192.00
tblLandUse	LandUseSquareFeet	125,452.80	125,333.00
tblOffRoadEquipment	HorsePower	247.00	0.00
tblOffRoadEquipment	LoadFactor	0.40	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	51.00	10.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	28.00	35.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	21.00	55.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	ST_TR	23.72	193.70
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	11.88	193.70
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	23.72	193.70
tblVehicleTrips	WD_TR	0.78	0.00

2.0 Emissions Summary

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Annual

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

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					
2024	9.0400e-003	0.0946	0.1091	2.4000e-004	9.0700e-003	3.6200e-003	0.0127	1.5500e-003	3.3600e-003	4.9100e-003	0.0000	21.7055	21.7055	4.4300e-003	9.1000e-004	22.0870
2025	0.0773	0.5423	0.7322	1.4500e-003	0.0275	0.0217	0.0491	7.4500e-003	0.0204	0.0278	0.0000	127.7546	127.7546	0.0235	3.0500e-003	129.2501
Maximum	0.0773	0.5423	0.7322	1.4500e-003	0.0275	0.0217	0.0491	7.4500e-003	0.0204	0.0278	0.0000	127.7546	127.7546	0.0235	3.0500e-003	129.2501

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					
2024	9.0400e-003	0.0946	0.1091	2.4000e-004	5.9700e-003	3.6200e-003	9.5900e-003	1.2100e-003	3.3600e-003	4.5700e-003	0.0000	21.7055	21.7055	4.4300e-003	9.1000e-004	22.0870
2025	0.0773	0.5423	0.7322	1.4500e-003	0.0275	0.0217	0.0491	7.4500e-003	0.0204	0.0278	0.0000	127.7545	127.7545	0.0235	3.0500e-003	129.2500
Maximum	0.0773	0.5423	0.7322	1.4500e-003	0.0275	0.0217	0.0491	7.4500e-003	0.0204	0.0278	0.0000	127.7545	127.7545	0.0235	3.0500e-003	129.2500

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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	8.48	0.00	5.01	3.78	0.00	1.04	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	12-9-2024	3-8-2025	0.4724	0.4724
2	3-9-2025	6-8-2025	0.2481	0.2481
		Highest	0.4724	0.4724

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	0.0195	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Energy	3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	6.2814	6.2814	5.1000e-004	1.2000e-004	6.3295
Mobile	0.2896	0.3599	2.3513	4.2800e-003	0.4327	3.8900e-003	0.4366	0.1159	3.6500e-003	0.1196	0.0000	395.2916	395.2916	0.0302	0.0236	403.0812
Waste						0.0000	0.0000		0.0000	0.0000	2.8338	0.0000	2.8338	0.1675	0.0000	7.0205
Water						0.0000	0.0000		0.0000	0.0000	0.1072	1.3474	1.4545	0.0112	2.9000e-004	1.8204
Total	0.3094	0.3631	2.3541	4.3000e-003	0.4327	4.1400e-003	0.4369	0.1159	3.9000e-003	0.1198	2.9409	402.9205	405.8614	0.2094	0.0240	418.2518

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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	0.0195	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Energy	3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	6.2814	6.2814	5.1000e-004	1.2000e-004	6.3295
Mobile	0.2896	0.3599	2.3513	4.2800e-003	0.4327	3.8900e-003	0.4366	0.1159	3.6500e-003	0.1196	0.0000	395.2916	395.2916	0.0302	0.0236	403.0812
Waste						0.0000	0.0000		0.0000	0.0000	2.8338	0.0000	2.8338	0.1675	0.0000	7.0205
Water						0.0000	0.0000		0.0000	0.0000	0.1072	1.3474	1.4545	0.0112	2.9000e-004	1.8204
Total	0.3094	0.3631	2.3541	4.3000e-003	0.4327	4.1400e-003	0.4369	0.1159	3.9000e-003	0.1198	2.9409	402.9205	405.8614	0.2094	0.0240	418.2518

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/9/2024	12/13/2024	5	5	
2	Grading	Grading	12/14/2024	12/25/2024	5	8	
3	Building Construction	Building Construction	12/26/2024	4/3/2025	5	71	

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

4	Paving	Paving	4/4/2025	4/29/2025	5	18
5	Architectural Coating	Architectural Coating	4/30/2025	5/23/2025	5	18

Acres of Grading (Site Preparation Phase): 2.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 1

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,382; Non-Residential Outdoor: 1,794; Striped Parking Area: 2,611 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Site Preparation	Rubber Tired Dozers	0	0.00	0	0.00
Building Construction	Cranes	1	7.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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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
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	72.00	28.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	37.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	121.00	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

3.2 Site Preparation - 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					
Fugitive Dust					1.3800e-003	0.0000	1.3800e-003	1.5000e-004	0.0000	1.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4400e-003	0.0145	0.0224	3.0000e-005		6.6000e-004	6.6000e-004		6.1000e-004	6.1000e-004	0.0000	2.7376	2.7376	8.9000e-004	0.0000	2.7597
Total	1.4400e-003	0.0145	0.0224	3.0000e-005	1.3800e-003	6.6000e-004	2.0400e-003	1.5000e-004	6.1000e-004	7.6000e-004	0.0000	2.7376	2.7376	8.9000e-004	0.0000	2.7597

