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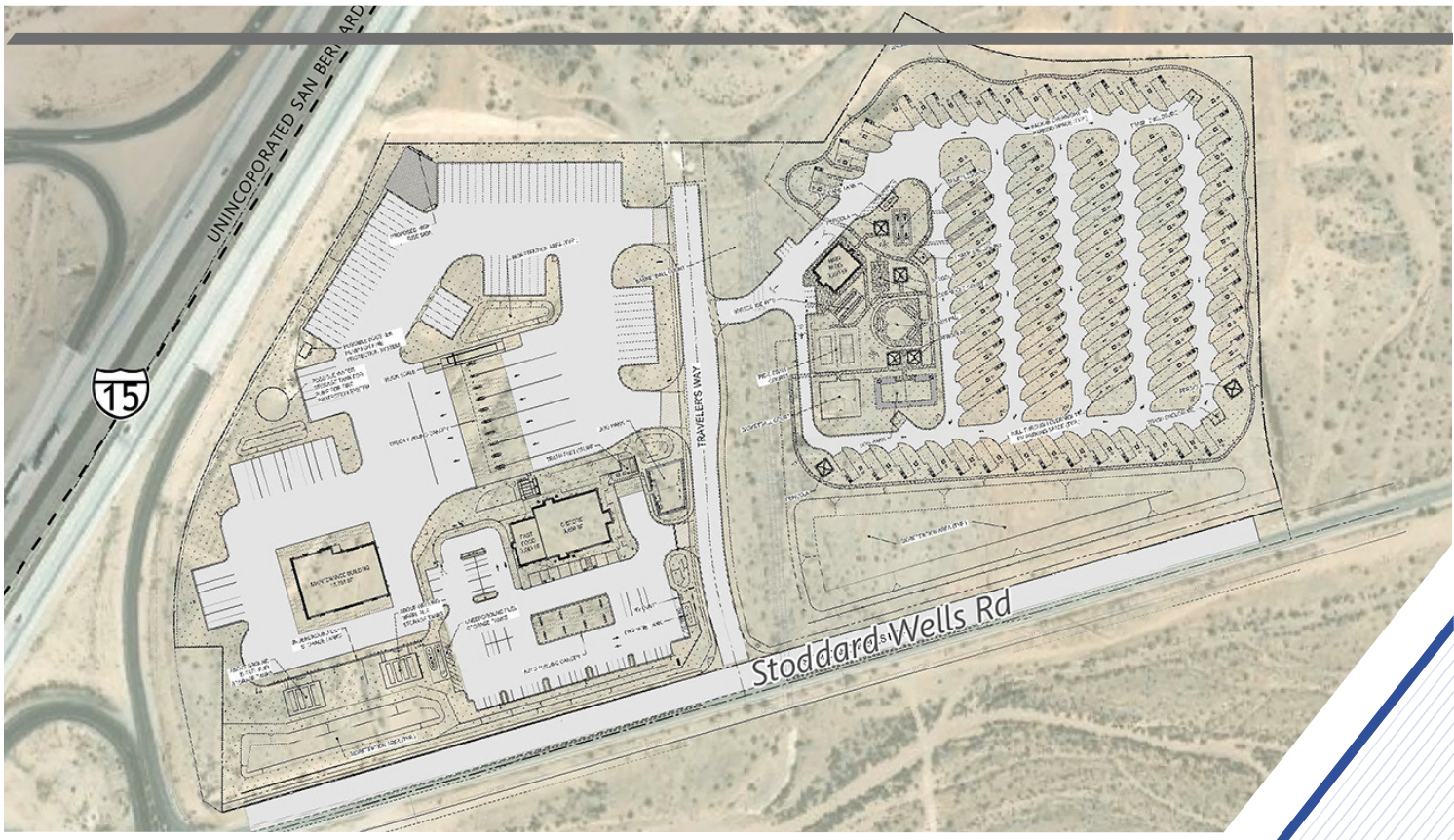

FINAL ENVIRONMENTAL IMPACT REPORT FOR THE

Apple Valley I-15 Travel Center

State Clearinghouse No. 2021120062

Prepared for:

Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307

June 2023

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Prepared for:

Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307
Contact:
Daniel Alcayaga
Planning Manager

Prepared by:

Ascent Environmental
455 Capitol Mall, Suite 300
Sacramento, CA 95814

June 2023

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

BMP	best management practice
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
draft EIR	draft environmental impact report
Final EIR	final environmental impact report
I	Interstate
LID	low impact development
project	Apple Valley I-15 Travel Center Project
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
Town	Town of Apple Valley
WQMP	water quality management plan

1 INTRODUCTION

This final environmental impact report (Final EIR) has been prepared by the Town of Apple Valley (Town), as lead agency, in accordance with the requirements of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines (CCR, Title 14, Section 15132). This Final EIR contains responses to comments received on the draft environmental impact report (draft EIR) for the Apple Valley I-15 Travel Center Project (project). The Final EIR consists of the Draft EIR and this document (response to comments document), which includes comments on the Draft EIR, responses to those comments, and revisions to the Draft EIR.

1.1 PURPOSE AND INTENDED USES OF THIS FINAL EIR

CEQA requires a lead agency that has prepared a Draft EIR to consult with and obtain comments from responsible agencies; trustee agencies; and any other state, federal, and local agencies that have jurisdiction by law with respect to the project, or that exercise authority over resources that may be affected by the project, and to provide the public with an opportunity to comment on the Draft EIR. The Final EIR is the mechanism for responding to these comments. This Final EIR has been prepared to respond to comments received on the Draft EIR, which are reproduced in this document; and to present corrections, revisions, and other clarifications and amplifications to the Draft EIR, including project updates, made in response to these comments and as a result of the applicant's ongoing planning and design efforts. The Final EIR will be used to support the Town's decision regarding whether to approve the project.

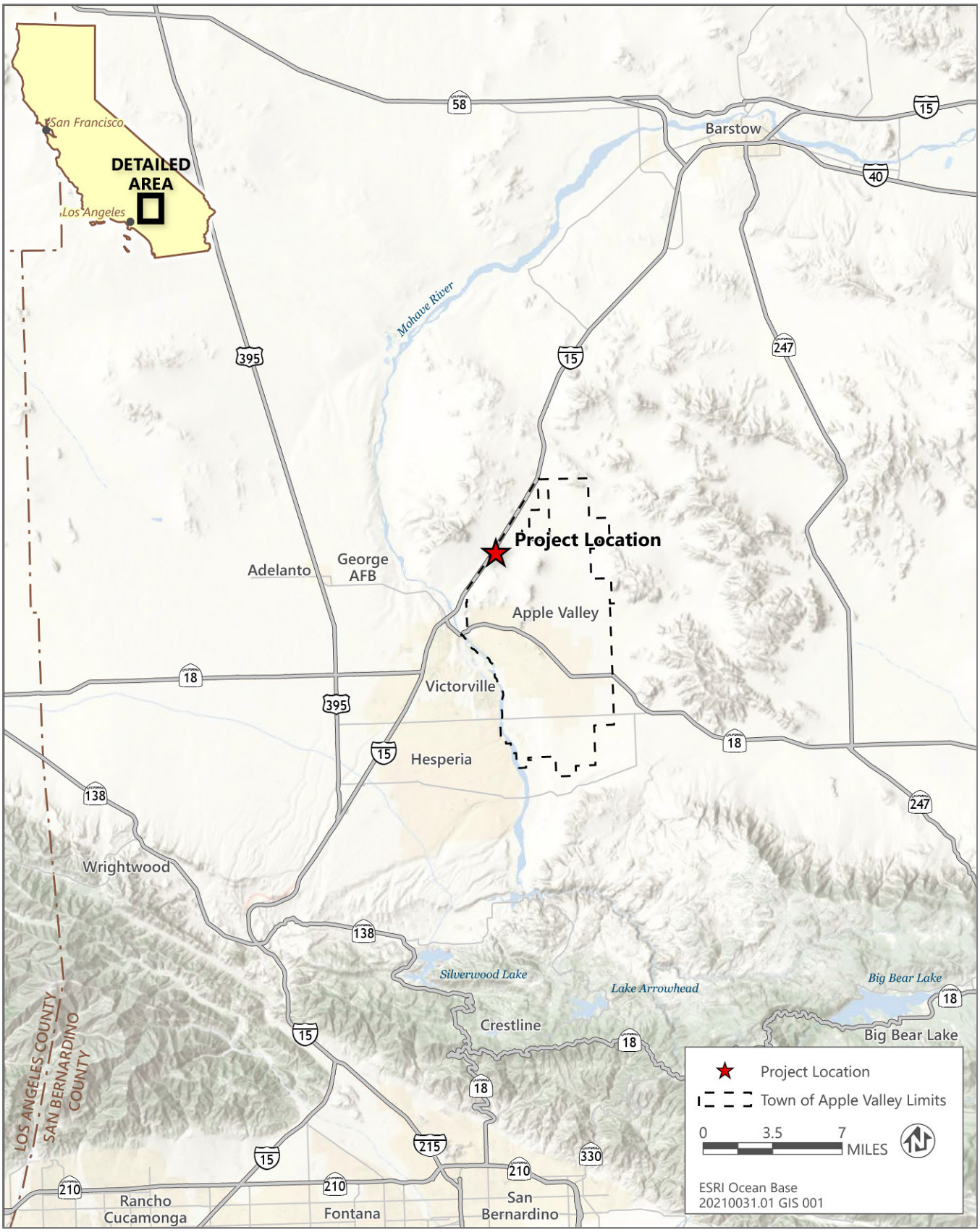
This Final EIR will also be used by CEQA responsible agencies to ensure that they have met their requirements under CEQA before deciding whether to approve or permit project elements over which they have jurisdiction. It may also be used by other state, regional, and local agencies that may have an interest in resources that could be affected by the project or that have jurisdiction over portions of the project.

Responsible, trustee, and interested agencies may include:

- California Department of Transportation
- Lahontan Regional Water Quality Control Board (Region 6)
- Mojave Desert Air Quality Management District

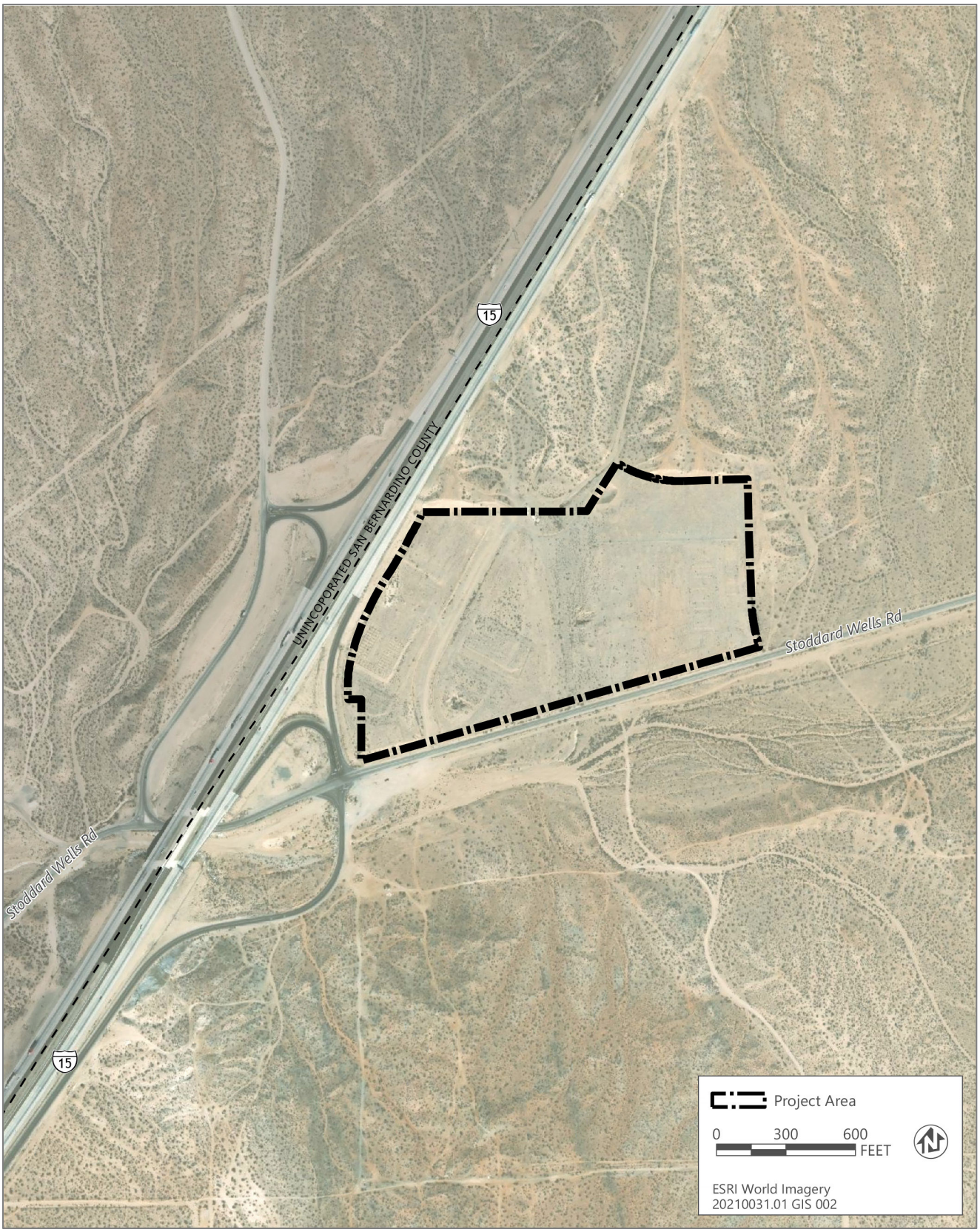
1.2 PROJECT LOCATION

The project site consists of a 33.52-acre parcel (Assessor's Parcel Number 0472-222-10-0000), located northeast of the interchange between Interstate 15 (I-15) and Stoddard Wells Road (Figure 1-1 and 1-2). The site is bounded to the north and east by vacant land, to the west by I-15, and to the south by Stoddard Wells Road. Off-site improvements would include construction of a water main line, extending 3.5 miles northeast of the project site within the roadway right-of-way of Stoddard Wells Road and Johnson Road (Figure 1-3).



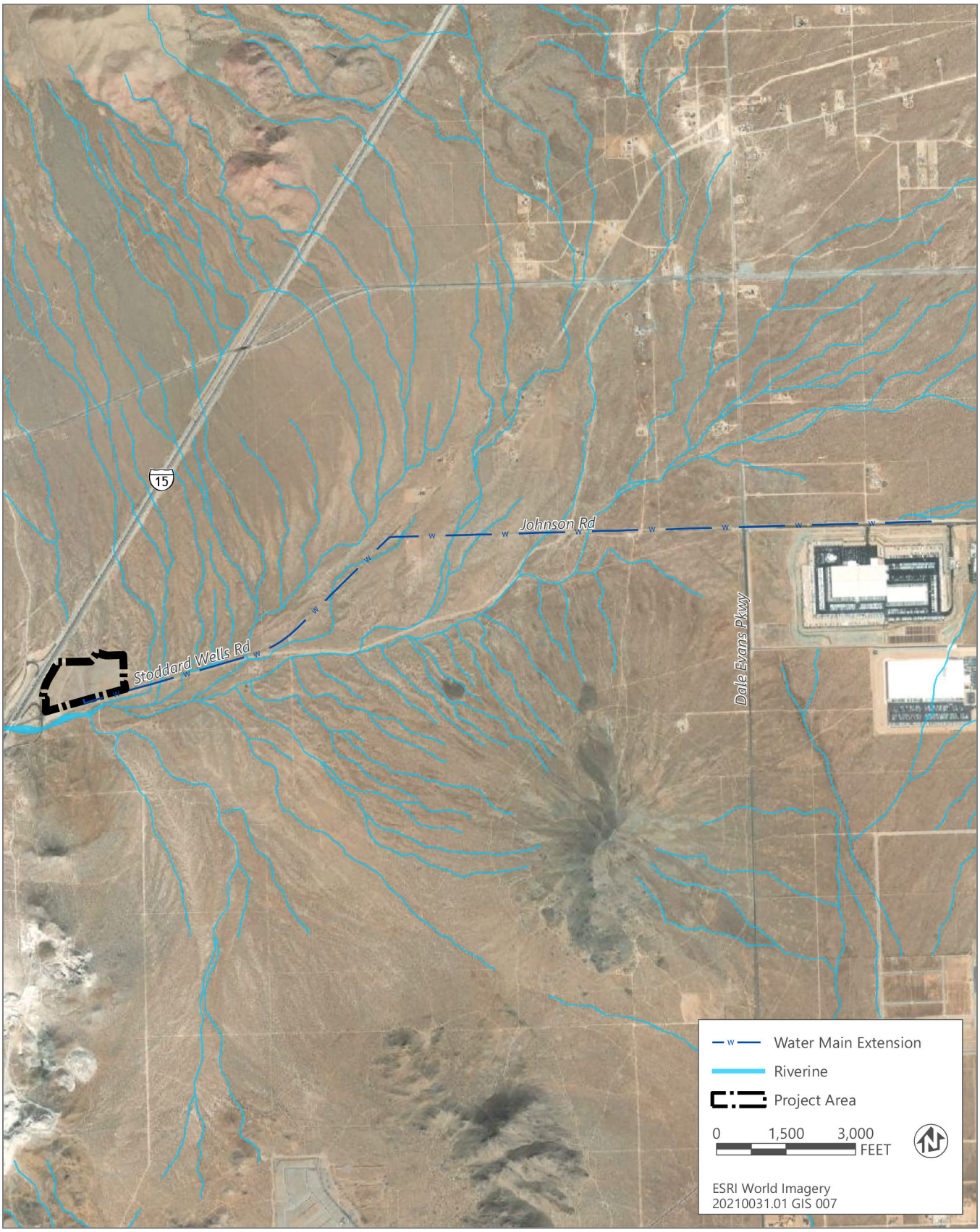
Source: Data downloaded from Western Riverside County Regional Conservation Authority in 2020 and adapted by Ascent Environmental in 2020,

Figure 1-1 Regional Location



Source: adapted by Ascent Environmental in 2021,

Figure 1-2 Project Vicinity



Source: data downloaded from NWI in 2020 and adapted by Ascent Environmental in 2021.

Figure 1-3 Water Main Extension

1.3 PROJECT OBJECTIVES

The underlying purpose of the project is to develop a regional travel center and related commercial land uses on Regional Commercial (C-R)-designated land within the Town of Apple Valley that is consistent with Town General Plan policies and zoning. A subdivision map is proposed to create the 33.52-acre project parcel. This underlying purpose, in turn, gives rise to the following project objectives:

- Create a high-quality travel center commercial development along Interstate (I)-15, a major interstate transportation corridor.
- Develop a property of sufficient size to create a regional travel center that would accommodate a truck and auto fuel dispensing area, convenience store, fast-food restaurant, truck parking and maintenance services, recreational vehicle (RV) park, and recreational amenities.
- Construct a travel center facility near a major freeway onramp/offramp to minimize truck and automobile movements, vehicle miles traveled, and associated air pollutant and greenhouse gas emissions and traffic noise on local streets.
- Assist the Town of Apple Valley with meeting its economic development goals, as set forth in its General Plan.
- Maximize tax revenue to the Town of Apple Valley.
- Provide employment opportunities for residents of Apple Valley and surrounding areas.
- Construct a facility with proximal access to adequate existing or anticipated utility infrastructure to support planned operations.
- Provide minimal stay, full-service RV accommodations for the public traveling to and from destinations along Interstate 15 and Stoddard Wells Road.

1.4 SUMMARY DESCRIPTION OF THE PROJECT

The applicant is proposing to construct and operate a full-service travel center and recreational vehicle (RV) park on approximately 33.52 acres of vacant land in the northwest portion of the Town of Apple Valley (project site). On the western portion of the project site, the travel center would provide professional truck drivers and motorists with 24-hour access to purchase gasoline, diesel fuel, propane, electronics, snacks, travel items, and fast-food restaurant offerings. A truck maintenance building, dog park, RV dump station, stormwater basins, truck and automobile parking areas and landscaping/lighting are also proposed. The eastern portion of the project site would include an RV park, which would consist of a convenience store, automobile and overnight RV parking with utility hookups, propane fueling area, recreational amenities, and landscaping/lighting. The project would include construction of Traveler's Way, a new roadway that would bisect the travel center in the western portion of the project site and the RV park in the eastern portion of the project site. Project visitors/customers would include "over-the-road" trucks (i.e., professional long-haul drivers who are on the road for consecutive days or weeks at a time), local residents, and traveling motorists.

Primary site access would be provided via a proposed roadway (Traveler's Way) connecting to Stoddard Wells Road. Access to the travel center facility would be using three ingress/egress driveways along the proposed Traveler's Way. The southern driveway (40 feet wide) along Traveler's Way would be for the exclusive use of automobiles while the two northern driveways (60 feet wide) would be for trucks only. Access to the RV park would be provided via one ingress/egress drive (40 feet wide) along the proposed Traveler's Way.

The travel center on the western portion of the project site would include the following characteristics and design features:

- an 8-position passenger vehicle fueling station;
- a 10-position truck fueling station;
- an electric vehicle charging station;
- a 9,659 square-foot (SF) convenience store;
- a 3,043 fast food restaurant;
- a 13,786 SF truck maintenance building with 80-kilowatt direct current rooftop solar system;
- up to two transformers (approximately 150 to 300 kilo-volt-amperes);
- a dog park;
- a truck scale;
- an RV dump station;
- a 1,000-gallon propane tank;
- eight 12,000-gallon above-ground and below ground diesel storage tanks, including fuel delivery parking;
- one 30,000-gallon below ground gasoline storage tank, including fuel delivery parking;
- one two-compartment combined high octane gasoline/diesel tank;
- one 20,000-gallon diesel exhaust fluid storage tank;
- truck (102 spaces) and automobile (81 spaces) parking – 183 total parking spaces;
- onsite lighting, consisting of high-mast LED fixtures and LED canopy lighting;
- high-rise freeway oriented signage, street signage, and other directional signage;
- landscaping, hardscaping, pavement, and fencing;
- a 200,000-gallon fire water supply storage tank; and
- five stormwater quality basins/features

The RV park on the eastern portion of the project site would include the following characteristics and design features:

- a 3,250 SF main building with a convenience store, laundry room, bathrooms, and showers;
- automobile (8 spaces) and overnight RV (80 spaces) parking with utility hookups – 88 total parking spaces;
- a 1,000-gallon propane tank;
- an 80,000 SF bioretention area;
- recreational amenities, including pergolas/gazebos, cornhole courts, pickleball courts, splash pad, horseshoe courts, shuffleboard courts, basketball court, dog park, picnic tables, fire pits, and walking paths;
- onsite lighting, consisting of high-mast LED fixtures and LED canopy lighting; and
- landscaping, hardscaping, pavement, and fencing.

Table 1-1 provides a summary of the proposed land uses.

