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**IDI Rider 2 and 4 High Cube  
Warehouses and Perris Valley  
Storm Drain Channel  
Improvement Project  
GREENHOUSE GAS ANALYSIS  
CITY OF PERRIS**

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## **LIST OF ABBREVIATED TERMS**

%	Percent
(1)	Reference
AB	Assembly Bill
AB 32	Global Warming Solutions Act
AB 1493	Pavley Regulations and Fuel Efficiency Standards
AB 1881	California Water Conservation in Landscaping Act of 2006
APA	Administrative Procedure Act
AQIA	Air Quality Impact Analysis
BAU	Business As Usual
C <sub>2</sub> F <sub>6</sub>	Hexafluoroethane
C <sub>2</sub> H <sub>6</sub>	Ethane
C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>	Tetrafluoroethane
C <sub>2</sub> H <sub>4</sub> F <sub>2</sub>	Ethylidene Fluoride
CAA	Federal Clean Air Act
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALFIRE	California Department of Forestry and Fire Protection
CALGAPS	California LBNL GHG Analysis of Policies Spreadsheet
CALGreen	California Green Building Standards Code
CALSTA	California State Transportation Agency
CALTRANS	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resource Board
CAP	Climate Action Plan
CBSC	California Building Standards Commission
CEC	California Energy Commission
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CDFA	California Department of Food and Agriculture
CF <sub>4</sub>	Tetrafluoromethane
CFC	Chlorofluorocarbons
CH <sub>4</sub>	Methane
CHF <sub>3</sub>	Carbon Trifluoride
CITY	City of Perris
CNRA	California Natural Resources Agency
CO	Carbon Monoxide

CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
COP	Conference of the Parties
CPUC	California Public Utilities Commission
CTC	California Transportation Commission
DOF	Department of Finance
EMFAC	Emission Factor Model
EPA	Environmental Protection Agency
EV	Electric Vehicle
FBMSM	Facility-Based Mobile Source Measures
FED	Functional Equivalent Document
GCC	Global Climate Change
GHGA	Greenhouse Gas Analysis
GOBIZ	Governor's Office of Business and Economic Development
GPD	Gallons Per Day
GPY	Gallons Per Year
GWP	Global Warming Potential
H <sub>2</sub> O	Water
HFC	Hydrofluorocarbons
HP	Horsepower
HVIP	Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project
I-215	Interstate 215
IBANK	California Infrastructure and Economic Development Bank
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent System Operator
ITE	Institute of Transportation Engineers
LBNL	Lawrence Berkeley National Laboratory
LCA	Life-Cycle Analysis
LCFS	Low Carbon Fuel Standard
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT	Light-Heavy-Duty Trucks
LEV	Low-Emission Vehicle
MARB/IPA	March Air Reserve Base/Inland Port Airport
MDV	Medium-Duty Vehicles
MHDT	Medium-Heavy-Duty Trucks
MMR	Mandatory Reporting Rule

MMTCO <sub>2e</sub>	Million Metric Ton of Carbon Dioxide Equivalent
MPG	Miles Per Gallon
MPOs	Metropolitan Planning Organizations
MT/YR	Metric Tons Per Year
MTCO <sub>2e</sub>	Metric Ton of Carbon Dioxide Equivalent
MWELO	Model Water Efficient
MY	Model Year
NHTSA	National Highway Traffic Safety Administration
N <sub>2</sub> O	Nitrogen Dioxide/Nitrous Oxide
NDC	Nationally Determined Contributions
NF <sub>3</sub>	Nitrogen Trifluoride
NIOSH	National Institute for Occupational Safety and Health
NO <sub>x</sub>	Oxides of Nitrogen
OPR	Office of Planning and Research
PFC	Perfluorocarbons
PM <sub>10</sub>	Particulate Matter 10 microns in diameter or less
PM <sub>2.5</sub>	Particulate Matter 2.5 microns in diameter or less
PPM	Parts Per Million
PPT	Parts Per Trillion
Project	IDI Rider 2 and 4 High Cube Warehouses and Perris Valley Storm Drain Channel Improvement Project
PVCC SP EIR	Perris Valley Commerce Center Specific Plan Environmental Impact Report
PVSD	Perris Valley Storm Drain
RPS	Renewable Portfolio Standards
RTP	Regional Transportation Plan
RV	Recreational Vehicle
SAR	Second Assessment Report
SB	Senate Bill
SB 32	California Global Warming Solutions Act of 2006
SB 375	Regional Greenhouse Gas Emissions Reduction
SB 1078	Renewable Portfolio Standards
SB 1368	Emissions Performance Standards
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SF <sub>6</sub>	Sulfur Hexafluoride
SGC	Strategic Growth Council
SLPS	Short-Lived Climate Pollutant Strategy