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

3.2 Site Preparation - 2024

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	1.5000e-004	8.1600e-003	1.8300e-003	4.0000e-005	1.0200e-003	7.0000e-005	1.0900e-003	2.8000e-004	7.0000e-005	3.5000e-004	0.0000	3.4701	3.4701	1.0000e-005	5.5000e-004	3.6328
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1481	0.1481	0.0000	0.0000	0.1494
Total	2.1000e-004	8.2000e-003	2.3600e-003	4.0000e-005	1.2200e-003	7.0000e-005	1.2900e-003	3.3000e-004	7.0000e-005	4.0000e-004	0.0000	3.6182	3.6182	1.0000e-005	5.5000e-004	3.7821

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					6.2000e-004	0.0000	6.2000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4400e-003	0.0145	0.0224	3.0000e-005		6.6000e-004	6.6000e-004		6.1000e-004	6.1000e-004	0.0000	2.7376	2.7376	8.9000e-004	0.0000	2.7597
Total	1.4400e-003	0.0145	0.0224	3.0000e-005	6.2000e-004	6.6000e-004	1.2800e-003	7.0000e-005	6.1000e-004	6.8000e-004	0.0000	2.7376	2.7376	8.9000e-004	0.0000	2.7597

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Annual

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

3.2 Site Preparation - 2024

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	1.5000e-004	8.1600e-003	1.8300e-003	4.0000e-005	1.0200e-003	7.0000e-005	1.0900e-003	2.8000e-004	7.0000e-005	3.5000e-004	0.0000	3.4701	3.4701	1.0000e-005	5.5000e-004	3.6328
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1481	0.1481	0.0000	0.0000	0.1494
Total	2.1000e-004	8.2000e-003	2.3600e-003	4.0000e-005	1.2200e-003	7.0000e-005	1.2900e-003	3.3000e-004	7.0000e-005	4.0000e-004	0.0000	3.6182	3.6182	1.0000e-005	5.5000e-004	3.7821

3.3 Grading - 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					
Fugitive Dust					4.2600e-003	0.0000	4.2600e-003	4.6000e-004	0.0000	4.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8700e-003	0.0396	0.0465	8.0000e-005		1.6100e-003	1.6100e-003		1.4800e-003	1.4800e-003	0.0000	7.4247	7.4247	2.4000e-003	0.0000	7.4847
Total	3.8700e-003	0.0396	0.0465	8.0000e-005	4.2600e-003	1.6100e-003	5.8700e-003	4.6000e-004	1.4800e-003	1.9400e-003	0.0000	7.4247	7.4247	2.4000e-003	0.0000	7.4847

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Annual

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

3.3 Grading - 2024

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	5.0000e-005	2.5000e-003	5.6000e-004	1.0000e-005	3.1000e-004	2.0000e-005	3.3000e-004	9.0000e-005	2.0000e-005	1.1000e-004	0.0000	1.0611	1.0611	0.0000	1.7000e-004	1.1108
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	1.1000e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3080	0.3080	1.0000e-005	1.0000e-005	0.3107
Total	1.8000e-004	2.5800e-003	1.6600e-003	1.0000e-005	7.2000e-004	2.0000e-005	7.4000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	1.3691	1.3691	1.0000e-005	1.8000e-004	1.4215

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					1.9200e-003	0.0000	1.9200e-003	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8700e-003	0.0396	0.0465	8.0000e-005		1.6100e-003	1.6100e-003		1.4800e-003	1.4800e-003	0.0000	7.4247	7.4247	2.4000e-003	0.0000	7.4847
Total	3.8700e-003	0.0396	0.0465	8.0000e-005	1.9200e-003	1.6100e-003	3.5300e-003	2.1000e-004	1.4800e-003	1.6900e-003	0.0000	7.4247	7.4247	2.4000e-003	0.0000	7.4847

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

3.3 Grading - 2024

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	5.0000e-005	2.5000e-003	5.6000e-004	1.0000e-005	3.1000e-004	2.0000e-005	3.3000e-004	9.0000e-005	2.0000e-005	1.1000e-004	0.0000	1.0611	1.0611	0.0000	1.7000e-004	1.1108
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	8.0000e-005	1.1000e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3080	0.3080	1.0000e-005	1.0000e-005	0.3107
Total	1.8000e-004	2.5800e-003	1.6600e-003	1.0000e-005	7.2000e-004	2.0000e-005	7.4000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	1.3691	1.3691	1.0000e-005	1.8000e-004	1.4215

3.4 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	2.9400e-003	0.0269	0.0323	5.0000e-005		1.2300e-003	1.2300e-003		1.1500e-003	1.1500e-003	0.0000	4.6370	4.6370	1.1000e-003	0.0000	4.6644
Total	2.9400e-003	0.0269	0.0323	5.0000e-005		1.2300e-003	1.2300e-003		1.1500e-003	1.1500e-003	0.0000	4.6370	4.6370	1.1000e-003	0.0000	4.6644