Table 1-1 Summary of Proposed Land Uses

	Floor Area/Square Feet	Parking		
		Auto	Truck	Overnight RV
Travel Center				
Convenience Store	9,659	42	58	--
Fast-Food Restaurant (w/drive-through)	3,043	39	32	--
Truck Maintenance/Tire Building	13,786	--	12	--
Pavement/Parking	350,000	--	--	--
RV Park				
Main Building	3,250	8	--	--
Pavement/Parking	786,000	--	--	80
Total	**1,165,738**	**89**	**102**	**80**

Source: Information provided by project applicant and compiled by Ascent Environmental in 2021.

The proposed travel center and RV park would be open 24 hours per day, 7 days per week. The travel center is designed to accommodate up to 102 trucks and 81 cars onsite at any given time and the RV park is anticipated to accommodate parking of up to 8 cars and 80 RVs onsite at any given time. Overnight truck parking would be available; however, idling of trucks would be limited to no more than five minutes, consistent with California Air Resources Board and Mojave Desert Air Quality Management District requirements.

In terms of employment, approximately 39 employees would be located at the project site, spread over three daily shifts. It is anticipated that up to 12 employees would be located at the travel center and 3 employees would be located at the RV park at one time. The travel stop would receive up to six (6) fuel deliveries per day. Up to three (3) small deliveries, such as those delivered by UPS or FedEx are also expected to occur. While the restaurant would likely receive one (1) delivery truck per week, a total of one (1) delivery per day would be the maximum. Diesel fuel, gasoline, and diesel exhaust fluid would be stored onsite in above-ground storage tanks. Total annual fuel throughput for the travel stop is planned to be 14,000,000 gallons (diesel fuel and gasoline).

Water and sewer service would be provided by a public utility through connections to existing main lines within and adjacent to the project site. During operation, the travel stop would have an estimated water demand of approximately 26,000 gallons per day (gpd) or 30 acre-feet per year. There are no existing offsite water mains on Stoddard Wells Road fronting the proposed project site. The nearest existing water main connection is approximately 3.5 miles northeast of the project site along Johnson Road, approximately 4,100 feet east of Dale Evans Parkway. The project would require extension of the exiting 16-inch diameter pipeline for approximately 19,460 linear feet within existing disturbed areas, such as within the north shoulders or pavement of Johnson Road and Stoddard Wells Road (see Figure 2).

Stormwater from the travel center would be drained toward five (5) onsite bioretention facilities. From the onsite retention basins, stormwater would flow through a new underground stormwater pipe that would discharge to existing drainage south of the project site. Stormwater from the RV park would be drained toward a bioretention basin along Stoddard Wells Road, just south of the parking area.

1.5 MAJOR CONCLUSIONS OF THE ENVIRONMENTAL ANALYSIS

The Draft EIR identified significant or potentially significant effects associated with cultural resources, biological resources, energy, greenhouse gas emissions, hazards and hazardous materials, noise, transportation, and utilities and service systems. Most of the significant or potentially significant impacts from the project can be reduced to a less-than-significant level through mitigation; however, the potential to expose existing sensitive receptors to short-term construction noise from construction of the off-site water main line would remain significant and unavoidable.

1.6 CEQA PUBLIC REVIEW PROCESS

On February 21, 2023, the Town released the Draft EIR for a 45-day public review and comment period. The Draft EIR was submitted to the State Clearinghouse for distribution to reviewing agencies; posted on the Town's website (https://www.applevalley.org/services/planning-division/environmental); and was made available for review at the following locations:

San Bernardino County Library
14901 Dale Evans Parkway
Apple Valley, CA 92307

Apple Valley Town Hall
14955 Dale Evans Parkway
Apple Valley, CA 92307

A notice of availability of the Draft EIR was published in the Apple Valley News and distributed by the Town to a project-specific mailing list of 53 agencies and interested parties.

As a result of these notification efforts, written comments were received from two agencies (San Bernardino County Department of Public Works and Lahontan Regional Water Quality Control Board) on the content of the Draft EIR. Chapter 3, "Responses to Comments," identifies these commenting parties, their respective comments, and responses

to these comments. None of the comments received, or the responses provided, constitute "significant new information" by CEQA standards (State CEQA Guidelines CCR, Title 14, Section 15088.5).

1.7 ORGANIZATION OF THE FINAL EIR

This Final EIR is organized as follows:

Chapter 1, "Introduction," describes the purpose of the Final EIR, summarizes the project and the major conclusions of the Draft EIR, provides an overview of the CEQA public review process, and describes the content of the Final EIR.

Chapter 2, "Responses to Comments," contains a list of all parties who submitted comments on the Draft EIR during the public review period, copies of the comment letters received, and responses to the comments.

Chapter 3, "Revisions to the Draft EIR," presents a revision to the Draft EIR made to correct an error that was identified subsequent to the release of the Draft EIR. No other revisions to the Draft EIR were necessary in response to public comments.

Chapter 4, "References," identifies the documents used as sources for the analysis.

Chapter 5, "List of Preparers," identifies the lead agency contacts as well as the preparers of this Final EIR.

2 RESPONSES TO COMMENTS

This chapter contains comment letters received during the public review period for the Draft EIR, which concluded on April 6, 2023. In conformance with Section 15088(a) of the State CEQA Guidelines, written responses were prepared addressing comments on environmental issues received from reviewers of the Draft EIR.

2.1 LIST OF COMMENTERS ON THE DRAFT EIR

A total of two letters containing comments on the Draft EIR were received from public agencies. No comments were received from members of the public or from nongovernmental organizations. Table 2-1 presents the list of commenters, including the numerical designation for each comment letter received, the author of the comment letter, and the date of the comment letter. The comment letters are presented in the order in which they were received.

Table 2-1 List of Commenters

Letter No.	Commenting Agency	Date
1	San Bernardino County Department of Public Works Nancy Sansonetti, Supervising Planner, Environmental Management Division	March 13, 2023
2	Lahontan Regional Water Quality Control Board Tiffany Steinert, Engineering Geologist	April 5, 2023

2.2 COMMENTS AND RESPONSES

Written comments received on the Draft EIR and the responses to those comments are provided below. The comment letters are reproduced in their entirety and are followed by the responses. Where a comment letter contains multiple comments, each individual comment is indicated by a line bracket and an identifying number in the margin of the comment letter corresponding to the response.

Main Office - 825 East Third Street, San Bernardino, CA 92415-0835 | Phone: 909.387.7910 Fax: 909.387.7911

SAN BERNARDINO COUNTY

Department of Public Works
- Flood Control
- Operations
- Solid Waste Management
- Special Districts
- Surveyor
- Transportation

Brendon [illegible], P.E.
Director

Noel Castillo, P.E.
Assistant Director

David Doublet, M.S., P.E.
Assistant Director

Letter 1

March 13, 2023

Transmitted Via Email
File: 10(ENV)-4.01

Town of Apple Valley
Attn: Daniel Alcayaga, Planning Manager
14955 Dale Evans Parkway
Apple Valley, CA 92307
dalcayaga@applevalley.org

RE: OUTSIDE ENVIRONMENTAL REVIEW: NOTICE OF AVAILABILITY OF A DRAFT ENVIROMENTAL IMPACT REPORT (EIR) FOR THE PROPOSED APPLE VALLEY I-15 TRAVEL CENTER

Dear Town of Apple Valley:

Thank you for allowing the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. **We received this request on February 24, 2023** and pursuant to our review, we have the following comments for your consideration and inclusion into public record: 1-1

NPDES Division (Jonathan Dillon, P.E. 909-387-8119):

1. In compliance with the Municipal separate storm sewer system (MS4) Permit, a Water Quality Management Plan (WQMP) should be prepared for the proposed project. Impacts associated with the development and implementation of the WQMP, and any proposed mitigation should be discussed within the EIR prior to adoption and certification. If you have any questions regarding this process, please contact the FCD Permit Section at (909) 387-1863 1-2

We respectfully request to be included on the circulation list for all project notices, public reviews, or public hearings. In closing, I would like to thank you again for allowing the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. Should you have any questions or need additional clarification, please contact the individuals who provided the specific comment, as listed above. 1-3

Sincerely,

Nancy Sansonetti

Nancy Sansonetti
Supervising Planner
Environmental Management Division

Letter 1 San Bernardino County Department of Public Works

Nancy Sansonetti, Supervising Planner, Environmental Management Division
March 13, 2023

1-1 The comment provides introductory remarks. This comment is not related to the adequacy of the CEQA document. No further response is required.

1-2 This comment states that a water quality management plan (WQMP) should be prepared for the project and associated impacts and mitigation measures identified in the WQMP should be addressed in the EIR. The comment provides contact information for the San Bernardino County Flood Control District Permit Section.

As described on page 3.9-3 of the Draft EIR, the Town of Apple Valley (Town) is covered under National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000004, also referred to as the Phase II Small Municipal Separate Storm Sewer System (MS4) General Permit, issued by the State Water Resources Control Board. The Phase II MS4 Permit requires the Town to impose requirements on new development and redevelopment projects to implement post-construction best management practices (BMPs) to mitigate potential adverse impacts to water quality and downstream channels. To implement Phase II MS4 Permit provisions for post-construction BMPs, the Town requires development projects that create or replace greater than 5,000 square feet of impervious surface areas to prepare a Regulated (Priority) Project WQMP. The WQMP is a contract with the Town, which describes the project and identifies all post-construction BMPs that will be implemented to minimize the discharge of pollutants and excess stormwater runoff. The WQMP also requires an operation and maintenance plan and an executed and recorded Maintenance Agreement to ensure long-term BMP performance.

CEQA does not require the preparation or inclusion of design level studies in a project EIR if other information is available to sufficiently address impacts; to do so would obligate project proponents to unreasonable financial commitments in advance of project approvals. In this case, a mandatory permitting process ensures that adverse impacts related to water quality and hydrology are avoided and minimized. The Town of Apple Valley will require a Regulated (Priority) Project WQMP to be submitted concurrent with grading and building permits for the project. The WQMP will be prepared and implemented in accordance with the Town requirements and is expected to include the operational water quality BMPs that are already considered in the project design and are described on page 3.9-11 of the Draft EIR.

As discussed on page 3.9-12 of the Draft EIR, a Hydrology Report (Lane Engineers, Inc. 2022) was prepared for the project and was included as Appendix F to the Draft EIR. The report discusses bioretention basins, which have been included in the project design, that would decrease the volume of stormwater runoff and peak discharge from the existing pre-development condition. As the Draft EIR noted on page 3.9-11, moreover, these basins would also provide water quality benefits: "[b]ioretention systems are designed to function in a similar manner as the physical, chemical, and biological processes in the natural environment. They capture runoff, promote infiltration and evapotranspiration, recharge groundwater, and remove up to 99 percent of the nutrients, sediment, and heavy metals carried in stormwater (Ahiablame et al. 2012)." The project also includes other design features to protect water quality. As the Draft EIR explains on page 3.9-11, "[t]he project includes operational water quality BMPs that would reduce the potential for pollutant discharge. All fueling and delivery areas would be surfaced with Portland cement concrete. Fueling bays would be covered by a canopy and would have a hydrologically isolated drainage system that discharges to an oil/water separator. The truck maintenance facility would also be enclosed and would include a similar drainage system. The travel center's eight above-ground storage tanks would include a concrete containment curb which would catch and retain fuel in the event of a fuel spill."

The Town Engineering Department additionally required that the post-development runoff would not exceed the pre-development runoff at any time. The bioretention basins would capture and store a sufficient amount of water to comply with the Phase II MS4 Permit and all of the stormwater requirements in the Town's Municipal Code.

Implementation of project design features and compliance with regulatory and permit processes would ensure that project impacts on water quality would be less than significant. As such, no mitigation is required and no revisions to the Draft EIR are required in response to this comment.

1-3 The comment requests that the agency be included in the circulation list for all project notices, public reviews, or public hearings and provides closing remarks. This comment is noted and San Bernardino County Department of Public Works has been added to the project distribution list. This comment is not related to the adequacy of the CEQA document. No further response is required.

CALIFORNIA Water Boards

Letter 2

GAVIN NEWSOM GOVERNOR

YANA GARCIA SECRETARY FOR ENVIRONMENTAL PROTECTION

April 5, 2023

File: Environmental Doc Review
San Bernardino County

Daniel Alcayaga
Town of Apple Valley
14955 Dale Evans Parkway
Apple Valley, CA 92307
dalcayaga@applevalley.org

Comments on Draft Environmental Impact Report for the Apple Valley I-15 Travel Center, State Clearinghouse No. 2021120062

Lahontan Regional Water Quality Control Board (Water Board) staff received the Apple Valley I-15 Travel Center Draft Environmental Impact Report (DEIR) on February 21, 2023. The DEIR was prepared by Ascent Environmental for the Town of Apple Valley (City) and submitted in compliance with provisions of the California Environmental Quality Act (CEQA). Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations (CCR), title 14, section 15096. We encourage the City to take this opportunity to integrate elements into the DEIR that: (1) promote watershed management; (2) support "Low Impact Development" (LID); and (3) reduce the effects of hydromodification. Our comments are outlined below. 2-1

WATER BOARD'S AUTHORITY

All groundwater and surface waters are considered waters of the State. Surface waters include streams, lakes, ponds, and wetlands, and may be ephemeral, intermittent, or perennial. All waters of the State are protected under California law. State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the U.S. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the U.S. 2-2

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml. 2-2 cont.

RECOMMENDED ELEMENTS TO INCLUDE IN THE PLAN

We recommend the following be considered in the environmental review.

1. Healthy watersheds are sustainable. Watersheds supply drinking water, provide for recreational uses, and support ecosystems. Watershed processes include the movement of water (i.e. infiltration and surface runoff), the transport of sediment, and the delivery of organic material to surface waters. These processes create and sustain the streams, lakes, wetlands, and other receiving waters of our region.

   The watershed approach for managing water resource quality and quantity is a collaborative process that focuses public and private efforts on the highest priority problems within a drainage basin. The Mojave Integrated Regional Water Management Group has assembled a collaborative group of stakeholders, both public and private, to address both water quantity and water quality issues within the Upper Mojave River Valley groundwater basin. A number of water management plans are being developed through that stakeholder collaboration process, and strategies continue to be developed and refined to sustain water quantity and to manage salts and nutrients to maintain the quality of groundwater and surface water resources. 2-3

2. The foremost method of reducing impacts to watersheds from development is LID, the goals of which are maintaining a landscape functionally equivalent to predevelopment hydrologic conditions and minimal generation of non-point source pollutants. LID results in less surface runoff and potentially less impacts to receiving waters, the principles of which include:

   - Maintaining natural drainage paths and landscape features to slow and filter runoff and maximize groundwater recharge;
   - Reducing compacted and impervious cover created by development and the associated road network; and
   - Managing runoff as close to the source as possible.

   LID development practices that maintain aquatic values also reduce local infrastructure requirements and maintenance costs and benefit air quality, open space, and habitat. Vegetated areas for storm water management and infiltration onsite are valuable in LID. 2-4

3. Because increased runoff from developed areas is a key variable driving a number of adverse effects, attention to maintaining the pre-development hydrograph will prevent or minimize many problems and will limit the need for other analyses and mitigation. Traditional methods for managing urban storm 2-5

water do not adequately protect the environment and tend to treat symptoms instead of causes. Such practices have led to channelization and stream armoring that permanently alter stream habitat, hydrology, and aesthetics, resulting in overall degradation of a watershed.

Storm water control measures that are compatible with LID are preferred over more traditional methods. Examples include the use of bioretention swales, pervious pavement, and vegetated infiltration basins, all of which can effectively treat post-construction storm water runoff, help sustain watershed processes, protect receiving waters, and maintain healthy watersheds. Any particular one of these control measures may not be suitable, effective, or even feasible in every instance, but the right combination, in the right places, can successfully achieve these goals.

2-5 cont.

4. Hydromodification is the alteration of the natural flow of water through a landscape (i.e. lining channels, flow diversions, culvert installations, armoring, etc.). Disturbing and compacting soils, changing or removing the vegetation cover, increasing impervious surfaces, and altering drainage patterns limit the natural hydrologic cycle processes of absorption, infiltration, and evapotranspiration, and increases the volume and frequency of runoff and sediment transport. Hydromodification results in stream channel instability, degraded water quality, changes in groundwater recharge processes, and aquatic habitat impacts. Hydromodification also can result in disconnecting a stream channel from its floodplain. Floodplain areas provide natural recharge, attenuate flood flows, provide habitat, and filter pollutants from urban runoff. Floodplain areas also store and release sediment, one of the essential processes to maintain the health of the watershed. Information regarding hydromodification can be accessed online at http://www.swrcb.ca.gov/water_issues/programs/stormwater/hydromodification.shtml .

2-6

5. The DEIR states that the applicant will work with the Water Board to determine the appropriate beneficial uses and water quality objectives found in the Basin Plan. The only means of accurately making an assessment as to whether the Project will affect or violate those standards is to first identify the applicable water quality standards.

    - For groundwater in the Project area, within the Upper Mojave River Valley Groundwater Basin, Beneficial Uses are defined as Municipal (MUN), Agricultural (AGR), Industrial (IND), Freshwater Replenishment (FRSH), and Aquaculture (AQUA).

    Water Quality Objectives to protect those uses include standards for bacteria, coliform, chemical constituents, radioactivity, taste, and odor.

    - For surface water in the Project area, within the Upper Mojave Hydrologic Area, Beneficial Uses may include MUN, AGR, Groundwater Recharge (GWR), Water Contact Recreation (REC-

2-7

1), Noncontact Water Recreation (REC-2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Wildlife Habitat (WILD), and the Flood Peak Attenuation/Flood Water Storage (FLD).

2-7 cont.

PERMITTING REQUIREMENTS

A number of activities that will be implemented have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. The required permits may include the following.

1. Streambed alteration and/or discharge of dredge and/or fill material to a surface water, including water diversions, may require a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge and fill WDRs for impacts to non-federal waters, both issued by the Lahontan Water Board.

2. Land disturbance of more than 1 acre may require a CWA, section 402(p) storm water permit, including a National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit, Water Quality Order (WQO) 2009-0009-DWQ, obtained from the State Water Board, or an individual storm water permit obtained from the Lahontan Water Board.

3. Water diversion and/or dewatering activities may be subject to discharge and monitoring requirements under either NPDES General Permit, Limited Threat Discharges to Surface Waters, Board Order No. R6T-2014-0049, or General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality, WQO-2003-0003, both issued by the Lahontan Water Board. Project proponents should consult with Water Board staff early on should implementation of individual projects result in activities that trigger these permitting actions. Information regarding these permits, including application forms, can be downloaded from our web site at http://www.waterboards.ca.gov/lahontan/.

2-8

Thank you for the opportunity to comment on the DEIR. If you have any questions regarding this letter, please contact me at (760) 241-7305 tiffany.steinert@waterboards.ca.gov or Jan Zimmerman, Senior Engineering Geologist, at (760) 241-7376 Jan.zimmerman@waterboards.ca.gov. Please send all future correspondence regarding this Project to the Water Board's email address at Lahontan@waterboards.ca.gov and be sure to include the Project name in the subject line.

2-9

Tiffany Steinert
Engineering Geologist

cc: State Clearinghouse (SCH No. 2021120062) (state.clearinghouse@opr.ca.gov)
California Dept. of Fish and Wildlife (AskRegion6@wildlife.ca.gov)

Letter 2 Lahontan Regional Water Quality Control Board

Tiffany Steinert, Engineering Geologist
April 5, 2023

2-1 The comment provides introductory remarks and identifies the Lahontan Regional Water Quality Control Board (RWQCB) as a responsible agency for the project under CEQA. The comment encourages the Town to integrate elements into the project that promote watershed management, support low impact development (LID), and reduce the effects of hydromodification.

This comment is noted and pages 1-3, 1-4, and 2-34 of the Draft EIR identify the Lahontan RWQCB as a responsible agency. Pages 2-23 and 2-24 of the Draft EIR further identify project features that are designed to promote watershed management, support LID practices, and reduce the effects of hydromodification. Specifically, five stormwater bioretention basins are proposed throughout the travel center to collect surface runoff. Another bioretention basin would be located along Stoddard Wells Road to collect surface runoff from the RV park. These bioretention systems were designed to function in a similar manner as the physical, chemical, and biological processes in the natural environment. The systems would capture runoff, promote infiltration and evapotranspiration, recharge groundwater, and remove nutrients, sediment, and heavy metals carried in stormwater. See also the response to comment 1-2 above.

As discussed on page 2-29 of the Draft EIR, stormwater would flow from the onsite retention basins through a new underground stormwater pipe that would discharge to existing drainage at Bell Mountain Wash south of the project site. As discussed on page 3.9-12 of the Draft EIR, a Hydrology Report (Lane Engineers, Inc. 2022) was prepared for the project and was included as Appendix F to the Draft EIR. Based on the findings of the Hydrology Report, the project design and storm drain system would have capacity to accommodate the modeled rainfall events (2-year, 5-year, 10-year, 25-year, 50-year, and 100-year 24-hour storm events). In addition, the Hydrology Report concluded that the project would decrease the volume of stormwater runoff and peak discharge from the existing pre-development condition (Lane Engineers, Inc. 2022). The Draft EIR concludes that impact related to the alteration of drainage patterns would be less than significant and no mitigation is required.

The Draft EIR includes the information requested by the commenter. Further, the comment does not identify any specific concern that the Draft EIR's conclusions are flawed or unsupported by substantial evidence. Therefore, no revisions to the Draft EIR are necessary in response to this comment.

2-2 The comment describes the authority of the Lahontan RWQCB in protecting waters of the State within the Lahontan Region and states that additional protections are in place for waters of the United States (US). The comment provides reference to the Water Quality Control Plan for the Lahontan Region (Basin Plan) (Lahontan RWQCB 2019). Pages 3.9-4 and 3.9-5 of the Draft EIR discuss the applicability of the Basin Plan to the project. The Basin Plan's beneficial uses for receiving waters near the project site and water quality objectives are further referenced on Pages 3.9-8 and 3.9-9 of the Draft EIR. Page 3.9-13 of the Draft EIR states that the project would not conflict with or obstruct implementation of the Basin Plan through the implementation of operational BMPs and compliance with applicable permits and concludes that the impact would be less than significant. The comment is not related to the adequacy of the CEQA document, nor does the comment identify any specific concern that the Draft EIR's conclusions are flawed or unsupported by substantial evidence. Therefore, no revisions to the Draft EIR are necessary in response to this comment.

2-3 The comment describes the function and processes of watersheds. The comment identifies the role of the Mojave Integrated Regional Water Management Group in managing water quantity and quality issues the Upper Mojave River Valley groundwater basin and recognizes that water management plans are in development. The comment is not related to the adequacy of the CEQA document, nor does the comment identify any specific concern that the Draft EIR's conclusions are flawed or unsupported by substantial evidence. No further response is required.

2-4 The comment describes the purpose and principles of LID and describes examples of LID practices. Refer to Response 2-1 above, which identifies project features that support LID practices. The comment is not related to the adequacy of the CEQA document, nor does the comment identify any specific concern that the Draft EIR's conclusions are flawed or unsupported by substantial evidence. No further response is required.