SP	Service Population
SWCRB	State Water Resources Control Board
TAZ	Traffic Analysis Zones
TIA	Traffic Impact Analysis
TITLE 20	Appliance Energy Efficiency Standards
TITLE 24	Building Energy Efficiency Standards
UNFCCC	United Nations' Framework Convention on Climate Change
UTR	Utility Tractors
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
WRI	World Resources Institute
ZE/NZE	Zero and Near-Zero Emissions

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## EXECUTIVE SUMMARY

### ES.1 SUMMARY OF FINDINGS

The results of this *IDI Rider 2 and 4 High Cube Warehouses and Perris Valley Storm Drain Channel Improvement Project Greenhouse Gas Analysis* (GHGA) is summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the 2019 California Environmental Quality Act (CEQA) Statute and Guidelines (*CEQA Guidelines*) (1). Table ES-1 shows the findings of significance for potential greenhouse gas (GHG) impacts under CEQA.

**TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS**

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
GHG Impact #1: The Project would not generate direct or indirect GHG emission that would result in a significant impact on the environment.	3.8	<i>Potentially Significant</i>	<i>Significant and Unavoidable</i>
GHG Impact #2: The Project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.	3.8	<i>Less Than Significant</i>	<i>n/a</i>

### ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the State of California and the South Coast Air Quality Management District (SCAQMD) aimed at the reduction of air pollutant emissions. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of GHG emissions include:

- Global Warming Solutions Act of 2006 (AB32) (2).
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (SB 375) (3).
- Pavley Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new vehicles (4).
- Title 24 California Code of Regulations - California Building Code (CCR, Title 24). Establishes energy efficiency requirements for new construction (5).
- Title 20 California Code of Regulations - Appliance Energy Efficiency Standards (CCR, Title 20). Establishes energy efficiency requirements for appliances (6).
- Executive Order S-01-07 - Low Carbon Fuel Standard (LCFS). Requires carbon content of fuel sold in California to be 10% less by 2020 (7).
- California Water Conservation in Landscaping Act of 2006 (AB 1881). Requires local agencies to adopt the Department of Water Resources updated Water Efficient Landscape Ordinance or equivalent by January 1, 2010 to ensure efficient landscapes in new development and reduced water waste in existing landscapes (8).

- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions (9).
- Renewable Portfolio Standards (SB 1078). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20% by 2010 and 33% by 2020 (10).
- California Global Warming Solutions Act of 2006 (SB 32). Requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15 (11).

Promulgated regulations that will affect the Project's emissions are accounted for in the Project's GHG calculations provided in this report. In particular, the AB 1493, LCFS, and SB 1078 will be in effect for the AB 32 target year of 2020, and therefore are accounted for in the Project's emission calculations.

### **ES.3 PERRIS VALLEY COMMERCE CENTER SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT (PVCC SP EIR) MITIGATION MEASURES (MM)**

The applicable PVCC SP EIR MM for air quality are shown below and are required for the Project. Additionally, these select measures, as disclosed in the EIR, would also reduce GHG emissions. As a conservative measure, to provide a worst-case disclosure of the Project's impacts, no reduction in emissions has been assumed from the following measures.

#### **MM AIR 11**

Signage shall be posted at loading docks and all entrances to loading areas prohibiting all on-site truck idling in excess of five minutes.

*For purposes of analysis, the emissions presented in this GHGA do not reflect implementation of this MM.*

#### **MM AIR 13**

In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to SCAQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year would be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP [On-road Heavy Duty Voucher Incentive Program], HVIP [Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project], and SOON [Surplus Off-Road Opt-in for Nitrogen Oxides (NO<sub>x</sub>)] funding programs, as identified on SCAQMD's website (<http://www.aqmd.gov>). Tenants would be required to use those funds, if awarded.