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3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.5700e-003	8.1000e-004	1.0000e-005	3.7000e-004	2.0000e-005	3.8000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.0660	1.0660	0.0000	1.6000e-004	1.1142
Worker	3.5000e-004	2.2000e-004	3.0500e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	0.0000	3.1000e-004	0.0000	0.8530	0.8530	2.0000e-005	2.0000e-005	0.8604
Total	4.1000e-004	2.7900e-003	3.8600e-003	2.0000e-005	1.5000e-003	3.0000e-005	1.5200e-003	4.1000e-004	1.0000e-005	4.3000e-004	0.0000	1.9190	1.9190	2.0000e-005	1.8000e-004	1.9745

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	2.9400e-003	0.0269	0.0323	5.0000e-005		1.2300e-003	1.2300e-003		1.1500e-003	1.1500e-003	0.0000	4.6370	4.6370	1.1000e-003	0.0000	4.6644
Total	2.9400e-003	0.0269	0.0323	5.0000e-005		1.2300e-003	1.2300e-003		1.1500e-003	1.1500e-003	0.0000	4.6370	4.6370	1.1000e-003	0.0000	4.6644

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3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.5700e-003	8.1000e-004	1.0000e-005	3.7000e-004	2.0000e-005	3.8000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.0660	1.0660	0.0000	1.6000e-004	1.1142
Worker	3.5000e-004	2.2000e-004	3.0500e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	0.0000	3.1000e-004	0.0000	0.8530	0.8530	2.0000e-005	2.0000e-005	0.8604
Total	4.1000e-004	2.7900e-003	3.8600e-003	2.0000e-005	1.5000e-003	3.0000e-005	1.5200e-003	4.1000e-004	1.0000e-005	4.3000e-004	0.0000	1.9190	1.9190	2.0000e-005	1.8000e-004	1.9745

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0458	0.4177	0.5388	9.0000e-004		0.0177	0.0177		0.0166	0.0166	0.0000	77.6930	77.6930	0.0183	0.0000	78.1496
Total	0.0458	0.4177	0.5388	9.0000e-004		0.0177	0.0177		0.0166	0.0166	0.0000	77.6930	77.6930	0.0183	0.0000	78.1496

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3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0400e-003	0.0427	0.0134	1.8000e-004	6.1300e-003	2.6000e-004	6.3800e-003	1.7700e-003	2.5000e-004	2.0200e-003	0.0000	17.4719	17.4719	5.0000e-005	2.6400e-003	18.2606
Worker	5.4400e-003	3.3600e-003	0.0480	1.5000e-004	0.0189	9.0000e-005	0.0190	5.0400e-003	8.0000e-005	5.1200e-003	0.0000	13.8005	13.8005	3.6000e-004	3.6000e-004	13.9171
Total	6.4800e-003	0.0460	0.0614	3.3000e-004	0.0251	3.5000e-004	0.0254	6.8100e-003	3.3000e-004	7.1400e-003	0.0000	31.2724	31.2724	4.1000e-004	3.0000e-003	32.1777

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	0.0458	0.4177	0.5388	9.0000e-004		0.0177	0.0177		0.0166	0.0166	0.0000	77.6929	77.6929	0.0183	0.0000	78.1495
Total	0.0458	0.4177	0.5388	9.0000e-004		0.0177	0.0177		0.0166	0.0166	0.0000	77.6929	77.6929	0.0183	0.0000	78.1495

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3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0400e-003	0.0427	0.0134	1.8000e-004	6.1300e-003	2.6000e-004	6.3800e-003	1.7700e-003	2.5000e-004	2.0200e-003	0.0000	17.4719	17.4719	5.0000e-005	2.6400e-003	18.2606
Worker	5.4400e-003	3.3600e-003	0.0480	1.5000e-004	0.0189	9.0000e-005	0.0190	5.0400e-003	8.0000e-005	5.1200e-003	0.0000	13.8005	13.8005	3.6000e-004	3.6000e-004	13.9171
Total	6.4800e-003	0.0460	0.0614	3.3000e-004	0.0251	3.5000e-004	0.0254	6.8100e-003	3.3000e-004	7.1400e-003	0.0000	31.2724	31.2724	4.1000e-004	3.0000e-003	32.1777

3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.3800e-003	0.0678	0.1096	1.7000e-004		3.1700e-003	3.1700e-003		2.9300e-003	2.9300e-003	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562
Paving	2.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.6000e-003	0.0678	0.1096	1.7000e-004		3.1700e-003	3.1700e-003		2.9300e-003	2.9300e-003	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562

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3.5 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	2.5000e-004	3.5800e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.0299	1.0299	3.0000e-005	3.0000e-005	1.0386
Total	4.1000e-004	2.5000e-004	3.5800e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.0299	1.0299	3.0000e-005	3.0000e-005	1.0386