2-5 The comment states that increase runoff from development results in adverse effects and describes the importance of maintaining the pre-development hydrograph. The comment expresses a preference for stormwater control measures that are compatible with LID (e.g., bioretention swales, pervious pavement, and vegetated infiltration basins) over traditional practices (e.g., channelization and stream armoring). Refer to Response 2-1 above, which identifies project features that support LID practices. As also noted in Response 2-1, the project would decrease the volume of stormwater runoff and peak discharge from the existing pre-development condition (Lane Engineers, Inc. 2022). The project design already considers the features requested by the commenter. Further, the comment does not identify any specific concern that the Draft EIR's conclusions are flawed or unsupported by substantial evidence. Therefore, no revisions to the Draft EIR are necessary in response to this comment.

2-6 The comment provides a definition of hydromodification and describes the adverse effects associated with this practice. Refer to Response 2-1 above. As noted above, the Hydrology Report concluded that the project would decrease the volume of stormwater runoff and peak discharge from the existing pre-development condition (Lane Engineers, Inc. 2022). The comment does not identify any specific concern that the Draft EIR's conclusions are flawed or unsupported by substantial evidence. Therefore, no revisions to the Draft EIR are necessary in response to this comment.

2-7 The comment identifies the beneficial uses for the surface and groundwaters within the project area. Pages 3.9-8 and 3.9-9 of the Draft EIR identify the beneficial uses and the constituents for which water quality objectives have been established. Refer to Response 2-2 above, which provides a summary of the analysis and conclusions related to the project's consistency with the Basin Plan. The comment does not identify any specific concern that the Draft EIR's conclusions are flawed or unsupported by substantial evidence. Therefore, no revisions to the Draft EIR are necessary in response to this comment.

2-8 The comment identifies permits that may be required for the project from the SWRCB and the Lahontan RWQCB. As discussed on Page 3.4-29 of the Draft EIR, Mitigation Measure 3.4-1 would be required to compensate for the disturbance or loss of state and federally protected wetlands and other waters. The measure specifically requires preparation of a wetland delineation report to determine the exact acreage of waters of the US and state that would be filled or degraded as a result of project implementation. The measure states that applicable permits, including a Section 404 permit and a Section 401 Water Quality Certification, will be obtained as needed. As discussed on page 3.9-10, project construction would disturb more than one acre of soil and would be subject to the requirements of the NPDES Construction General Permit from the Lahontan RWQCB. As noted in Response 1-2, the project would implement operational BMPs as specified in a project-specific WQMP to ensure that the Town remains in compliance with its MS4 permit; therefore, an individual stormwater permit would not be applicable to the project. In the unlikely event that water diversion or dewatering activities are required, the project applicant will consult with the RWQCB to ensure that applicable permits are obtained. The comment does not identify any specific concern that the Draft EIR's conclusions are flawed or unsupported by substantial evidence. Therefore, no revisions to the Draft EIR are necessary in response to this comment.

2-9 The comment provides closing remarks and the contact information for further coordination with Lahontan RWQCB staff. This comment is not related to the adequacy of the CEQA document. No further response is required.

3 REVISIONS TO THE DRAFT EIR

This chapter presents changes made to the Draft EIR since its publication and public review. CEQA requires recirculation of an EIR when the lead agency adds "significant new information" to an EIR after public notice is given of the availability of a draft EIR for public review under State CEQA Guidelines, California Code of Regulations (CCR), Title 14, Section 15087, but before EIR certification (State CEQA Guidelines CCR, Title 14, Section 15088.5[a]). Recirculation is not required unless the EIR is changed in a way that would deprive the public of the opportunity to comment on a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. Examples of significant new information include (i) a new significant impact for which no feasible mitigation is available to fully mitigate the impact (thus resulting in a significant and unavoidable impact), (ii) a substantial increase in the severity of a disclosed environmental impact, (iii) development of a new feasible alternative or mitigation measures that are considerably different from others previously analyzed and would clearly lessen environmental impacts but that the project proponent declines to adopt, and (iv) information indicating that the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded (State CEQA Guidelines CCR, Title 14, Section 15088.5[a]). Recirculation is not required when the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR (State CEQA Guidelines CCR, Title 14, Section 15088.5[b]).

No changes to the project description or the environmental setting have occurred subsequent to the release of the Draft EIR for public review. However, the following revision has been made to Appendix B of the Draft EIR to correct an error in the supporting documentation (i.e., modeling). As discussed further in Section 3.1 below, the air quality, greenhouse gas, and energy discussion presented in Section 3.2, "Air Quality," Section 3.5, "Energy," and Section 3.7, "Greenhouse Gas Emissions and Climate Change," of the Draft EIR contained the correct analysis, modeling input/output, and impact conclusions, although a previous version of the modeling input/output data was included in Appendix B of the Draft EIR. Because the analysis contained within Sections 3.2, 3.5, and 3.7 of the Draft EIR is correct and the correct modeling data is included in Appendix A of this Final EIR, recirculation of the Draft EIR is not required.

3.1 REVISION TO APPENDIX B, "AIR QUALITY, GREENHOUSE GAS, AND ENERGY MODELING"

As described in Section 3.2, "Air Quality," Section 3.5, "Energy," and Section 3.7, "Greenhouse Gas Emissions and Climate Change," of the Draft EIR, the project would not utilize natural gas during operations. The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 output files provided in Appendix B of the Draft EIR incorrectly show that the project would utilize natural gas during operations. These outdated files were based on previous design plans for the project, which included natural gas appliances and plumbing. Appendix B of the Draft EIR has therefore been revised to include the correct CalEEMod output files, which are consistent with the analysis provided in Sections 3.2, 3.5, and 3.7 of the Draft EIR.

As described on page 2-5 of the Draft EIR, the project design includes an 80-kilowatt rooftop solar system on the roof of the proposed truck maintenance building. The operational energy and greenhouse gas emissions analysis As in Sections 3.5 and 3.7 of the Draft EIR takes into account the proposed rooftop solar system. However, the files provided in Appendix B of the Draft EIR were based on previous design plans for the project, which did not include a rooftop solar system. Appendix B of the Draft EIR has therefore been updated to include the correct output files, which are consistent with the analysis provided in Sections 3.5 and 3.7 of the Draft EIR, and to include additional supporting information regarding performance assumptions and energy savings from photovoltaic systems.

The updated appendix files are included in Appendix A to this Final EIR, entitled *Revisions to Appendix B of the Draft EIR*. This revision does not constitute "significant new information" requiring recirculation because the analysis and conclusions in Sections 3.2, 3.5, and 3.7 of the Draft EIR remain unchanged.

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4 REFERENCES

Ahiablame, Laurent M., Bernard A. Engel, and Indrajeet Chaubey. 2012. Effectiveness of Low Impact Development Practices: Literature Review and Suggestions for Future Research. Journal of Water, Air, and Soil Pollution. 223:4253-4273.

Lahontan Regional Water Quality Control Board. 2019. *Water Quality Control Plan for the Lahontan Region (Basin Plan)*. Adopted March 31, 1995; reflects amendments through October 29, 2019. Retrieved from: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.html. Accessed September 20, 2021.

Lahontan RWQCB. *See* Lahontan Regional Water Quality Control Board.

Lane Engineers, Inc. 2022. *Hydrology Report, New Travel Center, Stoddard Wells Road, East of Interstate 15, Apple Valley, CA*.

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5 LIST OF PREPARERS

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Appendix A

Revisions to Appendix B of the Draft EIR

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

Love's Truck Stop Apple Valley

San Bernardino-Mojave Desert County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.34	Acre	1.34	58,370.40	0
Parking Lot	183.00	Space	1.65	73,200.00	0
City Park	11.20	Acre	11.20	487,872.00	0
Fast Food Restaurant with Drive Thru	3.04	1000sqft	0.07	3,040.00	0
Mobile Home Park	88.00	Dwelling Unit	11.09	105,600.00	0
Automobile Care Center	13.79	1000sqft	0.32	13,790.00	0
Convenience Market (24 Hour)	12.91	1000sqft	0.30	12,910.00	0
Gasoline/Service Station	25.00	Pump	0.08	3,529.37	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	351	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2023 operational for SCE EF based on CAPCOA Handbook Update, Table E-4.3 (pdf page 683/771), downloadable at: https://www.airquality.org/residents/climate-change/ghg-handbook-caleemod
Emissions are in CO2e, so CH4 and N2O zeroed out.

Land Use - For Service Center: 183 parking spaces, 25 pumps, fast food, auto care, and convenience store per PD. For RV park, mobile home park represents RV park (for electrical hookups and utilities) spaces. Convenience store added to service center. Landscaping for service center and RV area & renention basin = city park

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

Construction Phase - Construction schedule based on a 9-month construction phase and operation in 2023 per PD. Default schedule adjusted based on PD. Trenching accounts for water main work - overlaps with building construction and lasts 2 months. Water main paving added as "other asphalt".

Off-road Equipment - Undergrounding/water main work equipment assumed to be the same as a a default grading phase. Default all other phases.

Trips and VMT - Default worker and vendor trips. No hauling assumed.

Architectural Coating - Rule 1113. 150 g/L for all interior, exterior, and parking. Mobile home park not painted, so residential painting zeroed out.

Vehicle Trips - Adjusted based on trip rates provided by trip analysis. 213.04 trips per pump total (106.52 each for trucks and auto) and 2.7 trips/RV site per day. VMT adjusted per traffic sub to relfect most trips are diverted. 1.82 mi/trip for Service Center. For RV park, trip lengths, trip purpose, and mode splits adjusted based on other lodging uses (motel/hotel) from caleemod.

Fleet Mix - Fleet average for Gas/Service Station; For RV, adjusted to be 100% motorhome

Woodstoves - no hearths assumed (RV park). All values zeroed out.

Consumer Products -

Area Coating - Rule 1113. 150 g/L. No residential painting. Same as construction.

Energy Use - Project will have no natural gas service. Effective increase in kwh to compensate accounted for assuming 3,412 kwh per BTU. See converstion sheet. RV park based on 20 kw/day per RV + outdoor lighting similar to a parking lot.

Water And Wastewater - from PD: 26,000 gpd (365 days) total; for travel center: 12,000 gpd, 3,000 gpd for landscaping (remainder indoor). RV Park: 14,000 gpd, of which 11,000 gpd for landscaping (remainder indoor). Zero'd out water demand for other uses.

Solid Waste - default waste metrics

Area Mitigation -

Energy Mitigation - 80 kw DC system at the project site (34.53,-117.22), default ststem info in NREL PVWATTS: fixed (open rack), standard module, default system losses and efficiency = 148,484 kwh/yr

Grading -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	71,280.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	213,840.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaCoating	Area_Nonresidential_Interior	49904	0
tblAreaCoating	Area_Residential_Interior	213840	0
tblConstructionPhase	NumDays	35.00	22.00
tblConstructionPhase	NumDays	440.00	132.00
tblConstructionPhase	NumDays	30.00	22.00
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	35.00	22.00
tblConstructionPhase	NumDays	20.00	22.00
tblEnergyUse	LightingElect	1,038.60	2,836.10
tblEnergyUse	NT24E	5.02	10.04
tblEnergyUse	NT24E	2.44	2.53
tblEnergyUse	NT24E	28.48	85.86
tblEnergyUse	NT24E	5.02	10.04
tblEnergyUse	NT24E	4,004.74	7,300.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	0.30	0.00
tblEnergyUse	NT24NG	195.77	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	6,030.00	0.00
tblEnergyUse	T24E	1.97	6.49
tblEnergyUse	T24E	4.09	4.66
tblEnergyUse	T24E	11.06	33.94
tblEnergyUse	T24E	1.97	6.49
tblEnergyUse	T24E	164.88	0.00
tblEnergyUse	T24NG	15.20	0.00
tblEnergyUse	T24NG	1.90	0.00
tblEnergyUse	T24NG	76.89	0.00
tblEnergyUse	T24NG	15.20	0.00

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

tblEnergyUse	T24NG	16,337.91	0.00
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	48.40	0.00
tblFireplaces	NumberNoFireplace	8.80	0.00
tblFireplaces	NumberWood	30.80	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.1960e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.0710e-003	1.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblLandUse	Population	252.00	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblProjectCharacteristics	CH4IntensityFactor	0.033	0
tblProjectCharacteristics	CO2IntensityFactor	390.98	351
tblProjectCharacteristics	N2OIntensityFactor	0.004	0

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	1.82
tblVehicleTrips	CC_TTP	79.00	100.00
tblVehicleTrips	CNW_TL	6.60	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	14.70	0.00
tblVehicleTrips	CW_TTP	2.00	0.00
tblVehicleTrips	DV_TP	27.00	0.00
tblVehicleTrips	DV_TP	11.00	38.00
tblVehicleTrips	HO_TL	7.90	6.60
tblVehicleTrips	HO_TTP	40.60	19.00
tblVehicleTrips	HS_TL	7.10	6.60
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TL	16.80	14.70
tblVehicleTrips	HW_TTP	40.20	62.00
tblVehicleTrips	PB_TP	59.00	0.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PR_TP	14.00	100.00
tblVehicleTrips	PR_TP	86.00	58.00
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1,084.17	0.00
tblVehicleTrips	ST_TR	616.12	0.00
tblVehicleTrips	ST_TR	182.17	213.04
tblVehicleTrips	ST_TR	4.61	2.70
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	901.17	0.00
tblVehicleTrips	SU_TR	472.58	0.00

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

tblVehicleTrips	SU_TR	166.88	213.04
tblVehicleTrips	SU_TR	4.24	2.70
tblVehicleTrips	WD_TR	23.72	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	762.28	0.00
tblVehicleTrips	WD_TR	470.95	0.00
tblVehicleTrips	WD_TR	172.01	213.04
tblVehicleTrips	WD_TR	5.00	2.70
tblWater	IndoorWaterUseRate	1,297,378.47	0.00
tblWater	IndoorWaterUseRate	956,276.25	0.00
tblWater	IndoorWaterUseRate	922,742.49	0.00
tblWater	IndoorWaterUseRate	332,047.22	3,285,000.00
tblWater	IndoorWaterUseRate	5,733,554.25	1,095,000.00
tblWater	OutdoorWaterUseRate	795,167.45	0.00
tblWater	OutdoorWaterUseRate	13,344,591.12	0.00
tblWater	OutdoorWaterUseRate	586,104.80	0.00
tblWater	OutdoorWaterUseRate	58,898.46	0.00
tblWater	OutdoorWaterUseRate	203,512.81	1,095,000.00
tblWater	OutdoorWaterUseRate	3,614,632.03	4,015,000.00
tblWoodstoves	NumberCatalytic	4.40	0.00
tblWoodstoves	NumberNoncatalytic	4.40	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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					
2022	9.6693	97.8131	71.3396	0.1475	29.5376	4.4936	34.0312	13.9357	4.1462	18.0819	0.0000	14,609.2458	14,609.2458	4.2042	0.4365	14,807.2857
2023	25.7152	54.0573	58.2977	0.1455	5.2327	2.1757	7.4083	1.4039	2.0174	3.4212	0.0000	14,399.7643	14,399.7643	2.6997	0.4142	14,590.6773
Maximum	**25.7152**	**97.8131**	**71.3396**	**0.1475**	**29.5376**	**4.4936**	**34.0312**	**13.9357**	**4.1462**	**18.0819**	**0.0000**	**14,609.2458**	**14,609.2458**	**4.2042**	**0.4365**	**14,807.2857**

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					
2022	9.6693	97.8131	71.3396	0.1475	29.5376	4.4936	34.0312	13.9357	4.1462	18.0819	0.0000	14,609.2458	14,609.2458	4.2042	0.4365	14,807.2857
2023	25.7152	54.0573	58.2977	0.1455	5.2327	2.1757	7.4083	1.4039	2.0174	3.4212	0.0000	14,399.7643	14,399.7643	2.6997	0.4142	14,590.6773
Maximum	**25.7152**	**97.8131**	**71.3396**	**0.1475**	**29.5376**	**4.4936**	**34.0312**	**13.9357**	**4.1462**	**18.0819**	**0.0000**	**14,609.2458**	**14,609.2458**	**4.2042**	**0.4365**	**14,807.2857**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

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

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.4472	0.0839	7.2873	3.9000e-004		0.0403	0.0403		0.0403	0.0403	0.0000	13.1274	13.1274	0.0127	0.0000	13.4452
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	11.1859	15.3088	61.9802	0.1382	9.2733	0.2401	9.5134	2.5330	0.2278	2.7607		14,092.0308	14,092.0308	1.0493	0.9200	14,392.4355
Total	**14.6331**	**15.3928**	**69.2675**	**0.1385**	**9.2733**	**0.2804**	**9.5537**	**2.5330**	**0.2680**	**2.8010**	**0.0000**	**14,105.1582**	**14,105.1582**	**1.0620**	**0.9200**	**14,405.8808**

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	3.4472	0.0839	7.2873	3.9000e-004		0.0403	0.0403		0.0403	0.0403	0.0000	13.1274	13.1274	0.0127	0.0000	13.4452
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	11.1859	15.3088	61.9802	0.1382	9.2733	0.2401	9.5134	2.5330	0.2278	2.7607		14,092.0308	14,092.0308	1.0493	0.9200	14,392.4355
Total	**14.6331**	**15.3928**	**69.2675**	**0.1385**	**9.2733**	**0.2804**	**9.5537**	**2.5330**	**0.2680**	**2.8010**	**0.0000**	**14,105.1582**	**14,105.1582**	**1.0620**	**0.9200**	**14,405.8808**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Demolition	Demolition	10/3/2022	11/1/2022	5	22	
2	Site Preparation	Site Preparation	10/3/2022	11/1/2022	5	22	
3	Grading	Grading	10/3/2022	11/1/2022	5	22	
4	Water Main Trenching / Undergounding	Trenching	11/2/2022	1/2/2023	5	44	
5	Building Construction	Building Construction	12/1/2022	6/2/2023	5	132	
6	Paving	Paving	6/3/2023	7/4/2023	5	22	
7	Architectural Coating	Architectural Coating	6/3/2023	7/4/2023	5	22	

Acres of Grading (Site Preparation Phase): 33

Acres of Grading (Grading Phase): 66

Acres of Paving: 2.99

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 49,904; Non-Residential Outdoor: 16,635; Striped Parking Area: 7,894 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Water Main Trenching / Undergounding	Excavators	2	8.00	158	0.38
Water Main Trenching / Undergounding	Graders	1	8.00	187	0.41
Water Main Trenching / Undergounding	Rubber Tired Dozers	1	8.00	247	0.40
Water Main Trenching / Undergounding	Scrapers	2	8.00	367	0.48
Water Main Trenching / Undergounding	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Water Main Trenching / Undergounding	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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

Building Construction	9	334.00	116.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	67.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	67.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**		**1.2427**	**1.2427**		**1.1553**	**1.1553**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

3.2 Demolition - 2022

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	0.0666	0.0472	0.5678	1.6000e-003	0.1916	9.9000e-004	0.1926	0.0508	9.1000e-004	0.0517		161.4885	161.4885	4.3600e-003	4.4800e-003	162.9334
Total	**0.0666**	**0.0472**	**0.5678**	**1.6000e-003**	**0.1916**	**9.9000e-004**	**0.1926**	**0.0508**	**9.1000e-004**	**0.0517**		**161.4885**	**161.4885**	**4.3600e-003**	**4.4800e-003**	**162.9334**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**		**1.2427**	**1.2427**		**1.1553**	**1.1553**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

3.2 Demolition - 2022

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	0.0666	0.0472	0.5678	1.6000e-003	0.1916	9.9000e-004	0.1926	0.0508	9.1000e-004	0.0517		161.4885	161.4885	4.3600e-003	4.4800e-003	162.9334
Total	**0.0666**	**0.0472**	**0.5678**	**1.6000e-003**	**0.1916**	**9.9000e-004**	**0.1926**	**0.0508**	**9.1000e-004**	**0.0517**		**161.4885**	**161.4885**	**4.3600e-003**	**4.4800e-003**	**162.9334**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

3.3 Site Preparation - 2022

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	0.0799	0.0566	0.6814	1.9200e-003	0.2299	1.1900e-003	0.2311	0.0610	1.1000e-003	0.0621		193.7862	193.7862	5.2300e-003	5.3800e-003	195.5200
Total	**0.0799**	**0.0566**	**0.6814**	**1.9200e-003**	**0.2299**	**1.1900e-003**	**0.2311**	**0.0610**	**1.1000e-003**	**0.0621**		**193.7862**	**193.7862**	**5.2300e-003**	**5.3800e-003**	**195.5200**

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					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

3.3 Site Preparation - 2022

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	0.0799	0.0566	0.6814	1.9200e-003	0.2299	1.1900e-003	0.2311	0.0610	1.1000e-003	0.0621		193.7862	193.7862	5.2300e-003	5.3800e-003	195.5200
Total	**0.0799**	**0.0566**	**0.6814**	**1.9200e-003**	**0.2299**	**1.1900e-003**	**0.2311**	**0.0610**	**1.1000e-003**	**0.0621**		**193.7862**	**193.7862**	**5.2300e-003**	**5.3800e-003**	**195.5200**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.2036**	**1.6349**	**10.8385**	**3.6538**	**1.5041**	**5.1579**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

3.4 Grading - 2022

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	0.0888	0.0629	0.7571	2.1300e-003	0.2555	1.3200e-003	0.2568	0.0678	1.2200e-003	0.0690		215.3179	215.3179	5.8100e-003	5.9800e-003	217.2445
Total	**0.0888**	**0.0629**	**0.7571**	**2.1300e-003**	**0.2555**	**1.3200e-003**	**0.2568**	**0.0678**	**1.2200e-003**	**0.0690**		**215.3179**	**215.3179**	**5.8100e-003**	**5.9800e-003**	**217.2445**

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					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.2036**	**1.6349**	**10.8385**	**3.6538**	**1.5041**	**5.1579**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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

3.4 Grading - 2022

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	0.0888	0.0629	0.7571	2.1300e-003	0.2555	1.3200e-003	0.2568	0.0678	1.2200e-003	0.0690		215.3179	215.3179	5.8100e-003	5.9800e-003	217.2445
Total	**0.0888**	**0.0629**	**0.7571**	**2.1300e-003**	**0.2555**	**1.3200e-003**	**0.2568**	**0.0678**	**1.2200e-003**	**0.0690**		**215.3179**	**215.3179**	**5.8100e-003**	**5.9800e-003**	**217.2445**

3.5 Water Main Trenching / Undergounding - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**		**1.6349**	**1.6349**		**1.5041**	**1.5041**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

3.5 Water Main Trenching / Undergounding - 2022

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	0.0888	0.0629	0.7571	2.1300e-003	0.2555	1.3200e-003	0.2568	0.0678	1.2200e-003	0.0690		215.3179	215.3179	5.8100e-003	5.9800e-003	217.2445
Total	**0.0888**	**0.0629**	**0.7571**	**2.1300e-003**	**0.2555**	**1.3200e-003**	**0.2568**	**0.0678**	**1.2200e-003**	**0.0690**		**215.3179**	**215.3179**	**5.8100e-003**	**5.9800e-003**	**217.2445**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**		**1.6349**	**1.6349**		**1.5041**	**1.5041**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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