*For purposes of analysis, the emissions presented in this GHGA do not reflect implementation of this MM.*

**MM AIR 14**

Each implementing development project shall designate parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance would be required prior to the issuance of occupancy permits.

*For purposes of analysis, the emissions presented in this GHGA do not reflect implementation of this MM.*

**MM AIR 19**

In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the Project sites. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris' Building Division) prior to conveyance of applicable streets.

*For purposes of analysis, the emissions presented in this GHGA do not reflect implementation of this MM.*

**MM AIR 20**

Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15% beyond Title 24, and reduce indoor water use by 25%. All reductions would be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.

*For purposes of analysis, the emissions presented in this GHGA do not reflect implementation of this MM.*

**ES.4 ADDITIONAL MMS**

The following measures (MM AQ-1 through MM AQ-14) were identified in the *IDI Rider 2 and 4 High Cube Warehouses and Perris Valley Storm Drain Channel Improvement Project Air Quality Impact Analysis Report (AQIA)* (Urban Crossroads, Inc.) (12). These measures are designed to reduce Project operational-source emissions. However, it should be noted that there is no way to quantify these reductions in the California Emissions Estimator Model (CalEEMod), and therefore, to provide a conservative disclosure of Project emissions, no reductions in emissions are assumed to occur even with implementation of the below measures. Notwithstanding the foregoing, it is likely that all of the below measures will decrease Project emissions somewhat.

### **MM AQ-1**

Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable CARB anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five (5) minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to the issuance of an occupancy permit, the County shall conduct a site inspection to ensure that the signs are in place.

### **MM AQ-2**

Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the City demonstrating that occupants/tenants of the Project sites have been provided documentation on funding opportunities, such as the Carl Moyer Program, that provide incentives for using cleaner-than-required engines and equipment.

### **MM AQ-3**

Prior to the issuing of each building permit, the project proponent and its contractors shall provide plans and specifications to the City of Perris Building Department that demonstrate that each project building is designed for passive heating and cooling, and is designed to include natural light. Features designed to achieve this shall include the proper placement of windows, overhangs, and skylights.

### **MM AQ-4**

Prior to the issuing of each building permit, the project proponent and its contractors shall provide plans and specifications to the City of Perris Building Department that demonstrate that electrical service is provided to each of the areas in the vicinity of the building that are to be landscaped in order that electrical equipment may be used for landscape maintenance.

### **MM AQ-5**

Once constructed, the project proponent shall ensure that all building tenants shall utilize electric equipment for landscape maintenance to the extent feasible, through requirements in the lease agreements.

### **MM AQ-6**

Once constructed, the project proponent shall ensure that all building tenants shall utilize only electric or natural gas service yard trucks (hostlers), pallet jacks and forklifts, and other onsite equipment, through requirements in the lease agreements. Electric-powered service yard trucks (hostlers), pallet jacks and forklifts, and other onsite equipment shall also be required instead of diesel-powered equipment, if technically feasible. Yard trucks may be diesel fueled in lieu of electrically or natural gas fueled provided such yard trucks are at least compliant with California Air Resources Board (CARB) 2010 standards for on-road vehicles or CARB Tier 4 compliant for off-road vehicles.

### **MM AQ-7**

Upon occupancy, the facility operator shall require tenants that do not already operate 2010 and newer trucks to apply in good faith for funding to replace/retrofit their trucks, such as Carl Moyer, VIP, Prop 1B, SmartWay Finance, or other similar funds. If awarded, the tenant shall be required to accept and use the

funding. Tenants shall be encouraged to consider the use of alternative fueled trucks as well as new or retrofitted diesel trucks. Tenants shall also be encouraged to become SmartWay Partners, if eligible. This measure shall not apply to trucks that are not owned or operated by the facility operator or facility tenants since it would be infeasible to prohibit access to the site by any truck that is otherwise legal to operate on California roads and highways. The facility operator shall provide an annual report to the City of Perris Development Services Department. The report shall: one, list each engine design; two, describe the effort made by each tenant to obtain funding to upgrade their fleet and the results of that effort; and three, describe the change in each fleet composition from the prior year.