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	7.3800e-003	0.0678	0.1096	1.7000e-004		3.1700e-003	3.1700e-003		2.9300e-003	2.9300e-003	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562
Paving	2.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.6000e-003	0.0678	0.1096	1.7000e-004		3.1700e-003	3.1700e-003		2.9300e-003	2.9300e-003	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562

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3.5 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	2.5000e-004	3.5800e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.0299	1.0299	3.0000e-005	3.0000e-005	1.0386
Total	4.1000e-004	2.5000e-004	3.5800e-003	1.0000e-005	1.4100e-003	1.0000e-005	1.4200e-003	3.8000e-004	1.0000e-005	3.8000e-004	0.0000	1.0299	1.0299	3.0000e-005	3.0000e-005	1.0386

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0152					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	0.0167	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011

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3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.8000e-004	2.5100e-003	1.0000e-005	9.9000e-004	0.0000	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7209	0.7209	2.0000e-005	2.0000e-005	0.7270
Total	2.8000e-004	1.8000e-004	2.5100e-003	1.0000e-005	9.9000e-004	0.0000	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7209	0.7209	2.0000e-005	2.0000e-005	0.7270

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	0.0152					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	0.0167	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Annual

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

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.8000e-004	2.5100e-003	1.0000e-005	9.9000e-004	0.0000	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7209	0.7209	2.0000e-005	2.0000e-005	0.7270
Total	2.8000e-004	1.8000e-004	2.5100e-003	1.0000e-005	9.9000e-004	0.0000	9.9000e-004	2.6000e-004	0.0000	2.7000e-004	0.0000	0.7209	0.7209	2.0000e-005	2.0000e-005	0.7270

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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	0.2896	0.3599	2.3513	4.2800e-003	0.4327	3.8900e-003	0.4366	0.1159	3.6500e-003	0.1196	0.0000	395.2916	395.2916	0.0302	0.0236	403.0812
Unmitigated	0.2896	0.3599	2.3513	4.2800e-003	0.4327	3.8900e-003	0.4366	0.1159	3.6500e-003	0.1196	0.0000	395.2916	395.2916	0.0302	0.0236	403.0812

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	695.00	695.00	695.00	1,176,337	1,176,337
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	695.00	695.00	695.00	1,176,337	1,176,337

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
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	55	10	35
City Park	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Annual

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.469031	0.061941	0.210401	0.151320	0.033281	0.008216	0.015093	0.011904	0.000551	0.000425	0.031690	0.000963	0.005185
City Park	0.469031	0.061941	0.210401	0.151320	0.033281	0.008216	0.015093	0.011904	0.000551	0.000425	0.031690	0.000963	0.005185
Other Asphalt Surfaces	0.469031	0.061941	0.210401	0.151320	0.033281	0.008216	0.015093	0.011904	0.000551	0.000425	0.031690	0.000963	0.005185
Other Non-Asphalt Surfaces	0.469031	0.061941	0.210401	0.151320	0.033281	0.008216	0.015093	0.011904	0.000551	0.000425	0.031690	0.000963	0.005185

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.7488	2.7488	4.4000e-004	5.0000e-005	2.7759
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.7488	2.7488	4.4000e-004	5.0000e-005	2.7759
NaturalGas Mitigated	3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.5326	3.5326	7.0000e-005	6.0000e-005	3.5536
NaturalGas Unmitigated	3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.5326	3.5326	7.0000e-005	6.0000e-005	3.5536

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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					
Automobile Care Center	66198.6	3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.5326	3.5326	7.0000e-005	6.0000e-005	3.5536
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.5326	3.5326	7.0000e-005	6.0000e-005	3.5536

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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					
Automobile Care Center	66198.6	3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.5326	3.5326	7.0000e-005	6.0000e-005	3.5536
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	3.5326	3.5326	7.0000e-005	6.0000e-005	3.5536

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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			
Automobile Care Center	29708.6	2.7488	4.4000e-004	5.0000e-005	2.7759
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		2.7488	4.4000e-004	5.0000e-005	2.7759

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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			
Automobile Care Center	29708.6	2.7488	4.4000e-004	5.0000e-005	2.7759
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		2.7488	4.4000e-004	5.0000e-005	2.7759

6.0 Area Detail

6.1 Mitigation Measures Area

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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	0.0195	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Unmitigated	0.0195	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Total	0.0195	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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	1.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004
Total	0.0195	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-004	1.3000e-004	0.0000	0.0000	1.4000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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	1.4545	0.0112	2.9000e-004	1.8204
Unmitigated	1.4545	0.0112	2.9000e-004	1.8204

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.337751 / 0.207009	0.3433	0.0110	2.6000e-004	0.6982
City Park	0 / 3.43147	1.1112	1.8000e-004	2.0000e-005	1.1222
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.4545	0.0112	2.8000e-004	1.8204

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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			
Automobile Care Center	0.337751 / 0.207009	0.3433	0.0110	2.6000e-004	0.6982
City Park	0 / 3.43147	1.1112	1.8000e-004	2.0000e-005	1.1222
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.4545	0.0112	2.8000e-004	1.8204

8.0 Waste Detail

8.1 Mitigation Measures Waste

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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	2.8338	0.1675	0.0000	7.0205
Unmitigated	2.8338	0.1675	0.0000	7.0205