3.5 Water Main Trenching / Undergounding - 2022

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	0.0888	0.0629	0.7571	2.1300e-003	0.2555	1.3200e-003	0.2568	0.0678	1.2200e-003	0.0690		215.3179	215.3179	5.8100e-003	5.9800e-003	217.2445
Total	**0.0888**	**0.0629**	**0.7571**	**2.1300e-003**	**0.2555**	**1.3200e-003**	**0.2568**	**0.0678**	**1.2200e-003**	**0.0690**		**215.3179**	**215.3179**	**5.8100e-003**	**5.9800e-003**	**217.2445**

3.5 Water Main Trenching / Undergounding - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**		**1.4245**	**1.4245**		**1.3105**	**1.3105**		**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

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

3.5 Water Main Trenching / Undergounding - 2023

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	0.0822	0.0552	0.6928	2.0600e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1500e-003	0.0689		208.4024	208.4024	5.2100e-003	5.4900e-003	210.1687
Total	**0.0822**	**0.0552**	**0.6928**	**2.0600e-003**	**0.2555**	**1.2400e-003**	**0.2567**	**0.0678**	**1.1500e-003**	**0.0689**		**208.4024**	**208.4024**	**5.2100e-003**	**5.4900e-003**	**210.1687**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**		**1.4245**	**1.4245**		**1.3105**	**1.3105**	**0.0000**	**6,011.4777**	**6,011.4777**	**1.9442**		**6,060.0836**

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

3.5 Water Main Trenching / Undergounding - 2023

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	0.0822	0.0552	0.6928	2.0600e-003	0.2555	1.2400e-003	0.2567	0.0678	1.1500e-003	0.0689		208.4024	208.4024	5.2100e-003	5.4900e-003	210.1687
Total	**0.0822**	**0.0552**	**0.6928**	**2.0600e-003**	**0.2555**	**1.2400e-003**	**0.2567**	**0.0678**	**1.1500e-003**	**0.0689**		**208.4024**	**208.4024**	**5.2100e-003**	**5.4900e-003**	**210.1687**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

3.6 Building Construction - 2022

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	0.1894	5.1700	1.9009	0.0208	0.7110	0.0581	0.7691	0.2048	0.0555	0.2603		2,232.3741	2,232.3741	0.0599	0.3307	2,332.4103
Worker	1.4821	1.0504	12.6432	0.0356	4.2662	0.0221	4.2883	1.1314	0.0204	1.1517		3,595.8097	3,595.8097	0.0971	0.0998	3,627.9829
Total	**1.6715**	**6.2204**	**14.5441**	**0.0564**	**4.9772**	**0.0802**	**5.0574**	**1.3361**	**0.0759**	**1.4120**		**5,828.1837**	**5,828.1837**	**0.1569**	**0.4305**	**5,960.3932**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

3.6 Building Construction - 2022

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	0.1894	5.1700	1.9009	0.0208	0.7110	0.0581	0.7691	0.2048	0.0555	0.2603		2,232.3741	2,232.3741	0.0599	0.3307	2,332.4103
Worker	1.4821	1.0504	12.6432	0.0356	4.2662	0.0221	4.2883	1.1314	0.0204	1.1517		3,595.8097	3,595.8097	0.0971	0.0998	3,627.9829
Total	**1.6715**	**6.2204**	**14.5441**	**0.0564**	**4.9772**	**0.0802**	**5.0574**	**1.3361**	**0.0759**	**1.4120**		**5,828.1837**	**5,828.1837**	**0.1569**	**0.4305**	**5,960.3932**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

3.6 Building Construction - 2023

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	0.1243	4.1794	1.7402	0.0200	0.7110	0.0294	0.7404	0.2048	0.0281	0.2329		2,144.3541	2,144.3541	0.0555	0.3170	2,240.2020
Worker	1.3722	0.9222	11.5695	0.0344	4.2662	0.0208	4.2870	1.1314	0.0191	1.1505		3,480.3201	3,480.3201	0.0870	0.0917	3,509.8170
Total	**1.4965**	**5.1016**	**13.3097**	**0.0544**	**4.9772**	**0.0502**	**5.0274**	**1.3361**	**0.0473**	**1.3834**		**5,624.6742**	**5,624.6742**	**0.1424**	**0.4087**	**5,750.0190**

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

3.6 Building Construction - 2023

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	0.1243	4.1794	1.7402	0.0200	0.7110	0.0294	0.7404	0.2048	0.0281	0.2329		2,144.3541	2,144.3541	0.0555	0.3170	2,240.2020
Worker	1.3722	0.9222	11.5695	0.0344	4.2662	0.0208	4.2870	1.1314	0.0191	1.1505		3,480.3201	3,480.3201	0.0870	0.0917	3,509.8170
Total	**1.4965**	**5.1016**	**13.3097**	**0.0544**	**4.9772**	**0.0502**	**5.0274**	**1.3361**	**0.0473**	**1.3834**		**5,624.6742**	**5,624.6742**	**0.1424**	**0.4087**	**5,750.0190**

3.7 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.3561					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3888**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

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

3.7 Paving - 2023

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	0.0616	0.0414	0.5196	1.5500e-003	0.1916	9.3000e-004	0.1925	0.0508	8.6000e-004	0.0517		156.3018	156.3018	3.9000e-003	4.1200e-003	157.6265
Total	**0.0616**	**0.0414**	**0.5196**	**1.5500e-003**	**0.1916**	**9.3000e-004**	**0.1925**	**0.0508**	**8.6000e-004**	**0.0517**		**156.3018**	**156.3018**	**3.9000e-003**	**4.1200e-003**	**157.6265**

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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.3561					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3888**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

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

3.7 Paving - 2023

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	0.0616	0.0414	0.5196	1.5500e-003	0.1916	9.3000e-004	0.1925	0.0508	8.6000e-004	0.0517		156.3018	156.3018	3.9000e-003	4.1200e-003	157.6265
Total	**0.0616**	**0.0414**	**0.5196**	**1.5500e-003**	**0.1916**	**9.3000e-004**	**0.1925**	**0.0508**	**8.6000e-004**	**0.0517**		**156.3018**	**156.3018**	**3.9000e-003**	**4.1200e-003**	**157.6265**

3.8 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.5225					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**23.7142**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

3.8 Architectural Coating - 2023

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	0.5505	0.3700	4.6417	0.0138	3.1998	8.3400e-003	3.2081	0.8192	7.6800e-003	0.8269		1,396.2961	1,396.2961	0.0349	0.0368	1,408.1302
Total	**0.5505**	**0.3700**	**4.6417**	**0.0138**	**3.1998**	**8.3400e-003**	**3.2081**	**0.8192**	**7.6800e-003**	**0.8269**		**1,396.2961**	**1,396.2961**	**0.0349**	**0.0368**	**1,408.1302**

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	23.5225					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**23.7142**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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

3.8 Architectural Coating - 2023

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	0.5505	0.3700	4.6417	0.0138	3.1998	8.3400e-003	3.2081	0.8192	7.6800e-003	0.8269		1,396.2961	1,396.2961	0.0349	0.0368	1,408.1302
Total	**0.5505**	**0.3700**	**4.6417**	**0.0138**	**3.1998**	**8.3400e-003**	**3.2081**	**0.8192**	**7.6800e-003**	**0.8269**		**1,396.2961**	**1,396.2961**	**0.0349**	**0.0368**	**1,408.1302**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.1859	15.3088	61.9802	0.1382	9.2733	0.2401	9.5134	2.5330	0.2278	2.7607		14,092.0308	14,092.0308	1.0493	0.9200	14,392.4355
Unmitigated	11.1859	15.3088	61.9802	0.1382	9.2733	0.2401	9.5134	2.5330	0.2278	2.7607		14,092.0308	14,092.0308	1.0493	0.9200	14,392.4355

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Convenience Market (24 Hour)	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
Gasoline/Service Station	5,326.00	5,326.00	5326.00	3,528,368	3,528,368
Mobile Home Park	237.60	237.60	237.60	678,819	678,819
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	5,563.60	5,563.60	5,563.60	4,207,187	4,207,187

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	14.70	6.60	6.60	33.00	48.00	19.00	21	51	28
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Convenience Market (24 Hour)	14.70	6.60	6.60	0.90	80.10	19.00	24	15	61
Fast Food Restaurant with Drive	14.70	6.60	6.60	2.20	78.80	19.00	29	21	50

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Gasoline/Service Station	0.00	1.82	0.00	0.00	100.00	0.00	100	0	0
Mobile Home Park	14.70	6.60	6.60	62.00	19.00	19.00	58	38	4
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	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	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
City Park	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Convenience Market (24 Hour)	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Fast Food Restaurant with Drive Thru	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Gasoline/Service Station	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Mobile Home Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000
Other Asphalt Surfaces	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Parking Lot	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	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
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
Convenience Market (24 Hour)	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
Fast Food Restaurant with Drive Thru	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
Gasoline/Service Station	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
Mobile Home 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
Parking Lot	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Convenience Market (24 Hour)	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
Fast Food Restaurant with Drive Thru	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
Gasoline/Service Station	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
Mobile Home 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
Parking Lot	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.4472	0.0839	7.2873	3.9000e-004		0.0403	0.0403		0.0403	0.0403	0.0000	13.1274	13.1274	0.0127	0.0000	13.4452
Unmitigated	3.4472	0.0839	7.2873	3.9000e-004		0.0403	0.0403		0.0403	0.0403	0.0000	13.1274	13.1274	0.0127	0.0000	13.4452

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.0435					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2211	0.0839	7.2873	3.9000e-004		0.0403	0.0403		0.0403	0.0403		13.1274	13.1274	0.0127		13.4452
Total	**3.4472**	**0.0839**	**7.2873**	**3.9000e-004**		**0.0403**	**0.0403**		**0.0403**	**0.0403**	**0.0000**	**13.1274**	**13.1274**	**0.0127**	**0.0000**	**13.4452**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.0435					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2211	0.0839	7.2873	3.9000e-004		0.0403	0.0403		0.0403	0.0403		13.1274	13.1274	0.0127		13.4452
Total	**3.4472**	**0.0839**	**7.2873**	**3.9000e-004**		**0.0403**	**0.0403**		**0.0403**	**0.0403**	**0.0000**	**13.1274**	**13.1274**	**0.0127**	**0.0000**	**13.4452**

7.0 Water Detail

7.1 Mitigation Measures Water

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

Love's Truck Stop Apple Valley

San Bernardino-Mojave Desert County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.34	Acre	1.34	58,370.40	0
Parking Lot	183.00	Space	1.65	73,200.00	0
City Park	11.20	Acre	11.20	487,872.00	0
Fast Food Restaurant with Drive Thru	3.04	1000sqft	0.07	3,040.00	0
Mobile Home Park	88.00	Dwelling Unit	11.09	105,600.00	0
Automobile Care Center	13.79	1000sqft	0.32	13,790.00	0
Convenience Market (24 Hour)	12.91	1000sqft	0.30	12,910.00	0
Gasoline/Service Station	25.00	Pump	0.08	3,529.37	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	351	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2023 operational for SCE EF based on CAPCOA Handbook Update, Table E-4.3 (pdf page 683/771), downloadable at: https://www.airquality.org/residents/climate-change/ghg-handbook-caleemod
Emissions are in CO2e, so CH4 and N2O zeroed out.

Land Use - For Service Center: 183 parking spaces, 25 pumps, fast food, auto care, and convenience store per PD. For RV park, mobile home park represents RV park (for electrical hookups and utilities) spaces. Convenience store added to service center. Landscaping for service center and RV area & renention basin = city park

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

Construction Phase - Construction schedule based on a 9-month construction phase and operation in 2023 per PD. Default schedule adjusted based on PD. Trenching accounts for water main work - overlaps with building construction and lasts 2 months. Water main paving added as "other asphalt".

Off-road Equipment - Undergrounding/water main work equipment assumed to be the same as a a default grading phase. Default all other phases.

Trips and VMT - Default worker and vendor trips. No hauling assumed.

Architectural Coating - Rule 1113. 150 g/L for all interior, exterior, and parking. Mobile home park not painted, so residential painting zeroed out.

Vehicle Trips - Adjusted based on trip rates provided by trip analysis. 213.04 trips per pump total (106.52 each for trucks and auto) and 2.7 trips/RV site per day. VMT adjusted per traffic sub to relfect most trips are diverted. 1.82 mi/trip for Service Center. For RV park, trip lengths, trip purpose, and mode splits adjusted based on other lodging uses (motel/hotel) from caleemod.

Fleet Mix - Fleet average for Gas/Service Station; For RV, adjusted to be 100% motorhome

Woodstoves - no hearths assumed (RV park). All values zeroed out.

Consumer Products -

Area Coating - Rule 1113. 150 g/L. No residential painting. Same as construction.

Energy Use - Project will have no natural gas service. Effective increase in kwh to compensate accounted for assuming 3,412 kwh per BTU. See converstion sheet. RV park based on 20 kw/day per RV + outdoor lighting similar to a parking lot.

Water And Wastewater - from PD: 26,000 gpd (365 days) total; for travel center: 12,000 gpd, 3,000 gpd for landscaping (remainder indoor). RV Park: 14,000 gpd, of which 11,000 gpd for landscaping (remainder indoor). Zero'd out water demand for other uses.

Solid Waste - default waste metrics

Area Mitigation -

Energy Mitigation - 80 kw DC system at the project site (34.53,-117.22), default ststem info in NREL PVWATTS: fixed (open rack), standard module, default system losses and efficiency = 148,484 kwh/yr

Grading -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	71,280.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	213,840.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaCoating	Area_Nonresidential_Interior	49904	0
tblAreaCoating	Area_Residential_Interior	213840	0
tblConstructionPhase	NumDays	35.00	22.00
tblConstructionPhase	NumDays	440.00	132.00
tblConstructionPhase	NumDays	30.00	22.00
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	35.00	22.00
tblConstructionPhase	NumDays	20.00	22.00
tblEnergyUse	LightingElect	1,038.60	2,836.10
tblEnergyUse	NT24E	5.02	10.04
tblEnergyUse	NT24E	2.44	2.53
tblEnergyUse	NT24E	28.48	85.86
tblEnergyUse	NT24E	5.02	10.04
tblEnergyUse	NT24E	4,004.74	7,300.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	0.30	0.00
tblEnergyUse	NT24NG	195.77	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	6,030.00	0.00
tblEnergyUse	T24E	1.97	6.49
tblEnergyUse	T24E	4.09	4.66
tblEnergyUse	T24E	11.06	33.94
tblEnergyUse	T24E	1.97	6.49
tblEnergyUse	T24E	164.88	0.00
tblEnergyUse	T24NG	15.20	0.00
tblEnergyUse	T24NG	1.90	0.00
tblEnergyUse	T24NG	76.89	0.00
tblEnergyUse	T24NG	15.20	0.00

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

tblEnergyUse	T24NG	16,337.91	0.00
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	48.40	0.00
tblFireplaces	NumberNoFireplace	8.80	0.00
tblFireplaces	NumberWood	30.80	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.1960e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.0710e-003	1.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblLandUse	Population	252.00	0.00
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblProjectCharacteristics	CH4IntensityFactor	0.033	0
tblProjectCharacteristics	CO2IntensityFactor	390.98	351
tblProjectCharacteristics	N2OIntensityFactor	0.004	0

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TL	6.60	1.82
tblVehicleTrips	CC_TTP	79.00	100.00
tblVehicleTrips	CNW_TL	6.60	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	14.70	0.00
tblVehicleTrips	CW_TTP	2.00	0.00
tblVehicleTrips	DV_TP	27.00	0.00
tblVehicleTrips	DV_TP	11.00	38.00
tblVehicleTrips	HO_TL	7.90	6.60
tblVehicleTrips	HO_TTP	40.60	19.00
tblVehicleTrips	HS_TL	7.10	6.60
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TL	16.80	14.70
tblVehicleTrips	HW_TTP	40.20	62.00
tblVehicleTrips	PB_TP	59.00	0.00
tblVehicleTrips	PB_TP	3.00	4.00
tblVehicleTrips	PR_TP	14.00	100.00
tblVehicleTrips	PR_TP	86.00	58.00
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1,084.17	0.00
tblVehicleTrips	ST_TR	616.12	0.00
tblVehicleTrips	ST_TR	182.17	213.04
tblVehicleTrips	ST_TR	4.61	2.70
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	901.17	0.00
tblVehicleTrips	SU_TR	472.58	0.00

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

tblVehicleTrips	SU_TR	166.88	213.04
tblVehicleTrips	SU_TR	4.24	2.70
tblVehicleTrips	WD_TR	23.72	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	762.28	0.00
tblVehicleTrips	WD_TR	470.95	0.00
tblVehicleTrips	WD_TR	172.01	213.04
tblVehicleTrips	WD_TR	5.00	2.70
tblWater	IndoorWaterUseRate	1,297,378.47	0.00
tblWater	IndoorWaterUseRate	956,276.25	0.00
tblWater	IndoorWaterUseRate	922,742.49	0.00
tblWater	IndoorWaterUseRate	332,047.22	3,285,000.00
tblWater	IndoorWaterUseRate	5,733,554.25	1,095,000.00
tblWater	OutdoorWaterUseRate	795,167.45	0.00
tblWater	OutdoorWaterUseRate	13,344,591.12	0.00
tblWater	OutdoorWaterUseRate	586,104.80	0.00
tblWater	OutdoorWaterUseRate	58,898.46	0.00
tblWater	OutdoorWaterUseRate	203,512.81	1,095,000.00
tblWater	OutdoorWaterUseRate	3,614,632.03	4,015,000.00
tblWoodstoves	NumberCatalytic	4.40	0.00
tblWoodstoves	NumberNoncatalytic	4.40	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, 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					
2022	0.2218	2.1535	1.7737	3.9000e-003	0.3839	0.0944	0.4783	0.1691	0.0872	0.2563	0.0000	345.8512	345.8512	0.0877	4.6100e-003	349.4176
2023	0.4473	1.2216	1.9094	5.0000e-003	0.3053	0.0485	0.3538	0.0817	0.0455	0.1272	0.0000	454.8949	454.8949	0.0461	0.0210	462.2895
Maximum	**0.4473**	**2.1535**	**1.9094**	**5.0000e-003**	**0.3839**	**0.0944**	**0.4783**	**0.1691**	**0.0872**	**0.2563**	**0.0000**	**454.8949**	**454.8949**	**0.0877**	**0.0210**	**462.2895**

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					
2022	0.2218	2.1534	1.7737	3.9000e-003	0.3839	0.0944	0.4783	0.1691	0.0872	0.2563	0.0000	345.8509	345.8509	0.0877	4.6100e-003	349.4173
2023	0.4473	1.2216	1.9094	5.0000e-003	0.3053	0.0485	0.3538	0.0817	0.0455	0.1272	0.0000	454.8947	454.8947	0.0461	0.0210	462.2893
Maximum	**0.4473**	**2.1534**	**1.9094**	**5.0000e-003**	**0.3839**	**0.0944**	**0.4783**	**0.1691**	**0.0872**	**0.2563**	**0.0000**	**454.8947**	**454.8947**	**0.0877**	**0.0210**	**462.2893**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**10-3-2022**	**1-2-2023**	2.3873	2.3873
2	**1-3-2023**	**4-2-2023**	0.7248	0.7248
3	**4-3-2023**	**7-2-2023**	0.8896	0.8896
4	**7-3-2023**	**9-30-2023**	0.0269	0.0269
		Highest	2.3873	2.3873

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	0.6087	7.5500e-003	0.6559	3.0000e-005		3.6300e-003	3.6300e-003		3.6300e-003	3.6300e-003	0.0000	1.0718	1.0718	1.0400e-003	0.0000	1.0978
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	287.2478	287.2478	0.0000	0.0000	287.2478
Mobile	1.9736	2.8181	11.5825	0.0253	1.6573	0.0436	1.7009	0.4535	0.0414	0.4949	0.0000	2,341.1612	2,341.1612	0.1747	0.1530	2,391.1187
Waste						0.0000	0.0000		0.0000	0.0000	36.8246	0.0000	36.8246	2.1763	0.0000	91.2314
Water						0.0000	0.0000		0.0000	0.0000	1.3896	18.1189	19.5084	0.1427	3.3700e-003	24.0807
Total	**2.5822**	**2.8256**	**12.2384**	**0.0253**	**1.6573**	**0.0473**	**1.7045**	**0.4535**	**0.0450**	**0.4985**	**38.2142**	**2,647.5997**	**2,685.8138**	**2.4948**	**0.1564**	**2,794.7764**

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	0.6087	7.5500e-003	0.6559	3.0000e-005		3.6300e-003	3.6300e-003		3.6300e-003	3.6300e-003	0.0000	1.0718	1.0718	1.0400e-003	0.0000	1.0978
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	263.6075	263.6075	0.0000	0.0000	263.6075
Mobile	1.9736	2.8181	11.5825	0.0253	1.6573	0.0436	1.7009	0.4535	0.0414	0.4949	0.0000	2,341.1612	2,341.1612	0.1747	0.1530	2,391.1187
Waste						0.0000	0.0000		0.0000	0.0000	36.8246	0.0000	36.8246	2.1763	0.0000	91.2314
Water						0.0000	0.0000		0.0000	0.0000	1.3896	18.1189	19.5084	0.1427	3.3700e-003	24.0807
Total	**2.5822**	**2.8256**	**12.2384**	**0.0253**	**1.6573**	**0.0473**	**1.7045**	**0.4535**	**0.0450**	**0.4985**	**38.2142**	**2,623.9594**	**2,662.1735**	**2.4948**	**0.1564**	**2,771.1361**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.89**	**0.88**	**0.00**	**0.00**	**0.85**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/3/2022	11/1/2022	5	22	
2	Site Preparation	Site Preparation	10/3/2022	11/1/2022	5	22	
3	Grading	Grading	10/3/2022	11/1/2022	5	22	

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

4	Water Main Trenching / Undergounding	Trenching	11/2/2022	1/2/2023	5	44	
5	Building Construction	Building Construction	12/1/2022	6/2/2023	5	132	
6	Paving	Paving	6/3/2023	7/4/2023	5	22	
7	Architectural Coating	Architectural Coating	6/3/2023	7/4/2023	5	22	

Acres of Grading (Site Preparation Phase): 33

Acres of Grading (Grading Phase): 66

Acres of Paving: 2.99

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 49,904; Non-Residential Outdoor: 16,635; Striped Parking Area: 7,894 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Water Main Trenching / Undergounding	Excavators	2	8.00	158	0.38
Water Main Trenching / Undergounding	Graders	1	8.00	187	0.41
Water Main Trenching / Undergounding	Rubber Tired Dozers	1	8.00	247	0.40
Water Main Trenching / Undergounding	Scrapers	2	8.00	367	0.48
Water Main Trenching / Undergounding	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Water Main Trenching / Undergrounding	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	334.00	116.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	67.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	67.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0290	0.2829	0.2265	4.3000e-004		0.0137	0.0137		0.0127	0.0127	0.0000	37.3893	37.3893	0.0105	0.0000	37.6518
Total	**0.0290**	**0.2829**	**0.2265**	**4.3000e-004**		**0.0137**	**0.0137**		**0.0127**	**0.0127**	**0.0000**	**37.3893**	**37.3893**	**0.0105**	**0.0000**	**37.6518**