### **MM AQ-8**

Tenants who employ 250 or more employees on a full- or part-time basis shall comply with SCAQMD Rule 2202, On-Road Motor Vehicle Mitigation Options. The purpose of this rule is to provide employees with a menu of options to reduce employee commute vehicle emissions. Tenants with less than 250 employees or tenants with 250 or more employees who are exempt from SCAQMD Rule 2202 (as stated in the Rule) shall either (a) join with a tenant who is implementing a program in accordance with Rule 2202 or (b) implement an emission reduction program similar to Rule 2202 with annual reporting of actions and results to the City. The tenant-implemented program would include, but not be limited to the following:

- Appoint a Transportation Demand Management (TDM) coordinator who would promote the TDM program, activities and features to all employees.
- Create and maintain a “commuter club” to manage subsidies or incentives for employees who carpool, vanpool, bicycle, walk, or take transit to work.
- Inform employees of public transit and commuting services available to them (e.g., social media, signage).
- Provide on-site transit pass sales and discounted transit passes.
- Guarantee a ride home.
- Offer shuttle service to and from public transit and commercial areas/food establishments, if warranted.
- Coordinate with the Riverside Transit Agency and employers in the surrounding area to maximize the benefits of the TDM program.”

### **MM AQ-9**

Prior to the issuance of a building permit, the project proponent shall provide evidence to the City that loading docks are designed to be compatible with SmartWay trucks.

### **MM AQ-10**

Upon occupancy and annually thereafter, the facility operator shall provide information to all tenants, with instructions that the information shall be provided to employees and truck drivers as appropriate, regarding:

- Building energy efficiency, solid waste reduction, recycling, and water conservation.
- Vehicle GHG emissions, electric vehicle charging availability, and alternate transportation opportunities for commuting.
- Participation in the Voluntary Interindustry Commerce Solutions (VICS) “Empty Miles” program to improve goods trucking efficiencies.

- Health effects of diesel particulates, State regulations limiting truck idling time, and the benefits of minimized idling.
- The importance of minimizing traffic, noise, and air pollutant impacts to any residences in the Project vicinity.

**MM AQ-11**

Prior to issuance of a building permit, the project proponent shall provide the City with an onsite signage program that clearly identifies the required onsite circulation system. This shall be accomplished through posted signs and painting on driveways and internal roadways.

**MM AQ-12**

Prior to issuance of an occupancy permit, the City shall confirm that signs clearly identifying approved trucks have been installed along the truck routes to and from the Project sites.

**MM AQ-13**

Prior to issuance of an occupancy permit, the project proponent shall install a sign on the property with telephone, email, and regular mail contact information for a designated representative of the tenant who would receive complaints about excessive noise, dust, fumes, or odors. The sign shall also identify contact data for the City for perceived Code violations. The tenant's representative shall keep records of any complaints received and actions taken to communicate with the complainant and resolve the complaint. The tenant's representative shall endeavor to resolve complaints within 24 hours.

**MM AQ-14**

Prior to issuance of a building permit, the project proponent shall provide the City with project specifications, drawings, and calculations that demonstrate that main electrical supply lines and panels have been sized to support heavy truck charging facilities when these trucks become available. The calculations shall be based on reasonable predictions from currently available truck manufacturer's data. Electrical system upgrades that exceed reasonable costs shall not be required.



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# **1 INTRODUCTION**

This report presents the results of the GHGA prepared by Urban Crossroads, Inc., for the proposed IDI Rider 2 and 4 High Cube Warehouses and Perris Valley Storm Drain (PVSD) Channel Improvement Project (Project).

The purpose of this GHGA is to evaluate Project-related construction and operational emissions and determine the level of GHG impacts as a result of constructing and operating the Project.

## **1.1 SITE LOCATION**

The Project sites are located in City of Perris on the northeast corner of Redlands Avenue and Rider Street in the PVCC SP area, as shown on Exhibit 1-A. The March Air Reserve Base/Inland Port Airport (MARB/IPA) is located approximately 2 to 2.5 miles northwest of the Project sites, and the Interstate 215 (I-215) Freeway is located roughly 1.8 miles west of the Project sites.