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	13.71	2.7830	0.1645	0.0000	6.8948
City Park	0.25	0.0508	3.0000e-003	0.0000	0.1257
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		2.8338	0.1675	0.0000	7.0205

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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			
Automobile Care Center	13.71	2.7830	0.1645	0.0000	6.8948
City Park	0.25	0.0508	3.0000e-003	0.0000	0.1257
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		2.8338	0.1675	0.0000	7.0205

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

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Annual

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

Equipment Type	Number
----------------	--------

11.0 Vegetation

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Summer

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

**Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd.,
Placer County APCD Air District, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Automobile Care Center	3.59	1000sqft	0.08	3,588.00	0
Other Asphalt Surfaces	0.17	Acre	0.17	7,328.00	0
Other Non-Asphalt Surfaces	0.83	Acre	0.83	36,192.00	0
City Park	2.88	Acre	2.88	125,333.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Information provided by client.

Construction Phase - An estimated start date of 12/09/2024 and end date of 05/23/25 was provided by client.

Off-road Equipment - Removal of Rubber Tired Dozers during Site Preparation was provided by client.

Grading - Material import and export information provided on data request form.

Architectural Coating - VOC limits from PCAPCD Rule 218. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L.

Off-road Equipment -

Off-road Equipment -

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Summer

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

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Vehicle Trips - All areas modeled as a City Park are within the housing development and no vehicle trips are expected. Trip rates for the Automobile Care Center land use type are based on generation trip data provided by the client for a similar previous project.

Area Coating - VOC limits from PCAPCD Rule 218. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L.

Construction Off-road Equipment Mitigation - Assumes that construction site will be watered 2 times per day and a speed limit of 15 mph when traveling across unpaved areas to be in compliance with PCAPCD Rule 228.

Area Mitigation - -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	55.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	55.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	55.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	55.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	55
tblAreaCoating	Area_EF_Nonresidential_Interior	100	55
tblAreaCoating	Area_EF_Residential_Exterior	100	55
tblAreaCoating	Area_EF_Residential_Interior	100	55
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	230.00	71.00
tblConstructionPhase	PhaseEndDate	11/1/2026	5/23/2025
tblConstructionPhase	PhaseEndDate	11/12/2025	4/3/2025
tblConstructionPhase	PhaseEndDate	12/8/2025	4/29/2025
tblConstructionPhase	PhaseStartDate	12/9/2025	4/30/2025
tblConstructionPhase	PhaseStartDate	11/13/2025	4/4/2025
tblGrading	AcresOfGrading	0.00	2.50
tblGrading	AcresOfGrading	4.00	8.00
tblGrading	MaterialExported	0.00	966.00
tblGrading	MaterialExported	0.00	226.00

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Summer

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

tblGrading	MaterialImported	0.00	66.00
tblLandUse	LandUseSquareFeet	7,405.20	7,328.00
tblLandUse	LandUseSquareFeet	36,154.80	36,192.00
tblLandUse	LandUseSquareFeet	125,452.80	125,333.00
tblOffRoadEquipment	HorsePower	247.00	0.00
tblOffRoadEquipment	LoadFactor	0.40	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	51.00	10.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	28.00	35.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	21.00	55.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	ST_TR	23.72	193.70
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	11.88	193.70
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	23.72	193.70
tblVehicleTrips	WD_TR	0.78	0.00

2.0 Emissions Summary

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Summer

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

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					
2024	1.7011	14.7651	18.2719	0.0376	1.2524	0.6237	1.6617	0.2115	0.5868	0.7983	0.0000	3,652.978 3	3,652.978 3	0.6644	0.2419	3,698.361 8
2025	1.8954	13.7705	18.0787	0.0373	0.7812	0.5378	1.3190	0.2115	0.5060	0.7175	0.0000	3,623.653 1	3,623.653 1	0.6135	0.0978	3,668.141 4
Maximum	1.8954	14.7651	18.2719	0.0376	1.2524	0.6237	1.6617	0.2115	0.5868	0.7983	0.0000	3,652.978 3	3,652.978 3	0.6644	0.2419	3,698.361 8

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					
2024	1.7011	14.7651	18.2719	0.0376	0.7812	0.6237	1.4049	0.2115	0.5868	0.7983	0.0000	3,652.978 3	3,652.978 3	0.6644	0.2419	3,698.361 8
2025	1.8954	13.7705	18.0787	0.0373	0.7812	0.5378	1.3190	0.2115	0.5060	0.7175	0.0000	3,623.653 1	3,623.653 1	0.6135	0.0978	3,668.141 4
Maximum	1.8954	14.7651	18.2719	0.0376	0.7812	0.6237	1.4049	0.2115	0.5868	0.7983	0.0000	3,652.978 3	3,652.978 3	0.6644	0.2419	3,698.361 8