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	6.8000e-004	5.4000e-004	6.5500e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6436	1.6436	4.0000e-005	5.0000e-005	1.6585
Total	**6.8000e-004**	**5.4000e-004**	**6.5500e-003**	**2.0000e-005**	**2.0700e-003**	**1.0000e-005**	**2.0800e-003**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**1.6436**	**1.6436**	**4.0000e-005**	**5.0000e-005**	**1.6585**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.2 Demolition - 2022

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	0.0290	0.2829	0.2265	4.3000e-004		0.0137	0.0137		0.0127	0.0127	0.0000	37.3892	37.3892	0.0105	0.0000	37.6518
Total	**0.0290**	**0.2829**	**0.2265**	**4.3000e-004**		**0.0137**	**0.0137**		**0.0127**	**0.0127**	**0.0000**	**37.3892**	**37.3892**	**0.0105**	**0.0000**	**37.6518**

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	6.8000e-004	5.4000e-004	6.5500e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6436	1.6436	4.0000e-005	5.0000e-005	1.6585
Total	**6.8000e-004**	**5.4000e-004**	**6.5500e-003**	**2.0000e-005**	**2.0700e-003**	**1.0000e-005**	**2.0800e-003**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**1.6436**	**1.6436**	**4.0000e-005**	**5.0000e-005**	**1.6585**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2162	0.0000	0.2162	0.1111	0.0000	0.1111	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0349	0.3639	0.2167	4.2000e-004		0.0177	0.0177		0.0163	0.0163	0.0000	36.7833	36.7833	0.0119	0.0000	37.0807
Total	**0.0349**	**0.3639**	**0.2167**	**4.2000e-004**	**0.2162**	**0.0177**	**0.2340**	**0.1111**	**0.0163**	**0.1275**	**0.0000**	**36.7833**	**36.7833**	**0.0119**	**0.0000**	**37.0807**

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	8.1000e-004	6.5000e-004	7.8600e-003	2.0000e-005	2.4800e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9724	1.9724	5.0000e-005	6.0000e-005	1.9902
Total	**8.1000e-004**	**6.5000e-004**	**7.8600e-003**	**2.0000e-005**	**2.4800e-003**	**1.0000e-005**	**2.4900e-003**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**1.9724**	**1.9724**	**5.0000e-005**	**6.0000e-005**	**1.9902**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2162	0.0000	0.2162	0.1111	0.0000	0.1111	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0349	0.3639	0.2167	4.2000e-004		0.0177	0.0177		0.0163	0.0163	0.0000	36.7833	36.7833	0.0119	0.0000	37.0807
Total	**0.0349**	**0.3639**	**0.2167**	**4.2000e-004**	**0.2162**	**0.0177**	**0.2340**	**0.1111**	**0.0163**	**0.1275**	**0.0000**	**36.7833**	**36.7833**	**0.0119**	**0.0000**	**37.0807**

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	8.1000e-004	6.5000e-004	7.8600e-003	2.0000e-005	2.4800e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9724	1.9724	5.0000e-005	6.0000e-005	1.9902
Total	**8.1000e-004**	**6.5000e-004**	**7.8600e-003**	**2.0000e-005**	**2.4800e-003**	**1.0000e-005**	**2.4900e-003**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**1.9724**	**1.9724**	**5.0000e-005**	**6.0000e-005**	**1.9902**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1012	0.0000	0.1012	0.0402	0.0000	0.0402	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0399	0.4273	0.3195	6.8000e-004		0.0180	0.0180		0.0166	0.0166	0.0000	59.9881	59.9881	0.0194	0.0000	60.4731
Total	**0.0399**	**0.4273**	**0.3195**	**6.8000e-004**	**0.1012**	**0.0180**	**0.1192**	**0.0402**	**0.0166**	**0.0567**	**0.0000**	**59.9881**	**59.9881**	**0.0194**	**0.0000**	**60.4731**

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	9.0000e-004	7.3000e-004	8.7400e-003	2.0000e-005	2.7600e-003	1.0000e-005	2.7700e-003	7.3000e-004	1.0000e-005	7.5000e-004	0.0000	2.1915	2.1915	6.0000e-005	6.0000e-005	2.2114
Total	**9.0000e-004**	**7.3000e-004**	**8.7400e-003**	**2.0000e-005**	**2.7600e-003**	**1.0000e-005**	**2.7700e-003**	**7.3000e-004**	**1.0000e-005**	**7.5000e-004**	**0.0000**	**2.1915**	**2.1915**	**6.0000e-005**	**6.0000e-005**	**2.2114**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1012	0.0000	0.1012	0.0402	0.0000	0.0402	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0399	0.4273	0.3195	6.8000e-004		0.0180	0.0180		0.0166	0.0166	0.0000	59.9880	59.9880	0.0194	0.0000	60.4730
Total	**0.0399**	**0.4273**	**0.3195**	**6.8000e-004**	**0.1012**	**0.0180**	**0.1192**	**0.0402**	**0.0166**	**0.0567**	**0.0000**	**59.9880**	**59.9880**	**0.0194**	**0.0000**	**60.4730**

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	9.0000e-004	7.3000e-004	8.7400e-003	2.0000e-005	2.7600e-003	1.0000e-005	2.7700e-003	7.3000e-004	1.0000e-005	7.5000e-004	0.0000	2.1915	2.1915	6.0000e-005	6.0000e-005	2.2114
Total	**9.0000e-004**	**7.3000e-004**	**8.7400e-003**	**2.0000e-005**	**2.7600e-003**	**1.0000e-005**	**2.7700e-003**	**7.3000e-004**	**1.0000e-005**	**7.5000e-004**	**0.0000**	**2.1915**	**2.1915**	**6.0000e-005**	**6.0000e-005**	**2.2114**

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

3.5 Water Main Trenching / Undergounding - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0779	0.8351	0.6244	1.3300e-003		0.0352	0.0352		0.0323	0.0323	0.0000	117.2494	117.2494	0.0379	0.0000	118.1974
Total	**0.0779**	**0.8351**	**0.6244**	**1.3300e-003**		**0.0352**	**0.0352**		**0.0323**	**0.0323**	**0.0000**	**117.2494**	**117.2494**	**0.0379**	**0.0000**	**118.1974**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7600e-003	1.4200e-003	0.0171	5.0000e-005	5.3900e-003	3.0000e-005	5.4200e-003	1.4300e-003	3.0000e-005	1.4600e-003	0.0000	4.2834	4.2834	1.2000e-004	1.2000e-004	4.3222
Total	**1.7600e-003**	**1.4200e-003**	**0.0171**	**5.0000e-005**	**5.3900e-003**	**3.0000e-005**	**5.4200e-003**	**1.4300e-003**	**3.0000e-005**	**1.4600e-003**	**0.0000**	**4.2834**	**4.2834**	**1.2000e-004**	**1.2000e-004**	**4.3222**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.5 Water Main Trenching / Undergounding - 2022

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	0.0779	0.8351	0.6244	1.3300e-003		0.0352	0.0352		0.0323	0.0323	0.0000	117.2493	117.2493	0.0379	0.0000	118.1973
Total	**0.0779**	**0.8351**	**0.6244**	**1.3300e-003**		**0.0352**	**0.0352**		**0.0323**	**0.0323**	**0.0000**	**117.2493**	**117.2493**	**0.0379**	**0.0000**	**118.1973**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7600e-003	1.4200e-003	0.0171	5.0000e-005	5.3900e-003	3.0000e-005	5.4200e-003	1.4300e-003	3.0000e-005	1.4600e-003	0.0000	4.2834	4.2834	1.2000e-004	1.2000e-004	4.3222
Total	**1.7600e-003**	**1.4200e-003**	**0.0171**	**5.0000e-005**	**5.3900e-003**	**3.0000e-005**	**5.4200e-003**	**1.4300e-003**	**3.0000e-005**	**1.4600e-003**	**0.0000**	**4.2834**	**4.2834**	**1.2000e-004**	**1.2000e-004**	**4.3222**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.5 Water Main Trenching / Undergounding - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6600e-003	0.0173	0.0140	3.0000e-005		7.1000e-004	7.1000e-004		6.6000e-004	6.6000e-004	0.0000	2.7268	2.7268	8.8000e-004	0.0000	2.7488
Total	**1.6600e-003**	**0.0173**	**0.0140**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**2.7268**	**2.7268**	**8.8000e-004**	**0.0000**	**2.7488**

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	4.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0964	0.0964	0.0000	0.0000	0.0972
Total	**4.0000e-005**	**3.0000e-005**	**3.6000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0964**	**0.0964**	**0.0000**	**0.0000**	**0.0972**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.5 Water Main Trenching / Undergounding - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6600e-003	0.0173	0.0140	3.0000e-005		7.1000e-004	7.1000e-004		6.6000e-004	6.6000e-004	0.0000	2.7268	2.7268	8.8000e-004	0.0000	2.7488
Total	**1.6600e-003**	**0.0173**	**0.0140**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**6.6000e-004**	**6.6000e-004**	**0.0000**	**2.7268**	**2.7268**	**8.8000e-004**	**0.0000**	**2.7488**

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	4.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0964	0.0964	0.0000	0.0000	0.0972
Total	**4.0000e-005**	**3.0000e-005**	**3.6000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0964**	**0.0964**	**0.0000**	**0.0000**	**0.0972**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0188	0.1718	0.1800	3.0000e-004		8.9000e-003	8.9000e-003		8.3700e-003	8.3700e-003	0.0000	25.4898	25.4898	6.1100e-003	0.0000	25.6424
Total	**0.0188**	**0.1718**	**0.1800**	**3.0000e-004**		**8.9000e-003**	**8.9000e-003**		**8.3700e-003**	**8.3700e-003**	**0.0000**	**25.4898**	**25.4898**	**6.1100e-003**	**0.0000**	**25.6424**

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	2.1200e-003	0.0570	0.0205	2.3000e-004	7.7000e-003	6.4000e-004	8.3400e-003	2.2200e-003	6.1000e-004	2.8300e-003	0.0000	22.2622	22.2622	6.0000e-004	3.3000e-003	23.2600
Worker	0.0151	0.0121	0.1459	4.0000e-004	0.0460	2.4000e-004	0.0463	0.0122	2.2000e-004	0.0125	0.0000	36.5983	36.5983	9.8000e-004	1.0300e-003	36.9298
Total	**0.0172**	**0.0691**	**0.1664**	**6.3000e-004**	**0.0537**	**8.8000e-004**	**0.0546**	**0.0145**	**8.3000e-004**	**0.0153**	**0.0000**	**58.8605**	**58.8605**	**1.5800e-003**	**4.3300e-003**	**60.1898**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.6 Building Construction - 2022

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	0.0188	0.1718	0.1800	3.0000e-004		8.9000e-003	8.9000e-003		8.3700e-003	8.3700e-003	0.0000	25.4898	25.4898	6.1100e-003	0.0000	25.6424
Total	**0.0188**	**0.1718**	**0.1800**	**3.0000e-004**		**8.9000e-003**	**8.9000e-003**		**8.3700e-003**	**8.3700e-003**	**0.0000**	**25.4898**	**25.4898**	**6.1100e-003**	**0.0000**	**25.6424**

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	2.1200e-003	0.0570	0.0205	2.3000e-004	7.7000e-003	6.4000e-004	8.3400e-003	2.2200e-003	6.1000e-004	2.8300e-003	0.0000	22.2622	22.2622	6.0000e-004	3.3000e-003	23.2600
Worker	0.0151	0.0121	0.1459	4.0000e-004	0.0460	2.4000e-004	0.0463	0.0122	2.2000e-004	0.0125	0.0000	36.5983	36.5983	9.8000e-004	1.0300e-003	36.9298
Total	**0.0172**	**0.0691**	**0.1664**	**6.3000e-004**	**0.0537**	**8.8000e-004**	**0.0546**	**0.0145**	**8.3000e-004**	**0.0153**	**0.0000**	**58.8605**	**58.8605**	**1.5800e-003**	**4.3300e-003**	**60.1898**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0865	0.7912	0.8934	1.4800e-003		0.0385	0.0385		0.0362	0.0362	0.0000	127.4926	127.4926	0.0303	0.0000	128.2508
Total	**0.0865**	**0.7912**	**0.8934**	**1.4800e-003**		**0.0385**	**0.0385**		**0.0362**	**0.0362**	**0.0000**	**127.4926**	**127.4926**	**0.0303**	**0.0000**	**128.2508**

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	7.0900e-003	0.2288	0.0942	1.1000e-003	0.0385	1.6100e-003	0.0401	0.0111	1.5400e-003	0.0127	0.0000	106.8369	106.8369	2.7800e-003	0.0158	111.6130
Worker	0.0696	0.0532	0.6675	1.9300e-003	0.2302	1.1400e-003	0.2313	0.0611	1.0500e-003	0.0622	0.0000	177.1027	177.1027	4.4000e-003	4.7300e-003	178.6222
Total	**0.0767**	**0.2820**	**0.7617**	**3.0300e-003**	**0.2687**	**2.7500e-003**	**0.2714**	**0.0722**	**2.5900e-003**	**0.0748**	**0.0000**	**283.9396**	**283.9396**	**7.1800e-003**	**0.0205**	**290.2352**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.6 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0865	0.7912	0.8934	1.4800e-003		0.0385	0.0385		0.0362	0.0362	0.0000	127.4925	127.4925	0.0303	0.0000	128.2507
Total	**0.0865**	**0.7912**	**0.8934**	**1.4800e-003**		**0.0385**	**0.0385**		**0.0362**	**0.0362**	**0.0000**	**127.4925**	**127.4925**	**0.0303**	**0.0000**	**128.2507**

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	7.0900e-003	0.2288	0.0942	1.1000e-003	0.0385	1.6100e-003	0.0401	0.0111	1.5400e-003	0.0127	0.0000	106.8369	106.8369	2.7800e-003	0.0158	111.6130
Worker	0.0696	0.0532	0.6675	1.9300e-003	0.2302	1.1400e-003	0.2313	0.0611	1.0500e-003	0.0622	0.0000	177.1027	177.1027	4.4000e-003	4.7300e-003	178.6222
Total	**0.0767**	**0.2820**	**0.7617**	**3.0300e-003**	**0.2687**	**2.7500e-003**	**0.2714**	**0.0722**	**2.5900e-003**	**0.0748**	**0.0000**	**283.9396**	**283.9396**	**7.1800e-003**	**0.0205**	**290.2352**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.7 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0114	0.1121	0.1604	2.5000e-004		5.6100e-003	5.6100e-003		5.1600e-003	5.1600e-003	0.0000	22.0296	22.0296	7.1200e-003	0.0000	22.2077
Paving	3.9200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0153**	**0.1121**	**0.1604**	**2.5000e-004**		**5.6100e-003**	**5.6100e-003**		**5.1600e-003**	**5.1600e-003**	**0.0000**	**22.0296**	**22.0296**	**7.1200e-003**	**0.0000**	**22.2077**

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	6.3000e-004	4.8000e-004	6.0000e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.5907	1.5907	4.0000e-005	4.0000e-005	1.6044
Total	**6.3000e-004**	**4.8000e-004**	**6.0000e-003**	**2.0000e-005**	**2.0700e-003**	**1.0000e-005**	**2.0800e-003**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**1.5907**	**1.5907**	**4.0000e-005**	**4.0000e-005**	**1.6044**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

3.7 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0114	0.1121	0.1604	2.5000e-004		5.6100e-003	5.6100e-003		5.1600e-003	5.1600e-003	0.0000	22.0295	22.0295	7.1200e-003	0.0000	22.2077
Paving	3.9200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0153**	**0.1121**	**0.1604**	**2.5000e-004**		**5.6100e-003**	**5.6100e-003**		**5.1600e-003**	**5.1600e-003**	**0.0000**	**22.0295**	**22.0295**	**7.1200e-003**	**0.0000**	**22.2077**

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	6.3000e-004	4.8000e-004	6.0000e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.5907	1.5907	4.0000e-005	4.0000e-005	1.6044
Total	**6.3000e-004**	**4.8000e-004**	**6.0000e-003**	**2.0000e-005**	**2.0700e-003**	**1.0000e-005**	**2.0800e-003**	**5.5000e-004**	**1.0000e-005**	**5.6000e-004**	**0.0000**	**1.5907**	**1.5907**	**4.0000e-005**	**4.0000e-005**	**1.6044**

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

3.8 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2588					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1100e-003	0.0143	0.0199	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.8086	2.8086	1.7000e-004	0.0000	2.8128
Total	**0.2609**	**0.0143**	**0.0199**	**3.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**	**0.0000**	**2.8086**	**2.8086**	**1.7000e-004**	**0.0000**	**2.8128**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5900e-003	4.2700e-003	0.0536	1.5000e-004	0.0345	9.0000e-005	0.0346	8.8300e-003	8.0000e-005	8.9200e-003	0.0000	14.2106	14.2106	3.5000e-004	3.8000e-004	14.3326
Total	**5.5900e-003**	**4.2700e-003**	**0.0536**	**1.5000e-004**	**0.0345**	**9.0000e-005**	**0.0346**	**8.8300e-003**	**8.0000e-005**	**8.9200e-003**	**0.0000**	**14.2106**	**14.2106**	**3.5000e-004**	**3.8000e-004**	**14.3326**

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

3.8 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2588					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1100e-003	0.0143	0.0199	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.8086	2.8086	1.7000e-004	0.0000	2.8128
Total	**0.2609**	**0.0143**	**0.0199**	**3.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.8000e-004**	**7.8000e-004**	**0.0000**	**2.8086**	**2.8086**	**1.7000e-004**	**0.0000**	**2.8128**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5900e-003	4.2700e-003	0.0536	1.5000e-004	0.0345	9.0000e-005	0.0346	8.8300e-003	8.0000e-005	8.9200e-003	0.0000	14.2106	14.2106	3.5000e-004	3.8000e-004	14.3326
Total	**5.5900e-003**	**4.2700e-003**	**0.0536**	**1.5000e-004**	**0.0345**	**9.0000e-005**	**0.0346**	**8.8300e-003**	**8.0000e-005**	**8.9200e-003**	**0.0000**	**14.2106**	**14.2106**	**3.5000e-004**	**3.8000e-004**	**14.3326**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9736	2.8181	11.5825	0.0253	1.6573	0.0436	1.7009	0.4535	0.0414	0.4949	0.0000	2,341.1612	2,341.1612	0.1747	0.1530	2,391.1187
Unmitigated	1.9736	2.8181	11.5825	0.0253	1.6573	0.0436	1.7009	0.4535	0.0414	0.4949	0.0000	2,341.1612	2,341.1612	0.1747	0.1530	2,391.1187

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Convenience Market (24 Hour)	0.00	0.00	0.00		
Fast Food Restaurant with Drive Thru	0.00	0.00	0.00		
Gasoline/Service Station	5,326.00	5,326.00	5326.00	3,528,368	3,528,368
Mobile Home Park	237.60	237.60	237.60	678,819	678,819
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	5,563.60	5,563.60	5,563.60	4,207,187	4,207,187

4.3 Trip Type Information

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

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	14.70	6.60	6.60	33.00	48.00	19.00	21	51	28
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Convenience Market (24 Hour)	14.70	6.60	6.60	0.90	80.10	19.00	24	15	61
Fast Food Restaurant with Drive	14.70	6.60	6.60	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	0.00	1.82	0.00	0.00	100.00	0.00	100	0	0
Mobile Home Park	14.70	6.60	6.60	62.00	19.00	19.00	58	38	4
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	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	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
City Park	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Convenience Market (24 Hour)	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Fast Food Restaurant with Drive Thru	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Gasoline/Service Station	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Mobile Home Park	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000
Other Asphalt Surfaces	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Parking Lot	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	263.6075	263.6075	0.0000	0.0000	263.6075
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	287.2478	287.2478	0.0000	0.0000	287.2478
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	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
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
Convenience Market (24 Hour)	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
Fast Food Restaurant with Drive Thru	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
Gasoline/Service Station	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
Mobile Home 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
Parking Lot	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	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
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
Convenience Market (24 Hour)	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
Fast Food Restaurant with Drive Thru	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
Gasoline/Service Station	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
Mobile Home 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
Parking Lot	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	268353	42.7248	0.0000	0.0000	42.7248
City Park	0	0.0000	0.0000	0.0000	0.0000
Convenience Market (24 Hour)	165248	26.3093	0.0000	0.0000	26.3093
Fast Food Restaurant with Drive Thru	384317	61.1874	0.0000	0.0000	61.1874
Gasoline/Service Station	68681.5	10.9349	0.0000	0.0000	10.9349
Mobile Home Park	891977	142.0125	0.0000	0.0000	142.0125
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	25620	4.0790	0.0000	0.0000	4.0790
Total		**287.2478**	**0.0000**	**0.0000**	**287.2478**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	249793	39.7698	0.0000	0.0000	39.7698
City Park	-18560.5	-2.9550	0.0000	0.0000	-2.9550
Convenience Market (24 Hour)	146688	23.3543	0.0000	0.0000	23.3543
Fast Food Restaurant with Drive Thru	365756	58.2324	0.0000	0.0000	58.2324
Gasoline/Service Station	50121	7.9798	0.0000	0.0000	7.9798
Mobile Home Park	873416	139.0574	0.0000	0.0000	139.0574
Other Asphalt Surfaces	-18560.5	-2.9550	0.0000	0.0000	-2.9550
Parking Lot	7059.5	1.1240	0.0000	0.0000	1.1240
Total		**263.6075**	**0.0000**	**0.0000**	**263.6075**

6.0 Area Detail

6.1 Mitigation Measures Area

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	0.6087	7.5500e-003	0.6559	3.0000e-005		3.6300e-003	3.6300e-003		3.6300e-003	3.6300e-003	0.0000	1.0718	1.0718	1.0400e-003	0.0000	1.0978
Unmitigated	0.6087	7.5500e-003	0.6559	3.0000e-005		3.6300e-003	3.6300e-003		3.6300e-003	3.6300e-003	0.0000	1.0718	1.0718	1.0400e-003	0.0000	1.0978

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0333					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0199	7.5500e-003	0.6559	3.0000e-005		3.6300e-003	3.6300e-003		3.6300e-003	3.6300e-003	0.0000	1.0718	1.0718	1.0400e-003	0.0000	1.0978
Total	**0.6087**	**7.5500e-003**	**0.6559**	**3.0000e-005**		**3.6300e-003**	**3.6300e-003**		**3.6300e-003**	**3.6300e-003**	**0.0000**	**1.0718**	**1.0718**	**1.0400e-003**	**0.0000**	**1.0978**

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	0.0333					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0199	7.5500e-003	0.6559	3.0000e-005		3.6300e-003	3.6300e-003		3.6300e-003	3.6300e-003	0.0000	1.0718	1.0718	1.0400e-003	0.0000	1.0978
Total	**0.6087**	**7.5500e-003**	**0.6559**	**3.0000e-005**		**3.6300e-003**	**3.6300e-003**		**3.6300e-003**	**3.6300e-003**	**0.0000**	**1.0718**	**1.0718**	**1.0400e-003**	**0.0000**	**1.0978**