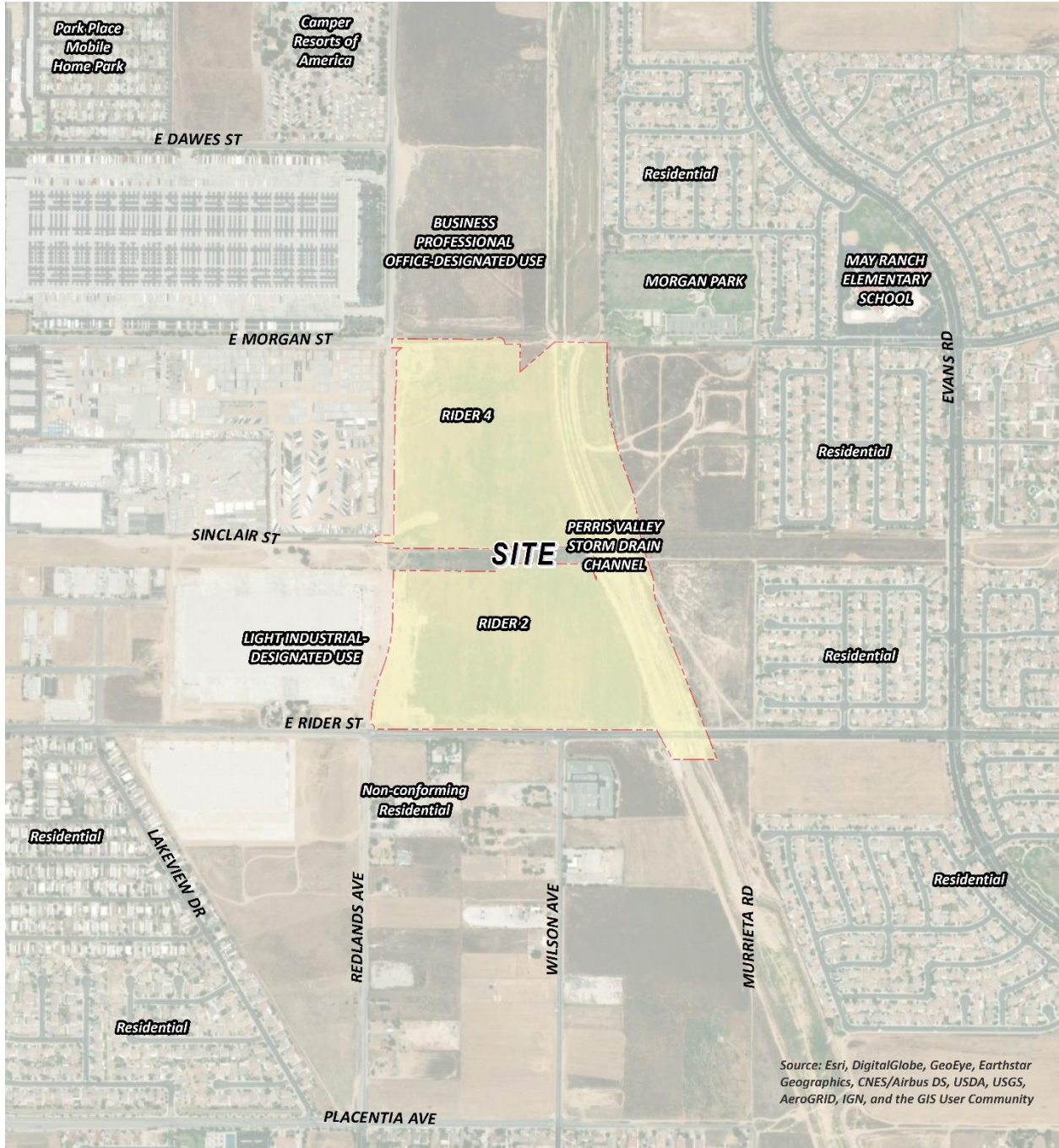
Existing land uses in the Project study area include an existing recreational vehicle (RV) park use to the north on the southwest corner of Redlands Avenue and Ramona Expressway; Morgan Park and residential homes located northeast, east, and south of the Project sites across the PVSD Channel; and industrial uses located west of the Project sites within areas defined by the PVCC SP and City of Perris Zoning Map as light industrial-designated land use (LI) (13) (14).