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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	0.1071	1.0000e-005	7.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6300e-003	1.6300e-003	0.0000		1.7400e-003
Energy	1.9600e-003	0.0178	0.0149	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		21.3372	21.3372	4.1000e-004	3.9000e-004	21.4640
Mobile	1.9519	1.8164	12.8581	0.0249	2.4859	0.0214	2.5073	0.6635	0.0201	0.6836		2,537.2325	2,537.2325	0.1663	0.1363	2,582.0187
Total	2.0609	1.8342	12.8738	0.0250	2.4859	0.0228	2.5086	0.6635	0.0214	0.6849		2,558.5713	2,558.5713	0.1667	0.1367	2,603.4844

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	0.1071	1.0000e-005	7.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6300e-003	1.6300e-003	0.0000		1.7400e-003
Energy	1.9600e-003	0.0178	0.0149	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		21.3372	21.3372	4.1000e-004	3.9000e-004	21.4640
Mobile	1.9519	1.8164	12.8581	0.0249	2.4859	0.0214	2.5073	0.6635	0.0201	0.6836		2,537.2325	2,537.2325	0.1663	0.1363	2,582.0187
Total	2.0609	1.8342	12.8738	0.0250	2.4859	0.0228	2.5086	0.6635	0.0214	0.6849		2,558.5713	2,558.5713	0.1667	0.1367	2,603.4844

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/9/2024	12/13/2024	5	5	
2	Grading	Grading	12/14/2024	12/25/2024	5	8	
3	Building Construction	Building Construction	12/26/2024	4/3/2025	5	71	
4	Paving	Paving	4/4/2025	4/29/2025	5	18	
5	Architectural Coating	Architectural Coating	4/30/2025	5/23/2025	5	18	

Acres of Grading (Site Preparation Phase): 2.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 1

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,382; Non-Residential Outdoor: 1,794; Striped Parking Area: 2,611 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Site Preparation	Rubber Tired Dozers	0	0.00	0	0.00
Building Construction	Cranes	1	7.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Summer

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

Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

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
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	72.00	28.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	37.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	121.00	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

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Summer

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

3.2 Site Preparation - 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					
Fugitive Dust					0.5521	0.0000	0.5521	0.0606	0.0000	0.0606			0.0000			0.0000
Off-Road	0.5757	5.7930	8.9424	0.0125		0.2659	0.2659		0.2446	0.2446		1,207.0670	1,207.0670	0.3904		1,216.8267
Total	0.5757	5.7930	8.9424	0.0125	0.5521	0.2659	0.8180	0.0606	0.2446	0.3052		1,207.0670	1,207.0670	0.3904		1,216.8267

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	0.0611	3.1029	0.7256	0.0145	0.4237	0.0289	0.4526	0.1162	0.0276	0.1438		1,529.0966	1,529.0966	2.8500e-003	0.2403	1,600.7765
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0137	0.2371	7.0000e-004	0.0822	3.7000e-004	0.0825	0.0218	3.4000e-004	0.0221		70.8722	70.8722	1.6600e-003	1.6300e-003	71.3981
Total	0.0884	3.1166	0.9627	0.0152	0.5058	0.0292	0.5351	0.1380	0.0280	0.1659		1,599.9687	1,599.9687	4.5100e-003	0.2419	1,672.1746

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Summer

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

3.2 Site Preparation - 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					
Fugitive Dust					0.2484	0.0000	0.2484	0.0273	0.0000	0.0273			0.0000			0.0000
Off-Road	0.5757	5.7930	8.9424	0.0125		0.2659	0.2659		0.2446	0.2446	0.0000	1,207.0670	1,207.0670	0.3904		1,216.8267
Total	0.5757	5.7930	8.9424	0.0125	0.2484	0.2659	0.5143	0.0273	0.2446	0.2718	0.0000	1,207.0670	1,207.0670	0.3904		1,216.8267

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	0.0611	3.1029	0.7256	0.0145	0.4237	0.0289	0.4526	0.1162	0.0276	0.1438		1,529.0966	1,529.0966	2.8500e-003	0.2403	1,600.7765
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0273	0.0137	0.2371	7.0000e-004	0.0822	3.7000e-004	0.0825	0.0218	3.4000e-004	0.0221		70.8722	70.8722	1.6600e-003	1.6300e-003	71.3981
Total	0.0884	3.1166	0.9627	0.0152	0.5058	0.0292	0.5351	0.1380	0.0280	0.1659		1,599.9687	1,599.9687	4.5100e-003	0.2419	1,672.1746

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Summer

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

3.3 Grading - 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					
Fugitive Dust					1.0646	0.0000	1.0646	0.1151	0.0000	0.1151			0.0000			0.0000
Off-Road	0.9666	9.9033	11.6283	0.0211		0.4033	0.4033		0.3710	0.3710		2,046.073 1	2,046.073 1	0.6617		2,062.616 6
Total	0.9666	9.9033	11.6283	0.0211	1.0646	0.4033	1.4679	0.1151	0.3710	0.4861		2,046.073 1	2,046.073 1	0.6617		2,062.616 6