7.0 Water Detail

7.1 Mitigation Measures Water

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	19.5084	0.1427	3.3700e-003	24.0807
Unmitigated	19.5084	0.1427	3.3700e-003	24.0807

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

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000
Gasoline/Service Station	3.285 / 1.095	9.7891	0.1070	2.5300e-003	13.2184
Mobile Home Park	1.095 / 4.015	9.7193	0.0357	8.4000e-004	10.8624
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**19.5084**	**0.1427**	**3.3700e-003**	**24.0807**

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 / 0	0.0000	0.0000	0.0000	0.0000
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Convenience Market (24 Hour)	0 / 0	0.0000	0.0000	0.0000	0.0000
Fast Food Restaurant with Drive Thru	0 / 0	0.0000	0.0000	0.0000	0.0000
Gasoline/Service Station	3.285 / 1.095	9.7891	0.1070	2.5300e-003	13.2184
Mobile Home Park	1.095 / 4.015	9.7193	0.0357	8.4000e-004	10.8624
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**19.5084**	**0.1427**	**3.3700e-003**	**24.0807**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	36.8246	2.1763	0.0000	91.2314
Unmitigated	36.8246	2.1763	0.0000	91.2314

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	52.68	10.6936	0.6320	0.0000	26.4929
City Park	0.96	0.1949	0.0115	0.0000	0.4828
Convenience Market (24 Hour)	38.8	7.8761	0.4655	0.0000	19.5126
Fast Food Restaurant with Drive Thru	35.02	7.1087	0.4201	0.0000	17.6116
Gasoline/Service Station	13.47	2.7343	0.1616	0.0000	6.7741
Mobile Home Park	40.48	8.2171	0.4856	0.0000	20.3575
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**36.8246**	**2.1763**	**0.0000**	**91.2314**

Love's Truck Stop Apple Valley - San Bernardino-Mojave Desert County, Annual

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

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	52.68	10.6936	0.6320	0.0000	26.4929
City Park	0.96	0.1949	0.0115	0.0000	0.4828
Convenience Market (24 Hour)	38.8	7.8761	0.4655	0.0000	19.5126
Fast Food Restaurant with Drive Thru	35.02	7.1087	0.4201	0.0000	17.6116
Gasoline/Service Station	13.47	2.7343	0.1616	0.0000	6.7741
Mobile Home Park	40.48	8.2171	0.4856	0.0000	20.3575
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**36.8246**	**2.1763**	**0.0000**	**91.2314**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Mobile Source Emissions Summary

		TOG	ROG	Nox	CO	SOx	PM2.5	PM10	CO_2	CH_4	N_2O	HFC	CO2e
2024	LBS/DAY	22.4	21.6	10.6	0.0	0.1	0.2	0.6	10528.4	1.2	0.9	0.0	0.0
	TPY	4.1	3.9	1.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	MT/YR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1743.1	0.2	0.1	0.0	1791.1

		TOG	ROG	Nox	CO	SOx	PM2.5	PM10	CO_2	CH_4	N_2O	HFC	CO2e
2030	LBS/DAY	16.4	15.8	8.0	0.0	0.1	0.2	0.6	9329.4	0.9	0.7	0.0	0.0
	TPY	3.0	2.9	1.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	MT/YR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1544.6	0.1	0.1	0.0	1583.2

		TOG	ROG	Nox	CO	SOx	PM2.5	PM10	CO_2	CH_4	N_2O	HFC	CO2e
2045	LBS/DAY	10.2	9.9	6.7	0.0	0.1	0.2	0.5	8254.8	0.5	0.6	0.0	0.0
	TPY	1.9	1.8	1.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	MT/YR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1366.7	0.1	0.1	0.0	1399.5

2024 Mobile Emissions

Metrics

	ADT	Annual VMT	Daily VM1 fleet	
Truck Stop	5,326	3,528,368	9,667	fleet average
RV park	238	678,819	1,860	fleet average
	5,564	4,207,187	11,527	

conversions

days/yr	365
lb to t	0.00050
lb to mt	0.00045
g to lb	0.0022

EFs and Fleet Mix From Caleemod 2022

Operational Year	Vehicle Type	Fleet %	TOG RUNEX (g/VMT)	TOG IDLEX (g/ADT)	TOG STREX (g/VMT)	TOG DIURN (g/ADT)	TOG HOTSOAK (g/ADT)	TOG RUNLOSS (g/ADT)	ROG RUNEX (g/VMT)	ROG IDLEX (g/ADT)	ROG STREX (g/VMT)	ROG DIURN (g/ADT)	ROG HOTSOAK (g/ADT)	ROG RUNLOSS (g/ADT)	NOx RUNEX (g/VMT)	NOx IDLEX (g/ADT)	NOx STREX (g/VMT)	CO RUNEX (g/VMT)	CO IDLEX (g/ADT)	CO STREX (g/VMT)	SOx RUNEX (g/VMT)	SOx IDLEX (g/ADT)	SOx STREX (g/VMT)	PM2.5 RUNEX (g/VMT)	PM2.5 IDLEX (g/ADT)	PM2.5 STREX (g/VMT)	PM2.5 PMTW (g/VMT)	PM2.5 PMBW (g/VMT)	PM10 RUNEX (g/VMT)	PM10 IDLEX (g/ADT)	PM10 STREX (g/VMT)	PM10 PMTW (g/VMT)	PM10 PMBW (g/VMT)	CO_2 RUNEX (g/VMT)	CO_2 IDLEX (g/ADT)	CO_2 STREX (g/VMT)	CH_4 RUNEX (g/VMT)	CH_4 IDLEX (g/ADT)	CH_4 STREX (g/VMT)	N_2O RUNEX (g/VMT)	N_2O IDLEX (g/ADT)	N_2O STREX (g/VMT)	HFC RUNEX (g/VMT)
2024	HHDT	1.9054%		0																																								
2024	LDA	48.6643%		0						0						0			0				0			0						0				0			0			0	
2024	LDT1	4.5873%		0						0						0			0				0			0						0				0			0			0	
2024	LDT2	20.4969%		0						0						0			0				0			0						0				0			0			0	
2024	LHDT1	3.5385%																																										
2024	LHDT2	0.9470%																																										
2024	MCY	2.6590%		0						0						0			0				0			0						0				0			0			0	
2024	MDV	15.8503%		0						0						0			0				0			0						0				0			0			0	
2024	MH	0.6395%		0						0						0			0		2.5		0			0						0				0			0			0	
2024	MHDT	0.5317%																																										
2024	OBUS	0.0505%																																										
2024	SBUS	0.1059%																																										
2024	UBUS	0.0237%		0						0						0			0				0			0						0				0			0			0	
		metric	VMT	ADT	ADT	ADT	ADT	ADT	VMT	ADT	ADT	ADT	ADT	ADT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	VMT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	ADT	ADT	VMT

BW and TW are g/mile, not g/trip

DAILY

EF (in g/ADT or g/VMT) * ADT/VMT * g/lb conv

	ADT	Daily VMT	TOG RUNEX (lb/d)	TOG IDLEX (lb/d)	TOG STREX (lb/d)	TOG DIURN (lb/d)	TOG HOTSOAK (lb/d)	TOG RUNLOSS (lb/d)	ROG RUNEX (lb/d)	ROG IDLEX (lb/d)	ROG STREX (lb/d)	ROG DIURN (lb/d)	ROG HOTSOAK (lb/d)	ROG RUNLOSS (lb/d)	NOx RUNEX (lb/d)	NOx IDLEX (lb/d)	NOx STREX (lb/d)	CO RUNEX (lb/d)	CO IDLEX (lb/d)	CO STREX (lb/d)	SOx RUNEX (lb/d)	SOx IDLEX (lb/d)	SOx STREX (lb/d)	PM2.5 RUNEX (lb/d)	PM2.5 IDLEX (lb/d)	PM2.5 STREX (lb/d)	PM2.5 PMTW (lb/d)	PM2.5 PMBW (lb/d)	PM10 RUNEX (lb/d)	PM10 IDLEX (lb/d)	PM10 STREX (lb/d)	PM10 PMTW (lb/d)	PM10 PMBW (lb/d)	CO_2 RUNEX (lb/d)	CO_2 IDLEX (lb/d)	CO_2 STREX (lb/d)	CH_4 RUNEX (lb/d)	CH_4 IDLEX (lb/d)	CH_4 STREX (lb/d)	N_2O RUNEX (lb/d)	N_2O IDLEX (lb/d)	N_2O STREX (lb/d)	HFC RUNEX (lb/d)
HHDT	106.0	219.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.7	1.3	0.6	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	739.7	245.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
LDA	2707.5	5609.3	0.2	0.0	2.0	2.0	0.5	1.0	0.1	0.0	1.9	2.0	0.5	1.0	0.5	0.0	1.5	8.6	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	3340.6	0.0	401.4	0.0	0.0	0.4	0.1	0.0	0.2	0.0
LDT1	255.2	528.8	0.1	0.0	0.5	0.6	0.1	0.3	0.0	0.0	0.4	0.6	0.1	0.3	0.2	0.0	0.3	2.3	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	402.7	0.0	51.9	0.0	0.0	0.1	0.0	0.0	0.0	0.0
LDT2	1140.4	2362.6	0.1	0.0	1.1	0.9	0.2	0.5	0.1	0.0	1.0	0.9	0.2	0.5	0.4	0.0	0.9	4.5	0.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1833.1	0.0	221.6	0.0	0.0	0.2	0.0	0.0	0.1	0.0
LHDT1	196.9	407.9	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	1.1	0.0	0.2	0.9	0.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	516.2	4.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LHDT2	52.7	109.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.2	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MCY	147.9	306.5	1.0	0.0	0.5	0.9	1.2	1.2	0.8	0.0	0.5	0.9	1.2	1.2	0.4	0.0	0.1	10.1	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	130.0	0.0	17.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0
MDV	881.8	1827.0	0.1	0.0	1.2	1.0	0.2	0.6	0.1	0.0	1.1	1.0	0.2	0.6	0.6	0.0	0.9	4.7	0.0	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1755.0	0.0	209.8	0.0	0.0	0.2	0.0	0.0	0.1	0.0
MH	35.6	73.7	0.0	0.0	0.0	3.1	0.7	0.0	0.0	0.0	0.0	3.1	0.7	0.0	0.3	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	253.6	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MHDT	29.6	61.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	167.7	10.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OBUS	2.8	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.6	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SBUS	5.9	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UBUS	1.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUM	5564	11527	1.6	0.1	5.4	8.5	3.1	3.7	1.2	0.1	5.0	8.5	3.1	3.7	4.8	1.4	4.5	31.8	1.7	44.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.2	0.3	9352.0	264.2	912.2	0.2	0.0	1.0	0.4	0.0	0.4	0.0

ANNUAL

tpy for CPs
mt/yr for GHG
Lbs/day x 365 x lb/ton or lb/MT conv

	ADT	Annual VMT	TOG RUNEX (tpy)	TOG IDLEX (tpy)	TOG STREX (tpy)	TOG DIURN (tpy)	TOG HOTSOAK (tpy)	TOG RUNLOSS (tpy)	ROG RUNEX (tpy)	ROG IDLEX (tpy)	ROG STREX (tpy)	ROG DIURN (tpy)	ROG HOTSOAK (tpy)	ROG RUNLOSS (tpy)	NOx RUNEX (tpy)	NOx IDLEX (tpy)	NOx STREX (tpy)	CO RUNEX (tpy)	CO IDLEX (tpy)	CO STREX (tpy)	SOx RUNEX (tpy)	SOx IDLEX (tpy)	SOx STREX (tpy)	PM2.5 RUNEX (tpy)	PM2.5 IDLEX (tpy)	PM2.5 STREX (tpy)	PM2.5 PMTW (tpy)	PM2.5 PMBW (tpy)	PM10 RUNEX (tpy)	PM10 IDLEX (tpy)	PM10 STREX (tpy)	PM10 PMTW (tpy)	PM10 PMBW (tpy)	CO_2 RUNEX (mt/yr)	CO_2 IDLEX (mt/yr)	CO_2 STREX (mt/yr)	CH_4 RUNEX (mt/yr)	CH_4 IDLEX (mt/yr)	CH_4 STREX (mt/yr)	N_2O RUNEX (mt/yr)	N_2O IDLEX (mt/yr)	N_2O STREX (mt/yr)	HFC RUNEX (mt/yr)
HHDT	38692.7	80162.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	122.5	40.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LDA	988233.3	2047399.3	0.0	0.0	0.4	0.4	0.1	0.2	0.0	0.0	0.3	0.4	0.1	0.2	0.1	0.0	0.3	1.6	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	553.1	0.0	66.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
LDT1	93155.8	192998.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	0.0	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LDT2	416233.2	862342.5	0.0	0.0	0.2	0.2	0.0	0.1	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.2	0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	303.5	0.0	36.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LHDT1	71855.8	148869.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.5	0.7	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LHDT2	19230.4	39841.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.9	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MCY	53997.2	111870.2	0.2	0.0	0.1	0.2	0.2	0.2	0.2	0.0	0.1	0.2	0.2	0.2	0.1	0.0	0.0	1.8	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.5	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MDV	321874.7	666852.6	0.0	0.0	0.2	0.2	0.0	0.1	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.2	0.9	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	290.6	0.0	34.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MH	12987.3	26906.9	0.0	0.0	0.0	0.6	0.1	0.0	0.0	0.0	0.0	0.6	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MHDT	10797.2	22369.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8	1.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OBUS	1024.9	2123.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SBUS	2150.4	4455.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UBUS	481.1	996.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUM			0.3	0.0	1.0	1.6	0.6	0.7	0.2	0.0	0.9	1.6	0.6	0.7	0.9	0.3	0.8	5.8	0.3	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1548.3	43.7	151.0	0.0	0.0	0.2	0.1	0.0	0.1	0.0

2030 Mobile Emissions

Metrics

	ADT	Annual VMT	Daily VMT	fleet
Truck Stop	5,326	3,528,368	9,667	fleet average
RV park	238	678,819	1,860	fleet average
total	5,564	4,207,187	11,527	

conversions	
days/yr	365
lb to t	0.00050
lb to mt	0.00045
g to lb	0.0022

EFs and Fleet Mix From Caleemod 2022

Operational Year	Vehicle Type	Fleet %	TOG RUNEX (g/mi)	TOG IDLEX (g/trip)	TOG STREX (g/mi)	TOG DIURN (g/trip)	TOG HOTSOAK (g/trip)	TOG RUNLOSS (g/mi)	ROG RUNEX (g/mi)	ROG IDLEX (g/trip)	ROG STREX (g/mi)	ROG DIURN (g/trip)	ROG HOTSOAK (g/trip)	ROG RUNLOSS (g/mi)	NOx RUNEX (g/mi)	NOx IDLEX (g/trip)	NOx STREX (g/mi)	CO RUNEX (g/mi)	CO IDLEX (g/trip)	CO STREX (g/mi)	SOx RUNEX (g/mi)	SOx IDLEX (g/trip)	SOx STREX (g/mi)	PM2.5 RUNEX (g/mi)	PM2.5 IDLEX (g/trip)	PM2.5 STREX (g/mi)	PM2.5 PMTW (g/trip)	PM2.5 PMBW (g/trip)	PM10 RUNEX (g/mi)	PM10 IDLEX (g/trip)	PM10 STREX (g/mi)	PM10 PMTW (g/trip)	PM10 PMBW (g/trip)	CO_2 RUNEX (g/mi)	CO_2 IDLEX (g/trip)	CO_2 STREX (g/mi)	CH_4 RUNEX (g/mi)	CH_4 IDLEX (g/trip)	CH_4 STREX (g/mi)	N_2O RUNEX (g/mi)	N_2O IDLEX (g/trip)	N_2O STREX (g/mi)	HFC RUNEX (g/mi)
2030	HHDT	2.1655%	"	0	"	"	"	"	"	"	0	"	"	"	"	"	"	"	"	0	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	"	0	"	"	"	0	"	"	"	0	"
2030	LDA	48.2973%	"	0	"	"	"	"	"	0	"	"	"	"	"	"	"	0	"	"	0	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	0	"	"	"	0	"	"	"	0	"
2030	LDT1	3.8456%	"	0	"	"	"	"	"	0	"	"	"	"	"	"	"	0	"	"	0	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	0	"	"	"	0	"	"	"	0	"
2030	LDT2	22.5601%	"	0	"	"	"	"	"	0	"	"	"	"	"	"	"	0	"	"	0	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	0	"	"	"	0	"	"	"	0	"
2030	LHDT1	3.1616%	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	0	"	"	"	0	"	"	"	0	"
2030	LHDT2	0.8850%	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	0	"	"	"	0	"	"	"	0	"
2030	MCY	2.4881%	"	0	"	"	"	"	"	"	"	"	"	"	"	"	"	0	"	"	0	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	0	"	"	"	0	"	"	"	0	"
2030	MDV	15.3780%	"	0	"	"	"	"	"	0	"	"	"	"	"	"	"	0	"	"	0	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	0	"	"	"	0	"	"	"	0	"
2030	MH	0.4594%	"	0	"	"	"	"	"	0	"	"	"	"	"	"	"	0	"	"	0	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	0	"	"	"	0	"	"	"	0	"
2030	MHDT	0.5811%	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	"	"	"	"	"	"	"	"	"	"
2030	OBUS	0.0451%	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	"	"	"	"	"	"	"	"	0	"
2030	SBUS	0.1099%	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3.3	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	"	"	"	"	"	"	"	"	0	"
2030	UBUS	0.0234%	"	0	"	"	"	"	"	0	"	"	"	"	"	"	"	0	"	"	0	"	"	0	"	"	0	"	"	"	"	"	0	"	"	"	"	0	"	"	"	0	"	"	"	0	"
		metric	VMT	ADT	ADT	ADT	ADT	ADT	VMT	ADT	ADT	ADT	ADT	ADT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	VMT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	VMT	VMT	ADT	ADT	VMT	ADT	ADT	VMT

BW and TW are g/mile, not g/trip

DAILY		ADT	Daily VMT	TOG RUNEX (lb/d)	TOG IDLEX (lb/d)	TOG STREX (lb/d)	TOG DIURN (lb/d)	TOG HOTSOAK (lb/d)	TOG RUNLOSS (lb/d)	ROG RUNEX (lb/d)	ROG IDLEX (lb/d)	ROG STREX (lb/d)	ROG DIURN (lb/d)	ROG HOTSOAK (lb/d)	ROG RUNLOSS (lb/d)	NOx RUNEX (lb/d)	NOx IDLEX (lb/d)	NOx STREX (lb/d)	CO RUNEX (lb/d)	CO IDLEX (lb/d)	CO STREX (lb/d)	SOx RUNEX (lb/d)	SOx IDLEX (lb/d)	SOx STREX (lb/d)	PM2.5 RUNEX (lb/d)	PM2.5 IDLEX (lb/d)	PM2.5 STREX (lb/d)	PM2.5 PMTW (lb/d)	PM2.5 PMBW (lb/d)	PM10 RUNEX (lb/d)	PM10 IDLEX (lb/d)	PM10 STREX (lb/d)	PM10 PMTW (lb/d)	PM10 PMBW (lb/d)	CO_2 RUNEX (lb/d)	CO_2 IDLEX (lb/d)	CO_2 STREX (lb/d)	CH_4 RUNEX (lb/d)	CH_4 IDLEX (lb/d)	CH_4 STREX (lb/d)	N_2O RUNEX (lb/d)	N_2O IDLEX (lb/d)	N_2O STREX (lb/d)	HFC RUNEX (lb/d)
EF (in g/ADT or g/VMT) * ADT/VMT * g/lb conv	HHDT	120.5	249.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.7	1.4	0.6	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	727.2	247.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
	LDA	2687.1	5567.0	0.1	0.0	1.3	1.7	0.4	0.8	0.1	0.0	1.2	1.7	0.4	0.8	0.3	0.0	1.1	6.2	0.0	12.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	2896.1	0.0	345.0	0.0	0.0	0.3	0.0	0.0	0.2	0.0
	LDT1	214.0	443.3	0.0	0.0	0.2	0.4	0.1	0.2	0.0	0.0	0.2	0.4	0.1	0.2	0.1	0.0	0.2	1.1	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	304.7	0.0	37.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LDT2	1255.2	2600.4	0.1	0.0	0.8	0.8	0.2	0.4	0.0	0.0	0.7	0.8	0.2	0.4	0.3	0.0	0.7	3.7	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1801.6	0.0	213.9	0.0	0.0	0.2	0.0	0.0	0.1	0.0
	LHDT1	175.9	364.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.1	0.5	0.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	392.4	3.4	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LHDT2	49.2	102.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	124.1	1.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MCY	138.4	286.8	0.8	0.0	0.4	0.8	1.1	1.1	0.6	0.0	0.4	0.8	1.1	1.1	0.4	0.0	0.0	7.7	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	119.5	0.0	14.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0
	MDV	855.6	1772.6	0.1	0.0	0.7	0.8	0.2	0.4	0.0	0.0	0.7	0.8	0.2	0.4	0.3	0.0	0.6	3.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1510.0	0.0	178.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0
	MH	25.6	53.0	0.0	0.0	0.0	1.7	0.4	0.0	0.0	0.0	0.0	1.7	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	177.7	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MHDT	32.3	67.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	157.8	10.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OBUS	2.5	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SBUS	6.1	12.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.3	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	UBUS	1.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUM	5564	11527	1.1	0.2	3.6	6.1	2.3	3.1	0.9	0.1	3.3	6.1	2.3	3.1	3.0	1.5	3.4	22.6	1.9	31.9	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.2	0.3	8265.1	266.7	797.5	0.2	0.0	0.7	0.3	0.0	0.3	0.0

ANNUAL		ADT	Annual VMT	TOG RUNEX (tpy)	TOG IDLEX (tpy)	TOG STREX (tpy)	TOG DIURN (tpy)	TOG HOTSOAK (tpy)	TOG RUNLOSS (tpy)	ROG RUNEX (tpy)	ROG IDLEX (tpy)	ROG STREX (tpy)	ROG DIURN (tpy)	ROG HOTSOAK (tpy)	ROG RUNLOSS (tpy)	NOx RUNEX (tpy)	NOx IDLEX (tpy)	NOx STREX (tpy)	CO RUNEX (tpy)	CO IDLEX (tpy)	CO STREX (tpy)	SOx RUNEX (tpy)	SOx IDLEX (tpy)	SOx STREX (tpy)	PM2.5 RUNEX (tpy)	PM2.5 IDLEX (tpy)	PM2.5 STREX (tpy)	PM2.5 PMTW (tpy)	PM2.5 PMBW (tpy)	PM10 RUNEX (tpy)	PM10 IDLEX (tpy)	PM10 STREX (tpy)	PM10 PMTW (tpy)	PM10 PMBW (tpy)	CO_2 RUNEX (mt/yr)	CO_2 IDLEX (mt/yr)	CO_2 STREX (mt/yr)	CH_4 RUNEX (mt/yr)	CH_4 IDLEX (mt/yr)	CH_4 STREX (mt/yr)	N_2O RUNEX (mt/yr)	N_2O IDLEX (mt/yr)	N_2O STREX (mt/yr)	HFC RUNEX (mt/yr)
tpy for CPs	HHDT	43974.8	91105.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	120.4	41.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
mt/yr for GHG	LDA	980780.4	2031958.4	0.0	0.0	0.2	0.3	0.1	0.2	0.0	0.0	0.2	0.3	0.1	0.2	0.1	0.0	0.2	1.1	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	479.5	0.0	57.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lbs/day x 365 x lb/ton or lb/MT conv	LDT1	78092.4	161790.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.4	0.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LDT2	458130.9	949145.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.7	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	298.3	0.0	35.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LHDT1	64202.7	133013.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.0	0.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LHDT2	17971.4	37232.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MCY	50525.7	104678.0	0.1	0.0	0.1	0.1	0.2	0.2	0.1	0.0	0.1	0.1	0.2	0.2	0.1	0.0	0.0	1.4	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.8	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MDV	312283.5	646981.9	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	250.0	0.0	29.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MH	9329.7	19329.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MHDT	11800.6	24448.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.1	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OBUS	915.0	1895.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SBUS	2231.7	4623.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	UBUS	475.3	984.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUM			0.2	0.0	0.7	1.1	0.4	0.6	0.2	0.0	0.6	1.1	0.4	0.6	0.5	0.3	0.6	4.1	0.4	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1368.4	44.2	132.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0