## **1.2 PROJECT DESCRIPTION**

The Project is proposed to consist of two High-Cube Transload Short-Term Storage Warehouse (without cold storage) buildings totaling approximately 1,373,449 square feet (sf) (Rider 2 is to consist of approximately 806,351 sf and Rider 4 is to consist of approximately 567,098 sf) of High-Cube Transload Short-Term Storage Warehouse (without cold storage) and the development and subsequent operations and maintenance of improvements to the PVSD Channel. At the time this GHGA was prepared, Rider 2 was proposed to consist of 806,351 sf and Rider 4 was proposed to consist of 567,098 sf of High-Cube Transload and Short-Term Storage Warehouse use (without cold storage). However, the current site plan shows 804,759 sf for Rider 2 and 547,977 sf for Rider 4. The higher square footages for Rider 2 and Rider 4 have been evaluated for the purposes of this GHGA in order to account for any minor changes that may occur to the building area as part of the final design. Exhibit 1-B shows the Project site plan.

At the time this GHGA was prepared the future tenants of the proposed Project were unknown. To present the potential worst-case conditions, this analysis assumes the Project would be operated 24 hours per day, seven days per week. It is expected that the Project business operations would primarily be conducted within the enclosed buildings, except for traffic movement, parking, as well as loading and unloading of trucks at designated loading bays. The on-site Project-related emission sources are expected to generally include: idling trucks, delivery truck activities, and parking lot vehicle movements. This GHGA is intended to describe air quality impacts associated with the expected typical industrial warehouse activities at the Project sites.

EXHIBIT 1-A: LOCATION MAP





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At the time of this analysis, no cold storage was planned at the Project sites, and is therefore not analyzed in this report.

According to the *IDI Rider 2 and 4 High Cube Warehouses and Perris Valley Storm Drain Channel Improvement Project Traffic Impact Analysis* (TIA) prepared by Urban Crossroads, Inc., the Project is expected to generate a total of approximately 1,926 two-way vehicular trips per day (963 inbound and 963 outbound) (15). The Project trip generation includes 1,304 two-way passenger car trips per day (652 inbound and 652 outbound) and 622 two-way truck trips per day (311 inbound and 311 outbound) from the proposed buildings within the Project sites.

## 2 CLIMATE CHANGE SETTING

### 2.1 INTRODUCTION TO GLOBAL CLIMATE CHANGE (GCC)

GCC is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project like the proposed Project evaluated in this GHGA cannot generate enough GHG emissions to affect a discernible change in global climate. However, the proposed Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. Because these changes may have serious environmental consequences, Section 3.0 will evaluate the potential for the proposed Project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

### 2.2 GLOBAL CLIMATE CHANGE DEFINED

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radioactive heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

### 2.3 GREENHOUSE GASES

#### 2.3.1 GHGs AND HEALTH EFFECTS

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. Many gases demonstrate these properties and are discussed in Table 2-1. For the purposes of this analysis, emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O were evaluated (see Table 3-1 later in this report) because these gases are the primary contributors to GCC from development

projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

**TABLE 2-1: GREENHOUSE GASES**

Greenhouse Gases	Description	Sources	Health Effects
Water	<p>Water is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. A climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change.</p> <p>As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to ‘hold’ more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a “positive feedback loop.” The extent to which this positive feedback loop will continue is</p>	<p>The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.</p>	<p>There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor.</p>



Greenhouse Gases	Description	Sources	Health Effects
	<p>unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the earth's surface and heat it up) (16).</p>		
<p>CO<sub>2</sub></p>	<p>CO<sub>2</sub> is an odorless and colorless GHG. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO<sub>2</sub> concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Left unchecked, the concentration of CO<sub>2</sub> in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources (17).</p>	<p>CO<sub>2</sub> is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. CO<sub>2</sub> is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks (18).</p>	<p>Outdoor levels of CO<sub>2</sub> are not high enough to result in negative health effects.</p> <p>According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of CO<sub>2</sub> can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of CO<sub>2</sub> in the earth's atmosphere are estimated to be approximately 370 ppm, the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15 minute period (19).</p>