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	0.0117	0.5930	0.1387	2.7600e-003	0.0810	5.5200e-003	0.0865	0.0222	5.2800e-003	0.0275		292.2344	292.2344	5.4000e-004	0.0459	305.9335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0355	0.0178	0.3083	9.1000e-004	0.1068	4.9000e-004	0.1073	0.0283	4.5000e-004	0.0288		92.1338	92.1338	2.1600e-003	2.1100e-003	92.8175
Total	0.0472	0.6108	0.4469	3.6700e-003	0.1878	6.0100e-003	0.1938	0.0505	5.7300e-003	0.0563		384.3682	384.3682	2.7000e-003	0.0480	398.7511

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

3.3 Grading - 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					
Fugitive Dust					0.4791	0.0000	0.4791	0.0518	0.0000	0.0518			0.0000			0.0000
Off-Road	0.9666	9.9033	11.6283	0.0211		0.4033	0.4033		0.3710	0.3710	0.0000	2,046.073 1	2,046.073 1	0.6617		2,062.616 6
Total	0.9666	9.9033	11.6283	0.0211	0.4791	0.4033	0.8823	0.0518	0.3710	0.4228	0.0000	2,046.073 1	2,046.073 1	0.6617		2,062.616 6

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	0.0117	0.5930	0.1387	2.7600e-003	0.0810	5.5200e-003	0.0865	0.0222	5.2800e-003	0.0275		292.2344	292.2344	5.4000e-004	0.0459	305.9335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0355	0.0178	0.3083	9.1000e-004	0.1068	4.9000e-004	0.1073	0.0283	4.5000e-004	0.0288		92.1338	92.1338	2.1600e-003	2.1100e-003	92.8175
Total	0.0472	0.6108	0.4469	3.6700e-003	0.1878	6.0100e-003	0.1938	0.0505	5.7300e-003	0.0563		384.3682	384.3682	2.7000e-003	0.0480	398.7511

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Summer

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

3.4 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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0327	1.2227	0.3977	5.5600e-003	0.1897	7.7500e-003	0.1975	0.0546	7.4100e-003	0.0620		586.9999	586.9999	1.7000e-003	0.0887	613.4878
Worker	0.1969	0.0987	1.7074	5.0500e-003	0.5915	2.6900e-003	0.5942	0.1569	2.4700e-003	0.1594		510.2796	510.2796	0.0120	0.0117	514.0664
Total	0.2295	1.3213	2.1051	0.0106	0.7812	0.0104	0.7916	0.2115	9.8800e-003	0.2214		1,097.2794	1,097.2794	0.0137	0.1004	1,127.5541

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, Summer

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

3.4 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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0327	1.2227	0.3977	5.5600e-003	0.1897	7.7500e-003	0.1975	0.0546	7.4100e-003	0.0620		586.9999	586.9999	1.7000e-003	0.0887	613.4878
Worker	0.1969	0.0987	1.7074	5.0500e-003	0.5915	2.6900e-003	0.5942	0.1569	2.4700e-003	0.1594		510.2796	510.2796	0.0120	0.0117	514.0664
Total	0.2295	1.3213	2.1051	0.0106	0.7812	0.0104	0.7916	0.2115	9.8800e-003	0.2214		1,097.2794	1,097.2794	0.0137	0.1004	1,127.5541

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

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0321	1.2119	0.3928	5.4400e-003	0.1897	7.6800e-003	0.1974	0.0546	7.3500e-003	0.0620		574.3577	574.3577	1.6600e-003	0.0868	600.2739
Worker	0.1845	0.0889	1.6012	4.8800e-003	0.5915	2.5600e-003	0.5940	0.1569	2.3600e-003	0.1592		492.8210	492.8210	0.0109	0.0110	496.3694
Total	0.2167	1.3008	1.9941	0.0103	0.7812	0.0102	0.7914	0.2115	9.7100e-003	0.2212		1,067.178 7	1,067.178 7	0.0125	0.0978	1,096.643 4

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3.4 Building Construction - 2025

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0321	1.2119	0.3928	5.4400e-003	0.1897	7.6800e-003	0.1974	0.0546	7.3500e-003	0.0620		574.3577	574.3577	1.6600e-003	0.0868	600.2739
Worker	0.1845	0.0889	1.6012	4.8800e-003	0.5915	2.5600e-003	0.5940	0.1569	2.3600e-003	0.1592		492.8210	492.8210	0.0109	0.0110	496.3694
Total	0.2167	1.3008	1.9941	0.0103	0.7812	0.0102	0.7914	0.2115	9.7100e-003	0.2212		1,067.178 7	1,067.178 7	0.0125	0.0978	1,096.643 4

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3.5 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8197	7.5321	12.1778	0.0189		0.3524	0.3524		0.3259	0.3259		1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.0247					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8445	7.5321	12.1778	0.0189		0.3524	0.3524		0.3259	0.3259		1,805.3926	1,805.3926	0.5673		1,819.5741

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0513	0.0247	0.4448	1.3500e-003	0.1643	7.1000e-004	0.1650	0.0436	6.6000e-004	0.0442		136.8947	136.8947	3.0200e-003	3.0500e-003	137.8804
Total	0.0513	0.0247	0.4448	1.3500e-003	0.1643	7.1000e-004	0.1650	0.0436	6.6000e-004	0.0442		136.8947	136.8947	3.0200e-003	3.0500e-003	137.8804