2045 Mobile Emissions

Metrics

	ADT	Annual VMT	Daily VMT	fleet
Truck Stop	5,326	3,528,368	9,667	fleet average
RV park	238	678,819	1,860	fleet average
total	5,564	4,207,187	11,527	

conversions	
days/yr	365
lb to t	0.00050
lb to mt	0.00045
g to lb	0.0022

EFs and Fleet Mix From Caleemod 2022

Operational Year	Vehicle Type	Fleet %	TOG RUNEX (g/mi)	TOG IDLEX (g/veh)	TOG STREX (g/veh)	TOG DIURN (g/veh)	TOG HOTSOAK (g/veh)	TOG RUNLOSS (g/veh)	ROG RUNEX (g/mi)	ROG IDLEX (g/veh)	ROG STREX (g/veh)	ROG DIURN (g/veh)	ROG HOTSOAK (g/veh)	ROG RUNLOSS (g/veh)	NOx RUNEX (g/mi)	NOx IDLEX (g/veh)	NOx STREX (g/veh)	CO RUNEX (g/mi)	CO IDLEX (g/veh)	CO STREX (g/veh)	SOx RUNEX (g/mi)	SOx IDLEX (g/veh)	SOx STREX (g/veh)	PM2.5 RUNEX (g/mi)	PM2.5 IDLEX (g/veh)	PM2.5 STREX (g/veh)	PM2.5 PMTW (g/mi)	PM2.5 PMBW (g/mi)	PM10 RUNEX (g/mi)	PM10 IDLEX (g/veh)	PM10 STREX (g/veh)	PM10 PMTW (g/mi)	PM10 PMBW (g/mi)	CO_2 RUNEX (g/mi)	CO_2 IDLEX (g/veh)	CO_2 STREX (g/veh)	CH_4 RUNEX (g/mi)	CH_4 IDLEX (g/veh)	CH_4 STREX (g/veh)	N_2O RUNEX (g/mi)	N_2O IDLEX (g/veh)	N_2O STREX (g/veh)	HFC RUNEX (g/mi)
2045	HHDT	3.0749%			0																																							
2045	LDA	47.4299%		0						0						0			0			0	0	0	0				0	0				0			0			0			0	
2045	LDT1	3.0376%		0						0						0			0			0	0						0					0			0			0			0	
2045	LDT2	24.3904%		0						0						0			0			0	0						0	0				0			0			0			0	
2045	LHDT1	2.8026%																					0	0						0														
2045	LHDT2	0.7815%																					0	0						0														
2045	MCY	2.2319%		0						0						0			0				0	0						0					0			0			0			0	
2045	MDV	15.1077%		0						0						0			0				0	0						0					0			0			0			0	
2045	MH	0.2431%		0						0						0			0				0	0						0					0			0			0			0	
2045	MHDT	0.7267%																					0	0						0														
2045	OBUS	0.0375%																					0	0						0														
2045	SBUS	0.1052%																					0	0						0					1.6									
2045	UBUS	0.0310%	0	0		0	0	0					0			0			0				0	0				0	0						0	0		0						
		metric	VMT	ADT	ADT	ADT	ADT	ADT	VMT	ADT	ADT	ADT	ADT	ADT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	VMT	VMT	ADT	ADT	VMT	VMT	VMT	ADT	ADT	VMT	ADT	ADT	VMT	ADT	ADT	VMT

BW and TW are g/mile, not g/trip

DAILY		ADT	Daily VMT	TOG RUNEX (lb/d)	TOG IDLEX (lb/d)	TOG STREX (lb/d)	TOG DIURN (lb/d)	TOG HOTSOAK (lb/d)	TOG RUNLOSS (lb/d)	ROG RUNEX (lb/d)	ROG IDLEX (lb/d)	ROG STREX (lb/d)	ROG DIURN (lb/d)	ROG HOTSOAK (lb/d)	ROG RUNLOSS (lb/d)	NOx RUNEX (lb/d)	NOx IDLEX (lb/d)	NOx STREX (lb/d)	CO RUNEX (lb/d)	CO IDLEX (lb/d)	CO STREX (lb/d)	SOx RUNEX (lb/d)	SOx IDLEX (lb/d)	SOx STREX (lb/d)	PM2.5 RUNEX (lb/d)	PM2.5 IDLEX (lb/d)	PM2.5 STREX (lb/d)	PM2.5 PMTW (lb/d)	PM2.5 PMBW (lb/d)	PM10 RUNEX (lb/d)	PM10 IDLEX (lb/d)	PM10 STREX (lb/d)	PM10 PMTW (lb/d)	PM10 PMBW (lb/d)	CO_2 RUNEX (lb/d)	CO_2 IDLEX (lb/d)	CO_2 STREX (lb/d)	CH_4 RUNEX (lb/d)	CH_4 IDLEX (lb/d)	CH_4 STREX (lb/d)	N_2O RUNEX (lb/d)	N_2O IDLEX (lb/d)	N_2O STREX (lb/d)	HFC RUNEX (lb/d)
EF (in g/ADT or	HHDT	171.1	354.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.8	2.1	0.7	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	876.4	330.6	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
g/VMT) * ADT/VMT	LDA	2638.8	5467.0	0.0	0.0	0.7	1.1	0.2	0.6	0.0	0.0	0.6	1.1	0.2	0.6	0.2	0.0	0.8	4.8	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2509.3	0.0	288.9	0.0	0.0	0.2	0.0	0.0	0.1	0.0
* g/lb conv	LDT1	169.0	350.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	205.9	0.0	23.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LDT2	1357.0	2811.4	0.0	0.0	0.5	0.7	0.1	0.4	0.0	0.0	0.5	0.7	0.1	0.4	0.1	0.0	0.6	3.2	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1750.2	0.0	202.5	0.0	0.0	0.1	0.0	0.0	0.1	0.0
	LHDT1	155.9	323.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	191.3	2.8	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LHDT2	43.5	90.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.4	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MCY	124.2	257.3	0.5	0.0	0.3	0.6	1.0	1.0	0.4	0.0	0.3	0.6	1.0	1.0	0.3	0.0	0.0	5.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	104.4	0.0	10.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	MDV	840.5	1741.4	0.0	0.0	0.4	0.5	0.1	0.3	0.0	0.0	0.3	0.5	0.1	0.3	0.1	0.0	0.4	2.1	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1295.2	0.0	149.6	0.0	0.0	0.1	0.0	0.0	0.1	0.0
	MH	13.5	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.9	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MHDT	40.4	83.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	112.4	11.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OBUS	2.1	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SBUS	5.9	12.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	UBUS	1.7	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUM	5564	11527	0.7	0.2	1.9	3.5	1.5	2.4	0.5	0.2	1.8	3.5	1.5	2.4	1.7	2.2	2.7	16.0	2.8	21.4	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.2	0.3	7225.3	349.5	680.0	0.1	0.0	0.4	0.3	0.1	0.3	0.0

ANNUAL		ADT	Annual VMT	TOG RUNEX (tpy)	TOG IDLEX (tpy)	TOG STREX (tpy)	TOG DIURN (tpy)	TOG HOTSOAK (tpy)	TOG RUNLOSS (tpy)	ROG RUNEX (tpy)	ROG IDLEX (tpy)	ROG STREX (tpy)	ROG DIURN (tpy)	ROG HOTSOAK (tpy)	ROG RUNLOSS (tpy)	NOx RUNEX (tpy)	NOx IDLEX (tpy)	NOx STREX (tpy)	CO RUNEX (tpy)	CO IDLEX (tpy)	CO STREX (tpy)	SOx RUNEX (tpy)	SOx IDLEX (tpy)	SOx STREX (tpy)	PM2.5 RUNEX (tpy)	PM2.5 IDLEX (tpy)	PM2.5 STREX (tpy)	PM2.5 PMTW (tpy)	PM2.5 PMBW (tpy)	PM10 RUNEX (tpy)	PM10 IDLEX (tpy)	PM10 STREX (tpy)	PM10 PMTW (tpy)	PM10 PMBW (tpy)	CO_2 RUNEX (mt/yr)	CO_2 IDLEX (mt/yr)	CO_2 STREX (mt/yr)	CH_4 RUNEX (mt/yr)	CH_4 IDLEX (mt/yr)	CH_4 STREX (mt/yr)	N_2O RUNEX (mt/yr)	N_2O IDLEX (mt/yr)	N_2O STREX (mt/yr)	HFC RUNEX (mt/yr)
tpy for CPs	HHDT	62442.8	129367.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.1	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	145.1	54.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
mt/yr for GHG	LDA	963165.9	1995465.1	0.0	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.1	0.9	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	415.4	0.0	47.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lbs/day x 365 x	LDT1	61684.7	127797.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
lb/ton or lb/MT conv	LDT2	495299.7	1026150.7	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	289.8	0.0	33.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LHDT1	56911.8	117908.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.7	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LHDT2	15871.0	32881.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MCY	45323.3	93899.8	0.1	0.0	0.1	0.1	0.2	0.2	0.1	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.9	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.3	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MDV	306793.9	635608.5	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	214.4	0.0	24.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MH	4936.0	10226.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MHDT	14756.4	30572.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.6	2.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OBUS	762.1	1578.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SBUS	2135.8	4425.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	UBUS	630.4	1306.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SUM		4,207,187	0.1	0.0	0.4	0.6	0.3	0.4	0.1	0.0	0.3	0.6	0.3	0.4	0.3	0.4	0.5	2.9	0.5	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1196.2	57.9	112.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0

Conversion of Energy Consumption from NG to Electricity and RV Park Electricity Calculation

kWh/kBTU conversion = 3.412

CalEEMod Defaults

Table 8.1 Energy Use by Climate Zone and Land Use Type

Land Use Sub Type	Climate Zone	Historical	T24 Electricity	NT24 Electricity	Lighting Electricity	T24 Natural Gas	NT24 Natural Gas
Automobile Care Center	10	N	1.97	5.02	2.93	15	17
City Park	10	N	0.00	0.00	0.00	0	0
Convenience Market (24 hour)	10	N	4.09	2.44	5.61	2	0
Fast Food Restaurant with Drive Thru	10	N	11.06	28.48	6.62	78	196
Gasoline/Service Station	10	N	1.97	5.02	2.93	15	17
Mobile Home Park	10	N	164.88	4004.74	1038.60	22827	6030
Other Asphalt Surfaces	10	N	0.00	0.00	0.00	0	0
Parking Lot	10	N	0.00	0.00	0.35	0	0

KBTU to KWhr Calc

kWh equivalent from Natural Gas BTU

Land Use Sub Type	T24 Natural Gas	NT24 Natural Gas
Automobile Care Center	4.5	5.0
City Park	0	0
Convenience Market (24 hour)	0.6	0
Fast Food Restaurant with Drive Thru	22.9	57.4
Gasoline/Service Station	4.5	5.0
Mobile Home Park	0.0	0.0
Other Asphalt Surfaces	0	0
Parking Lot	0	0

no NG assumed from the start

Total Electricity (for adjusted CalEEMod Inputs)

Numbers here are the sum of Electricity in that category + kwh equivalent from NG

	Title 24 Electricity (KWhr/size/yr)	Non-Title 24 Electricity (KWhr/size/yr)	Lighting Electricity
Automobile Care Center	6.49	10.04	2.93
City Park	0	0	0
Convenience Market (24 hour)	4.66	2.53	5.61
Fast Food Restaurant with Drive Thru	33.94	85.86	6.62
Gasoline/Service Station	6.49	10.04	2.93
Mobile Home Park	0	7300	2836.10
Other Asphalt Surfaces	0	0	0
Parking Lot	0	0	0.35

Lighting unchanged for all except RV park

Energy Usage from RV park

RV Energy from plugging in

kwh per rv per day	20	
spaces/rvs	88	
kwh/day	1760	
days/yr	365	
kwh/yr	642,400	

Outdoor Lighting

Based on kwh per sqft for parking lot, caleemod appx d, table 8.1

kwh per SF	0.35	
RV area acreage	16.37	
RV area SF	713077.2	
kwh/yr	249,577	

total	642,400	non-title 24 elec
	249,577	lighting elec
per "DU" (88 spaces)	**7300**	non-title 24 elec per DU (For caleemod)
	2836.10	lighting elec per DU (For caleemod)

20 kw/day per RV references:

https://www.godownsize.com/electricity-consumption-rv/
https://www.rvingtrends.com/rv-electricity-consumption/
https://www.rvtalk.net/rv-electricity-usage/

2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
Version 1.0 - February 18, 2022

Required Value	User Defined Input	Instructions
Annual Throughput (gallons/year)	14,000,000	Enter your gas station's annual throughput in gallons of gasoline dispensed per year.
Hourly Dispensing Throughput (gallons/hour)	4000	The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4.
Hourly Loading Throughput (gallons/hour)	8800	The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5.
Meteorological Data	Lancaster	Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool.
Distance to Nearest Resident (meters)	1000	Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Nearest Business (meters)	1000	Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Acute Receptor (meters)	1000	Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Control Scenario	EVR Phase I & EVR Phase II	Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls.
Include Building Downwash Adjustments	no	Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment.

Risk Value	Results
Max Residential Cancer Risk (chances/million)	0.14
Max Worker Cancer Risk (chances/million)	0.01
Chronic HI	0.00
Acute HI	0.02

Construction Energy Calculations

Construction Fuel Usage Summary (gallons)

	Diesel			Gasoline
Construction Phase	**Off-road Equipment**	**On-road**	**Total**	**On-road**
Demolition	3,844	0	3,844	227
Site Preparation	3,872	0	3,872	273
Grading	6,333	0	6,333	303
Building Construction	15,264	17,299	32,563	30,377
er Main Trenching / Undergrour	12,666	0	12,666	606
Paving	2,332	0	2,332	227
Architectural Coating	247	0	247	1,016
TOTAL	**44,558**	**17,299**	**61,857**	**33,030**

Total Gasoline	**33,030**	**gallons**
Total Diesel	**61,857**	**gallons**

Operational Energy Calculations

Operational Fuel Use Summary (gallons, kwh, and kbtu)

Vehicle Class	Diesel Gallons	Gasoline Gallons	Electricity Kwh	Natural Gas kbtu
Gasoline Vehicle		17,503		
Diesel Vehicle	3,188			
Electriciy			1,655,713	
Natural Gas				-
Total	**3,188**	**17,503**	**1,655,713**	**-**

1. Fleet mix calculated from CalEEMod default values.
2. Gallons per mile calculated from EMFAC 2014.
3. Annual VMT obtained from CalEEMod output file.

Operational Energy Usage Summary (MMBTU)

Vehicle Class	Diesel	Gasoline	Electricity	Natural Gas
Gasoline Vehicle	-	2,188		
Diesel Vehicle	442			
Electriciy	-		5,649	
Natural Gas	-			-
Total	**442**	**2,188**	**5,649**	**-**

Gasoline	125,000	BTU per gallon	BTS 2021
Diesel	138,700	BTU per gallon	BTS 2021
Electricity	3,412	BTU_kWh	BTS 2021
BTUs per therm	100000	standard	
btu to mmbtu	0.000001	standard	
kbtu to mmbtu	1000		

Construction Offroad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of days	Diesel Fuel Usage
Demolition	Concrete/Industrial Saws	1	8	81	0.73	22	**520**
Demolition	Excavators	3	8	158	0.38	22	**1,585**
Demolition	Rubber Tired Dozers	2	8.00	247	0.40	22	**1,739**
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40	22	**2,608**
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37	22	**1,263**
Grading	Excavators	2	8.00	158	0.38	22	**1,057**
Grading	Graders	1	8.00	187	0.41	22	**675**
Grading	Rubber Tired Dozers	1	8.00	247	0.40	22	**869**
Grading	Scrapers	2	8.00	367	0.48	22	**3,100**
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37	22	**632**
Building Construction	Cranes	1	7.00	231	0.29	132	**3,095**
Building Construction	Forklifts	3	8.00	89	0.20	132	**2,820**
Building Construction	Generator Sets	1	8.00	84	0.74	132	**3,282**
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37	132	**4,974**
Building Construction	Welders	1	8.00	46	0.45	132	**1,093**
Water Main Trenching / Undergrounding	Excavators	2	8.00	158	0.38	44	**2,113**
Water Main Trenching / Undergrounding	Graders	1	8.00	187	0.41	44	**1,349**
Water Main Trenching / Undergrounding	Rubber Tired Dozers	1	8.00	247	0.40	44	**1,739**
Water Main Trenching / Undergrounding	Scrapers	2	8.00	367	0.48	44	**6,201**
Water Main Trenching / Undergrounding	Tractors/Loaders/Backhoes	2	8.00	97	0.37	44	**1,263**
Paving	Pavers	2	8.00	130	0.42	22	**961**
Paving	Paving Equipment	2	8.00	132	0.36	22	**836**
Paving	Rollers	2	8.00	80	0.38	22	**535**
Architectural Coating	Air Compressors	1	6.00	78	0.48	22	**247**
						TOTAL	**44,558**

=offroad diesel

Notes: Equipment assumptions are consistent with CalEEMod. Fuel usage average of 0.05 gallons of diesel fuel per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3E.

Trips and VMT

Phase Name	Daily Worker Trip	Daily Vendor Trip	Daily Hauling Trip	Days in Phase	Total Worker Trips	Total Vendor Trips	Total Haul Trips	Worker Trip Length (miles)	Vendor Trip Length (miles)	Haul Trip Length (miles)	Total Worker Trip Length (miles)	Total Vendor Trip Length (miles)	Total Haul Trip Length (miles)	**Total gallons of gasoline**	**Total gallons of diesel**
Demolition	15	0	0	22	330	0	0	16.80	6.60	20.00	5544	0	-	227	0
Site Preparation	18	0	0	22	396	0	0	16.80	6.60	20.00	6652.8	0	-	273	0
Grading	20	0	0	22	440	0	0	16.80	6.60	20.00	7392	0	-	303	0
Building Construction	334	116	0	132	44,088	15,312	0	16.80	6.60	20.00	740678.4	101059.2	-	30,377	17,299
Water Main Trenching / Undergrounding	20	0	0	44	880	0	0	16.80	6.60	20.00	14784	0	-	606	0
Paving	15	0	0	22	330	0	0	16.80	6.60	20.00	5544	0	-	227	0
Architectural Coating	67	0	0	22	1,474	0	0	16.80	6.60	20.00	24763.2	0	-	1,016	0
													TOTAL	**33,030**	**17,299**

Operational Transporation Energy Calc

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: Air Basin
Region: Mojave Desert
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT (mi/day)	% of vehicle class Ef	% CalEEMod vehicle	% project vehicle cl	VMT by project vehicle class (m	Gallons of fuel	Fuel_Consumption (1000 gal/day)	Fuel (gal/day)	mi/gal	Class
Mojave Desert	2024	HHDT	Aggregated	Aggreg	GAS	66.26869	12286.44426	0.002747829	0.017285	4.74962E-05	199.8255005	38.26087012	2.352502793	2352.502793	5.222711871	Truck
Mojave Desert	2024	HHDT	Aggregated	Aggreg	DSL	21214.09	4459041.306	0.997252171	0.017285	0.017237504	72521.40179	10568.92626	649.8396003	649839.6003	6.861756815	Truck
Mojave Desert	2024	LDA	Aggregated	Aggreg	GAS	592213.9	22692621.71	0.920179023	0.537785	0.494858476	2081962.146	63153.65347	688.3515971	688351.5971	32.96661446	Passenger
Mojave Desert	2024	LDA	Aggregated	Aggreg	DSL	6885.635	273325.8077	0.01108328	0.537785	0.005960422	25076.60826	580.2029252	6.323998506	6323.998506	43.22040991	Passenger
Mojave Desert	2024	LDA	Aggregated	Aggreg	ELEC	34044.54	1695146.849	0.068737698	0.537785	0.036966103	155523.3069	#DIV/0!	0	0	#DIV/0!	Passenger
Mojave Desert	2024	LDT1	Aggregated	Aggreg	GAS	44252.84	1519888.45	0.998671461	0.055838	0.055763817	234608.806	8433.690247	54.63677434	54636.77434	27.8180487	Truck
Mojave Desert	2024	LDT1	Aggregated	Aggreg	DSL	59.87612	1309.126237	0.000860186	0.055838	4.80311E-05	202.0757139	6.598687106	0.0427489	42.74889969	30.62362415	Truck
Mojave Desert	2024	LDT1	Aggregated	Aggreg	ELEC	20.86969	712.7916298	0.000468353	0.055838	2.61519E-05	110.0259649	#DIV/0!	0	0	#DIV/0!	Truck
Mojave Desert	2024	LDT2	Aggregated	Aggreg	GAS	201601.8	7708313.572	0.997973819	0.172353	0.172003782	723652.0739	28729.19958	306.0223097	306022.3097	25.18873078	Truck
Mojave Desert	2024	LDT2	Aggregated	Aggreg	DSL	382.2774	15650.14937	0.002026181	0.172353	0.000349218	1469.227081	43.4882981	0.463235649	463.2356495	33.78442351	Truck
Mojave Desert	2024	LHDT1	Aggregated	Aggreg	GAS	10641.29	280840.0185	0.409425525	0.027005	0.011056536	46516.91585	4396.396127	26.54268769	26542.68769	10.58069257	Truck
Mojave Desert	2024	LHDT1	Aggregated	Aggreg	DSL	13660.17	405096.7418	0.590574475	0.027005	0.015948464	67098.16909	3369.122725	20.34065396	20340.65396	19.91562035	Truck
Mojave Desert	2024	LHDT2	Aggregated	Aggreg	GAS	1748.792	60658.26917	0.274605417	0.007196	0.001976061	8313.6564	810.2743642	5.91194032	5911.94032	10.26029795	Truck
Mojave Desert	2024	LHDT2	Aggregated	Aggreg	DSL	4642.614	160234.2017	0.725394583	0.007196	0.005219939	21961.26125	1170.470399	8.540009966	8540.009966	18.76276518	Truck
Mojave Desert	2024	MCY	Aggregated	Aggreg	GAS	32348.72	356687.4187	1	0.025303	0.025303	106454.4527	2757.680528	9.239913638	9239.913638	38.60289529	Passenger
Mojave Desert	2024	MDV	Aggregated	Aggreg	GAS	135759.1	4437776.562	0.97873604	0.139003	0.136047246	572376.2035	31761.0488	246.2513939	246251.3939	18.02132565	Truck
Mojave Desert	2024	MDV	Aggregated	Aggreg	DSL	2525.367	96414.8674	0.02126396	0.139003	0.002955754	12435.41106	485.9336972	3.767566085	3767.566085	25.5907568	Truck
Mojave Desert	2024	MH	Aggregated	Aggreg	GAS	4304.639	32209.98259	0.777850648	0.005071	0.003944481	16595.16766	2070.851667	4.01936862	4019.36862	8.013692107	Other
Mojave Desert	2024	MH	Aggregated	Aggreg	DSL	1193.815	9198.972546	0.222149352	0.005071	0.001126519	4739.477621	449.2194973	0.871901537	871.9015371	10.55047176	Other
Mojave Desert	2024	MHDT	Aggregated	Aggreg	GAS	1276.666	95403.48595	0.20311145	0.011392	0.002313846	9734.781288	1205.123253	11.81053338	11810.53338	8.07783043	Truck
Mojave Desert	2024	MHDT	Aggregated	Aggreg	DSL	7115.801	374306.5475	0.79688855	0.011392	0.009078154	38193.49302	4130.687136	40.48184962	40481.84962	9.246280766	Truck
Mojave Desert	2024	OBUS	Aggregated	Aggreg	GAS	687.841	51071.86263	0.702470766	0.000559	0.000392681	1652.083065	202.6210588	6.263749748	6263.749748	8.153560517	Other
Mojave Desert	2024	OBUS	Aggregated	Aggreg	DSL	259.8527	21631.32314	0.297529234	0.000559	0.000166319	699.7344681	92.93202477	2.872864993	2872.864993	7.529529997	Other
Mojave Desert	2024	SBUS	Aggregated	Aggreg	GAS	189.1327	11998.70085	0.309903886	0.000954	0.000295648	1243.847717	102.8240147	0.991885563	991.8855634	12.09686006	Other
Mojave Desert	2024	SBUS	Aggregated	Aggreg	DSL	710.6313	26718.78989	0.690096114	0.000954	0.000658352	2769.808681	380.7213855	3.672605539	3672.605539	7.275159176	Other
Mojave Desert	2024	UBUS	Aggregated	Aggreg	GAS	202.0422	39351.87648	0.459630839	0.000254	0.000116746	491.1732343	95.65025333	7.663318543	7663.318543	5.135096011	Other
Mojave Desert	2024	UBUS	Aggregated	Aggreg	DSL	253.8133	46264.39017	0.540369161	0.000254	0.000137254	577.4522637	114.3815657	9.164036092	9164.036092	5.048473151	Other
							44,884,160				**4,207,179**		**2,116**	2116439.046	21.20739565	