Greenhouse Gases	Description	Sources	Health Effects
CH <sub>4</sub>	CH <sub>4</sub> is an extremely effective absorber of radiation, although its atmospheric concentration is less than CO <sub>2</sub> and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs.	CH <sub>4</sub> has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH <sub>4</sub> . Other anthropogenic sources include fossil-fuel combustion and biomass burning (20).	CH <sub>4</sub> is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to high levels of CH <sub>4</sub> can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.
N <sub>2</sub> O	N <sub>2</sub> O, also known as laughing gas, is a colorless GHG. Concentrations of N <sub>2</sub> O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb).	N <sub>2</sub> O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also	N <sub>2</sub> O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage) (21).

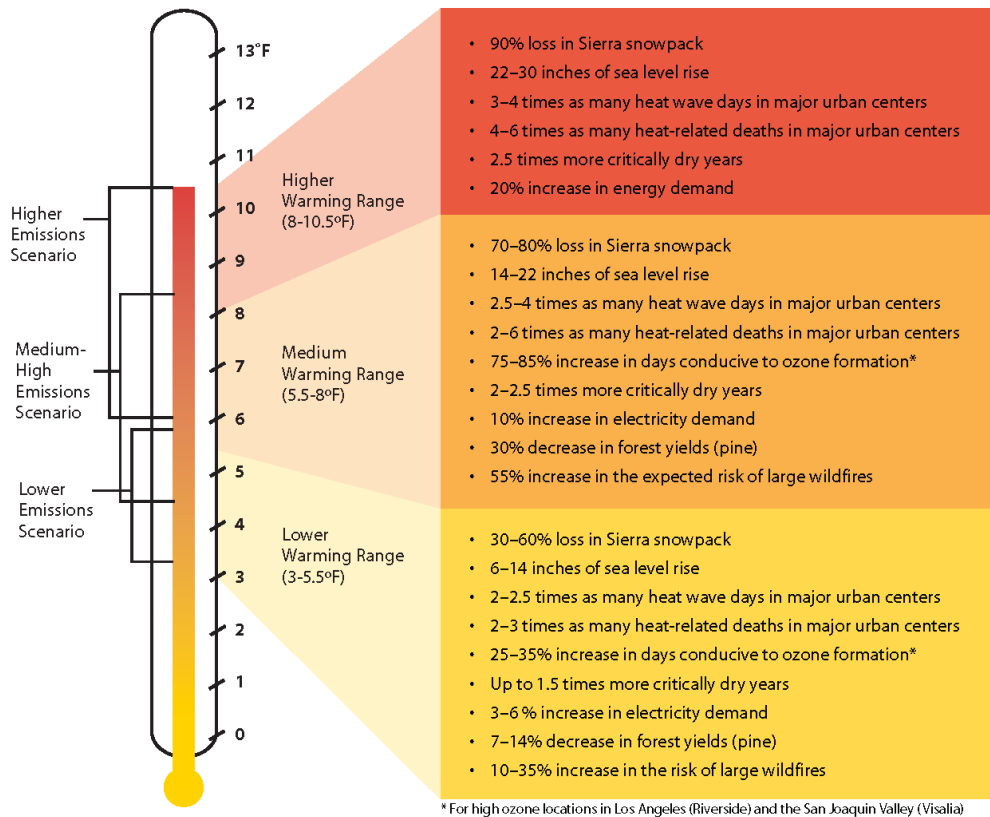
Greenhouse Gases	Description	Sources	Health Effects
		<p>used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. N<sub>2</sub>O can be transported into the stratosphere, be deposited on the earth's surface, and be converted to other compounds by chemical reaction (21).</p>	
<p>Chlorofluorocarbons (CFCs)</p>	<p>CFCs are gases formed synthetically by replacing all hydrogen atoms in CH<sub>4</sub> or ethane (C<sub>2</sub>H<sub>6</sub>) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).</p>	<p>CFCs have no natural source but were first synthesized in 1928. They were used for refrigerants, aerosol propellants and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years (22).</p>	<p>In confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.</p>