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

3.5 Paving - 2025

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	0.8197	7.5321	12.1778	0.0189		0.3524	0.3524		0.3259	0.3259	0.0000	1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.0247					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8445	7.5321	12.1778	0.0189		0.3524	0.3524		0.3259	0.3259	0.0000	1,805.3926	1,805.3926	0.5673		1,819.5741

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0513	0.0247	0.4448	1.3500e-003	0.1643	7.1000e-004	0.1650	0.0436	6.6000e-004	0.0442		136.8947	136.8947	3.0200e-003	3.0500e-003	137.8804
Total	0.0513	0.0247	0.4448	1.3500e-003	0.1643	7.1000e-004	0.1650	0.0436	6.6000e-004	0.0442		136.8947	136.8947	3.0200e-003	3.0500e-003	137.8804

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

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	1.6886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	1.8595	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0359	0.0173	0.3114	9.5000e-004	0.1150	5.0000e-004	0.1155	0.0305	4.6000e-004	0.0310		95.8263	95.8263	2.1200e-003	2.1400e-003	96.5163
Total	0.0359	0.0173	0.3114	9.5000e-004	0.1150	5.0000e-004	0.1155	0.0305	4.6000e-004	0.0310		95.8263	95.8263	2.1200e-003	2.1400e-003	96.5163

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

3.6 Architectural Coating - 2025

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	1.6886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	1.8595	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0359	0.0173	0.3114	9.5000e-004	0.1150	5.0000e-004	0.1155	0.0305	4.6000e-004	0.0310		95.8263	95.8263	2.1200e-003	2.1400e-003	96.5163
Total	0.0359	0.0173	0.3114	9.5000e-004	0.1150	5.0000e-004	0.1155	0.0305	4.6000e-004	0.0310		95.8263	95.8263	2.1200e-003	2.1400e-003	96.5163

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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	1.9519	1.8164	12.8581	0.0249	2.4859	0.0214	2.5073	0.6635	0.0201	0.6836		2,537.2325	2,537.2325	0.1663	0.1363	2,582.0187
Unmitigated	1.9519	1.8164	12.8581	0.0249	2.4859	0.0214	2.5073	0.6635	0.0201	0.6836		2,537.2325	2,537.2325	0.1663	0.1363	2,582.0187

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	695.00	695.00	695.00	1,176,337	1,176,337
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	695.00	695.00	695.00	1,176,337	1,176,337

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
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	55	10	35
City Park	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

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

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
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.469031	0.061941	0.210401	0.151320	0.033281	0.008216	0.015093	0.011904	0.000551	0.000425	0.031690	0.000963	0.005185
City Park	0.469031	0.061941	0.210401	0.151320	0.033281	0.008216	0.015093	0.011904	0.000551	0.000425	0.031690	0.000963	0.005185
Other Asphalt Surfaces	0.469031	0.061941	0.210401	0.151320	0.033281	0.008216	0.015093	0.011904	0.000551	0.000425	0.031690	0.000963	0.005185
Other Non-Asphalt Surfaces	0.469031	0.061941	0.210401	0.151320	0.033281	0.008216	0.015093	0.011904	0.000551	0.000425	0.031690	0.000963	0.005185

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	1.9600e-003	0.0178	0.0149	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		21.3372	21.3372	4.1000e-004	3.9000e-004	21.4640
NaturalGas Unmitigated	1.9600e-003	0.0178	0.0149	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		21.3372	21.3372	4.1000e-004	3.9000e-004	21.4640

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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					
Automobile Care Center	181.366	1.9600e-003	0.0178	0.0149	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		21.3372	21.3372	4.1000e-004	3.9000e-004	21.4640
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.9600e-003	0.0178	0.0149	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		21.3372	21.3372	4.1000e-004	3.9000e-004	21.4640

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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					
Automobile Care Center	0.181366	1.9600e-003	0.0178	0.0149	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		21.3372	21.3372	4.1000e-004	3.9000e-004	21.4640
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.9600e-003	0.0178	0.0149	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003		21.3372	21.3372	4.1000e-004	3.9000e-004	21.4640

6.0 Area Detail

6.1 Mitigation Measures Area

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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	0.1071	1.0000e-005	7.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6300e-003	1.6300e-003	0.0000		1.7400e-003
Unmitigated	0.1071	1.0000e-005	7.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6300e-003	1.6300e-003	0.0000		1.7400e-003

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	8.3300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6300e-003	1.6300e-003	0.0000		1.7400e-003
Total	0.1071	1.0000e-005	7.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6300e-003	1.6300e-003	0.0000		1.7400e-003

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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	8.3300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6300e-003	1.6300e-003	0.0000		1.7400e-003
Total	0.1071	1.0000e-005	7.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.6300e-003	1.6300e-003	0.0000		1.7400e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Air Quality Study - Quick Quack Car Wash, APN 044-122-005-000, Brace Road and Sierra College Blvd., - Placer County APCD Air District, 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

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