Project VMT (mi/yr) **4,207,187**
Project Mobile Emissions (MT 2,391

	Gas (gal)	Diesel (gal)
Passenger	65,911	580
Truck	75,374	19,775
Other	2,472	1,037
Total	143,757	21,393

Gasoline Sum	143,757
Diesel Sum	21,393

Apple Valley CAP Measure Summary

Type	Measure #	Measure Description	Loves Apple Valley Project Consistency
Town Municipal Operational Measures	MO-1	Encourage the development of residential projects at a density of at least 15 units per acre in the Medium Density Residential zone along Bear Valley Road, Highway 18, Dale Evans Parkway, Apple Valley Road, Navajo Road, Central Road, and Kiowa Road.	NA - not a residential project
Town Municipal Operational Measures	MO-2	Encourage the development of mixed-use projects in the Mixed Use zone along Bear Valley Road, Highway 18, Dale Evans Parkway, Apple Valley Road, Navajo Road, Central Road, and Kiowa Road.	NA - not in a mixed use zone
Town Municipal Operational Measures	MO-3	Encourage the development of residential projects at a density of at least 15 units per acre in the Medium Density Residential zone along the High Desert Corridor.	NA - not a residential project
Town Municipal Operational Measures	MO-4	Encourage the development of mixed-use projects in the Mixed Use zone along the High Desert Corridor.	NA - not in a mixed use zone
Town Municipal Operational Measures	MO-5	Encourage the development of new infill or reconstruction projects along Bear Valley Road, near its intersections with Apple Valley Road, Kiowa Road and Navajo Road; or along Highway 18.	NA - not in these areas
Town Municipal Operational Measures	MO-6	Plant a minimum of 25 trees annually in Town parks, and on other Town properties.	NA - Town-lead measure
Town Municipal Operational Measures	MO-7	Partner with the Apple Valley Unified School District to establish an “adopt a tree” education and maintenance program whereby school classes adopt and maintain specific trees in Town parks and other Town properties.	NA - Town-lead measure
Town Municipal Operational Measures	MO-8	Install advanced technology systems and implement effective management strategies in order to improve the operational efficiency of transportation systems and the movement of people, goods, and services, including synchronization of traffic lights and signals.	NA - Town-lead measure
Town Municipal Operational Measures	MO-9	Expand bikeways, walking paths and trails connecting residential neighborhoods to commercial projects, schools and other institutions, and transit.	NA - Town-lead measure
Town Municipal Operational Measures	MO-10	Prioritize roadway improvements for areas experiencing Level of Service D or worse.	NA - Town-lead measure
Town Municipal Operational Measures	MO-11	Replace gasoline or diesel fleet vehicles with hybrid or alternative fuel vehicles when they are scheduled for replacement, if available for the use intended.	NA - Town-lead measure
Town Municipal Operational Measures	MO-12	A minimum of 50% of the Town’s additional new vehicle purchases (not replacement vehicles) shall be hybrid or alternative fuel vehicles (if available for the use intended).	NA - Town-lead measure
Town Municipal Operational Measures	MO-13	Encourage Victor Valley Transit Authority to install bicycle racks on all buses, and to operate an all-alternative fuel fleet.	NA - Town-lead measure
Town Municipal Operational Measures	MO-14	Encourage Apple Valley Unified School District to replace traditional fueled school buses with CNG fueled school buses upon new bus purchases.	NA - Town-lead measure
Town Municipal Operational Measures	MO-15	Encourage CalTrans to install carpool lanes on the High Desert Corridor.	NA - Town-lead measure
Town Municipal Operational Measures	MO-16	Specify rubberized and/or recycled asphalt in Town-initiated road pavement projects to the extent economically viable.	NA - Town-lead measure
Town Municipal Operational Measures	MO-17	When feasible, Town staff is encouraged to carpool when traveling out of Town for official functions, meetings, and events.	NA - Town-lead measure
Town Municipal Operational Measures	MO-18	Provide employees with free public transit passes.	NA - Town-lead measure
Town Municipal Operational Measures	MO-19	Provide secure bicycle racks at all Town facilities.	NA - Town-lead measure
Town Municipal Operational Measures	MO-20	Reduce energy use at all Town facilities by 15% by 2030.	NA - Town-lead measure
Town Municipal Operational Measures	MO-21	Replace all failing or failed fixtures and appliances in Town facilities with energy efficient fixtures and appliances. Light bulbs shall be replaced with CFL or LED bulbs. Appliances shall be Energy Star rated.	NA - Town-lead measure
Town Municipal Operational Measures	MO-22	Encourage Liberty Utilities Apple Valley, Golden State, and other water purveyors to replace water systems with energy efficient motors, pumps and other equipment.	NA - Town-lead measure
Town Municipal Operational Measures	MO-23	Encourage VVWRA to replace wastewater systems with energy efficient motors, pumps and other equipment.	NA - Town-lead measure
Town Municipal Operational Measures	MO-24	Encourage the County of San Bernardino to capture and utilize landfill gas for use as an energy source including fuel for vehicles, operating equipment, and heating buildings	NA - Town-lead measure
Town Municipal Operational Measures	MO-25	Consider the installation of green roofs on Town facilities.	NA - Town-lead measure
Town Municipal Operational Measures	MO-26	Consider the installation of cool roofs on Town facilities.	NA - Town-lead measure
Town Municipal Operational Measures	MO-27	Reduce turf areas at Town facilities by 20% overall.	NA - Town-lead measure
Town Municipal Operational Measures	MO-28	Modernize facilities and equipment at the golf course when financially feasible, including the well pumps.	NA - Town-lead measure
Town Municipal Operational Measures	MO-29	Install semi-pervious surfaces which allow water to percolate at Town facilities to the extent economically feasible.	NA - Town-lead measure
Town Municipal Operational Measures	MO-30	Install timers for all ball field lighting on Town facilities.	NA - Town-lead measure
Town Municipal Operational Measures	MO-31	Consider a home weatherization and energy efficient appliance replacement grant program for existing residents including extremely low, very low and low-income households	NA - Town-lead measure
Town Municipal Operational Measures	MO-32	Continue to require that improvements made under the Residential Rehabilitation Loan Program be energy efficient.	NA - Town-lead measure
Town Municipal Operational Measures	MO-33	Promote third-party energy efficiency programs, including the Energy Upgrade California program.	NA - Town-lead measure
Town Municipal Operational Measures	MO-34	Consider an Energy Savings Performance Contract with a private entity to retrofit public buildings, which will allow the private entity to fund all energy improvements in exchange for a share of the energy savings over a period of time.	NA - Town-lead measure

Apple Valley CAP Measure Summary

Type	Measure #	Measure Description	Loves Apple Valley Project Consistency
Town Municipal Operational Measures	MO-35	Consider partnership with Southern California Edison in establishing a rebate/incentive/refund program for the installation of Energy Star appliances or alternative energy systems on private projects, including single family homes.	NA - Town-lead measure
Town Municipal Operational Measures	MO-36	Install photovoltaic systems on the buildings and carports located at the Public Works facility and Town Hall/Police Department, which will provide electricity for the Civic Center and the Public Works/Animal Control facilities. And consider installing wind energy resources on properties greater than 2 acres.	NA - Town-lead measure
Town Municipal Operational Measures	MO-37	Consider installing a CNG fueling station and establish a public access program for same.	NA - Town-lead measure
Town Municipal Operational Measures	MO-38	Consider replacing failing or failed traditional water heaters in Town facilities with solar water heaters	NA - Town-lead measure
Town Municipal Operational Measures	MO-39	When it fails, consider replacing the municipal pool heater with a solar pool heating system.	NA - Town-lead measure
Town Municipal Operational Measures	MO-40	Require composting of all landscaping waste from Town facilities.	NA - Town-lead measure
Town Municipal Operational Measures	MO-41	Encourage two-sided printing and electronic document submittals to reduce paper waste.	NA - Town-lead measure
Town Municipal Operational Measures	MO-42	Provide recycling bins for all offices, and at all employee gathering points (lunch room, conference rooms, etc.).	NA - Town-lead measure
Town Municipal Operational Measures	MO-43	Reuse and replace transport packaging including the reuse of cardboard boxes, and the recycling of plastic film, cardboard, and paper. Utilize reusable plastic transport packaging in place of limited-use wood pallets or cardboard boxes. For every 1-ton of corrugated cardboard boxes that is kept from entering the landfill, about 3.87 tons of CO_2e are avoided. • For every ton of plastic film (in the form of Low Density Polyethylene LDPE) that is recycled, about 1.9 tons of CO_2e are avoided annually. • For every ton of mixed general paper recycled about 4.3 tons of CO_2e are avoided.	NA - Town-lead measure
Community Operational Measures	CO-1	Encourage replacement of personal vehicles with hybrid or alternative fuel vehicle.	Applicable - Project would include EV charger(s)
Community Operational Measures	CO-2	Establish and enforce idling time limits for delivery vehicles. Idling shall not be permitted for more than 5 minutes.	NA, deliveries very rate (meant more for busy commercial areas)
Community Operational Measures	CO-3	Encourage the replacement of gasoline or diesel fleet vehicles with hybrid or alternative fuel vehicles, if available for intended use.	Applicable - Project would include EV charger(s)
Community Operational Measures	CO-4	Establish an employee carpooling program, including incentives (preferred parking, flex time incentives, etc.) for participating employees.	NA not a job center
Community Operational Measures	CO-5	(Encourage) Provide employees with free or discounted public transit passes	NA tranit not very accesible given the rural project location
Community Operational Measures	CO-6	Replace failing or failed fixtures and appliances with energy efficient fixtures and appliances. Light bulbs shall be replaced with CFL or LED bulbs. Appliances shall be Energy Star rated	NA meant more for existing uses
Community Operational Measures	CO-7	Replace traditional water heater with an instant water heating system.	NA meant more for existing uses
Community Operational Measures	CO-8	Replace traditional roofing with a cool roof.	NA meant more for existing uses
Community Operational Measures	CO-9	Increase insulation in walls and roof to a minimum R-30.	Applicable but part of Title 24
Community Operational Measures	CO-10	Install weather-stripping on all doors and windows.	Applicable but part of Title 24
Community Operational Measures	CO-11	Replace grass/turf areas with drought tolerant or native plants, or with decorative rock or gravel.	NA there are is no existing vegetation to replace
Community Operational Measures	CO-12	Replace water fixtures (faucets, toilets, etc.) with high efficiency fixtures.	Applicable but part of Title 24
Community Operational Measures	CO-13	Replace water heater and/or pool heater with a solar water heating system.	Applicable but part of Title 24 - plus no existing water heater to replace
Community Operational Measures	CO-14	Install solar panels or photovoltaic system	Using AVCE
Community Operational Measures	CO-15	For apartment or condominium projects, install solar or photovoltaic systems on carport roofs.	NA not a residential project
Community Operational Measures	CO-16	Install a home composting system	NA measure meant more for residential project
Community Operational Measures	CO-17	Increase recycling by 20%. Currently, recycling is mandatory for businesses that generate four cubic yards or more of commercial solid waste per week and for multifamily residential dwellings of five units or more (Senate Bill 1018).	Applicable. Mitigation 3.7-1 requires recycling, plus SB 1018 compliance is required
Community Operational Measures	CO-18	For businesses, encourage two-sided printing and electronic document submittals to reduce paper waste.	NA, not a project with uses that print much
New Development Measures	ND-1	Develop a residential project at a density of at least 15 units per acre in the Medium Density Residential zone along Bear Valley Road, Highway 18, Dale Evans Parkway, Apple Valley Road, Navajo Road, Central Road, and Kiowa Road.	NA not residential
New Development Measures	ND-2	Develop a mixed-use project in the Mixed-Use zone along Bear Valley Road, Highway 18, Dale Evans Parkway, Apple Valley Road, Navajo Road, Central Road, and Kiowa Road	NA - not in a mixed use zone
New Development Measures	ND-3	Develop a residential project at a density of at least 15 units per acre in the Medium Density Residential zone along the High Desert Corridor.	NA - a residential project
New Development Measures	ND-4	Develop a mixed-use project in the Mixed-Use zone along the High Desert Corridor.	NA - not in a mixed use zone
New Development Measures	ND-5	Develop a new infill or redevelopment project along Bear Valley Road, near its intersections with Apple Valley Road, Kiowa Road and Navajo Road; or along Highway 18.	NA - not in a mixed use zone
New Development Measures	ND-6	For projects within the North Apple Valley Industrial Specific Plan, develop employee housing within one mile of the industrial project.	NA

Apple Valley CAP Measure Summary

Type	Measure #	Measure Description	Loves Apple Valley Project Consistency
New Development Measures	ND-7	Preserve trees occurring on-site either through in situ protection during and after construction, or through transplant and relocation within landscaped areas.	NA site is disturbed with little vegetation
New Development Measures	ND-8	Utilize the Collaborative for High Performance Schools (CHPS) best practices for school design, building, and operation.	Applicable but part of Title 24
New Development Measures	ND-9	During project construction, encourage on-site and off-road construction equipment to utilize biodiesel fuel (a minimum of B20), except for equipment where use of biodiesel fuel would void the equipment warranty. As a conservative measure, no reduction in GHG emissions was taken for the implementation of this measure as it is unknown if biodiesel can be readily applied to the various pieces of construction equipment that will be necessary for the project.	Applicable
New Development Measures	ND-10	Install bus stop(s) and secure scheduled transit service from Victor Valley Transit Authority.	
New Development Measures	ND-11	Install pedestrian, bicycle and/or equestrian trails connecting project to school(s), commercial project(s) or transit.	Applicable, and mitigation adds a Class II bike lane
New Development Measures	ND-12	Building and site plan designs shall ensure that the project energy efficiencies meet applicable California Title 24 Energy Efficiency Standards. Verification of increased energy efficiencies shall be documented in Title 24 Compliance Reports provided by the applicant, and reviewed and approved by the Town prior to the issuance of the first building permit. Any combination of the following design features may be used to fulfill this measure provided that the total increase in efficiency meets or exceeds Title 24 standards: • Buildings shall meet or exceed California Title 24 Energy Efficiency performance standards for water heating and space heating and cooling. • Increase in insulation such that heat transfer and thermal bridging is minimized. • Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption. • Incorporate dual-paned or other energy efficient windows. • Incorporate energy efficient space heating and cooling equipment. • Incorporate the use of tankless water heaters in all residential units and community buildings. • Promote building design that will incorporate solar control in an effort to minimize direct sunlight upon windows. A combination of design features including roof eaves, recessed windows, “eyebrow” shades and shade trees shall be considered. • Interior and exterior energy efficient lighting which exceeds the California Title 24 Energy Efficiency performance standards shall be installed, as deemed acceptable by Town. Automatic devices to turn off lights when they are not needed shall be implemented. • To the extent that they are compatible with landscaping guidelines established by the Town, shade producing trees, particularly those that shade paved surfaces such as streets and parking lots and buildings shall be planted at the Project site. • Paint and surface color palette for the Project shall emphasize light and off-white colors which will reflect heat away from the buildings. • All buildings shall be designed to accommodate renewable energy sources, such as photovoltaic solar electricity systems, and wind energy systems on properties greater than 2 acres, appropriate to their architectural design. • Consideration shall be given to using LED lighting for all outdoor uses (i.e. buildings, pathways, landscaping, carports).	Applicable but part of Title 24
New Development Measures	ND-13	For residential projects, implement Green Building practices and document GHG reduction.	NA not residential
New Development Measures	ND-14	Use passive solar design by orienting buildings and incorporating landscaping to maximize passive solar heating during the winter, and minimize solar heating during the summer	Applicable but part of Title 24, plus mitigation requires solar or use of the Town's CCA
New Development Measures	ND-15	To reduce energy demand associated with potable water conveyance: • Landscaping palette emphasizing drought tolerant plants and exceeding Town standards for water conservation. • For residential uses, limit turf areas to no more than 25% of all landscaped areas. •Encourage limiting turf areas to no more than 20% for added water/energy savings. •Turf is prohibited in public rights-of-way, including parkways, and in non-residential uses with the exception of Special Landscaping Areas. (Town Municipal Code Chapter 9.75 Water Conservation/Landscaping). • Use of water-efficient irrigation techniques exceeding Town standards for water conservation. • U.S. EPA Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads. • Consider use of artificial turf.	Applicable but part of Title 24
New Development Measures	ND-16	Install Energy Star appliances and energy efficient fixtures.	Applicable but part of Title 24
New Development Measures	ND-17	Install all CFL or LED light bulbs.	Applicable but already part of project design
New Development Measures	ND-18	Install common area electric vehicle charging station(s) and secure bicycle racks.	Applicable but already part of project design
New Development Measures	ND-19	To reduce the project’s energy use from the grid: • Install solar panels/photovoltaic systems sufficient to provide electric power and heat water within the project, and/or • Install other clean energy system sufficient to provide electric power and heat water within the project, and/or	Applicable but part of Title 24, plus mitigation requires solar or use of the Town's CCA
New Development Measures	ND-20	Install solar or photovoltaic systems on new roofs whether on residential, commercial or industrial buildings.	Applicable but part of Title 24, plus mitigation requires solar or use of the Town's CCA
New Development Measures	ND-21	Use on-site generated bio-gas in appropriate applications.	NA
New Development Measures	ND-22	Install combined heat and power facilities in appropriate applications.	NA
New Development Measures	ND-23	Specify rubberized and/or recycled asphalt for roads and driveways to the extent economically viable.	NA

Apple Valley CAP Measure Summary

Type	Measure #	Measure Description	Loves Apple Valley Project Consistency
New Development Measures	ND-24	Recycle and/or salvage non-hazardous construction and demolition waste, and develop and implement a construction waste management plan quantifying the reduction in the waste stream.	no real demo activities
New Development Measures	ND-25	Reuse construction waste in project features (e.g. shattered concrete or asphalt can be ground and used in walkways and parking lots).	no real demo activities
New Development Measures	ND-26	Facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills by providing easily accessible areas that serve each building and are dedicated to the collection and storage of paper, cardboard, glass, plastics, and metals.	Applicable
New Development Measures	ND-27	Provide educational information to residents addressing energy efficiency, solid waste reduction, and water conservation measures.	NA

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at https://sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

SOLAR RESOURCE DATA

The latitude and longitude of the solar resource data site is shown below, along with the distance between your location and the center of the site grid cell. Use this data unless you have a reason to change it.

Solar resource data site

Lat, Lng: 34.53, -117.22	0.0 mi

Resource Data Map

The blue rectangle on the map indicates the NREL National Solar Radiation Database (NSRDB) grid cell for your location. If you want to use data for a different NSRDB grid cell, double-click the map to move the rectangle.
Dragging the rectangle will not move it.
If your location is outside the NSRDB area, the map shows pins for the nearest alternate data sites instead of a rectangle: Click a pin to choose the site you want to use.
See **Help** for details.

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SYSTEM INFO

RESTORE DEFAULTS

Modify the inputs below to run the simulation.

DC System Size (kW):	80
Module Type:	Standard
Array Type:	Fixed (open rack)
System Losses (%):	14.08
Tilt (deg):	20
Azimuth (deg):	180

Loss Calculator

Advanced Parameters

Draw Your System

Click below to customize your system on a map. (optional)

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The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

RESULTS

148,484 kWh/Year*

System output may range from 141,550 to 150,340 kWh per year near this location.

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)
January	5.01	10,107
February	5.42	9,759
March	6.80	13,129
April	7.50	13,670
May	8.05	14,841
June	8.22	14,397
July	7.88	13,937
August	7.63	13,595
September	7.30	12,928
October	6.47	12,216
November	5.43	10,341
December	4.69	9,565
Annual	6.70	148,485

Location and Station Identification

Requested Location	34.53, -117.22
Weather Data Source	Lat, Lng: 34.53, -117.22 0.0 mi
Latitude	34.53° N
Longitude	117.22° W

PV System Specifications

DC System Size	80 kW
Module Type	Standard
Array Type	Fixed (open rack)
System Losses	14.08%
Array Tilt	20°
Array Azimuth	180°
DC to AC Size Ratio	1.2
Inverter Efficiency	96%
Ground Coverage Ratio	0.4%
Albedo	*From weather file*
Bifacial	No (0)

Monthly Irradiance Loss	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Performance Metrics

DC Capacity Factor	**21.2%**