Greenhouse Gases	Description	Sources	Health Effects
HFCs	<p>HFCs are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential (GWP). The HFCs with the largest measured atmospheric abundances are (in order), fluoroform (CHF<sub>3</sub>), 1,1,1,2-tetrafluoroethane (CH<sub>2</sub>FCF), and 1,1-difluoroethane (CH<sub>3</sub>CF<sub>2</sub>). Prior to 1990, the only significant emissions were of CHF<sub>3</sub>. CH<sub>2</sub>FCF emissions are increasing due to its use as a refrigerant.</p>	<p>HFCs are manmade for applications such as automobile air conditioners and refrigerants.</p>	<p>No health effects are known to result from exposure to HFCs.</p>
PFCs	<p>PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above earth's surface, are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF<sub>4</sub>) and hexafluoroethane (C<sub>2</sub>F<sub>6</sub>). The EPA estimates that concentrations of CF<sub>4</sub> in the atmosphere are over 70 parts per trillion (ppt).</p>	<p>The two main sources of PFCs are primary aluminum production and semiconductor manufacture.</p>	<p>No health effects are known to result from exposure to PFCs.</p>
SF <sub>6</sub>	<p>SF<sub>6</sub> is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900) (23). The EPA indicates that concentrations in the 1990s were about 4 ppt.</p>	<p>SF<sub>6</sub> is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.</p>	<p>In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.</p>

Greenhouse Gases	Description	Sources	Health Effects
Nitrogen Trifluoride (NF <sub>3</sub> )	NF <sub>3</sub> is a colorless gas with a distinctly moldy odor. The World Resources Institute (WRI) indicates that NF <sub>3</sub> has a 100-year GWP of 17,200 (24).	NF <sub>3</sub> is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display (LCD) panels, types of solar panels, and chemical lasers.	Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis (25).

The potential health effects related directly to the emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O as they relate to development projects such as the proposed Project are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth’s ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas (26). Exhibit 2-A presents the potential impacts of global warming (27).

**EXHIBIT 2-A: SUMMARY OF PROJECTED GLOBAL WARMING IMPACT, 2070-2099 (AS COMPARED WITH 1961-1990)**



Source: Barbara H. Allen-Diaz. "Climate change affects us all." University of California, Agriculture and Natural Resources, 2009.

## 2.4 GLOBAL WARMING POTENTIAL

GHGs have varying GWP values. GWP of a GHG indicates the amount of warming a gas causes over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO<sub>2</sub> is utilized as the reference gas for GWP, and thus has a GWP of 1. CO<sub>2</sub> equivalent (CO<sub>2</sub>e) is a term used for describing the difference GHGs in a common unit. CO<sub>2</sub>e signifies the amount of CO<sub>2</sub> which would have the equivalent GWP.

The atmospheric lifetime and GWP of selected GHGs are summarized at Table 2-2. As shown in the table below, GWP for the Second Assessment Report, the Intergovernmental Panel on Climate Change (IPCC)'s scientific and socio-economic assessment on climate change, range from 1 for CO<sub>2</sub> to 23,900 for SF<sub>6</sub> and GWP for the IPCC's 5<sup>th</sup> Assessment Report range from 1 for CO<sub>2</sub> to 23,500 for SF<sub>6</sub> (28).

**TABLE 2-2: GWP AND ATMOSPHERIC LIFETIME OF SELECT GHGS**

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)	
		Second Assessment Report	5 <sup>th</sup> Assessment Report
CO <sub>2</sub>	See*	1	1
CH <sub>4</sub>	12 .4	21	28
N <sub>2</sub> O	121	310	265
HFC-23	222	11,700	12,400
HFC-134a	13.4	1,300	1,300
HFC-152a	1.5	140	138
SF <sub>6</sub>	3,200	23,900	23,500

\*As per Appendix 8.A. of IPCC's 5th Assessment Report, no single lifetime can be given.

Source: Table 2.14 of the IPCC Fourth Assessment Report, 2007

## 2.5 GREENHOUSE GAS EMISSIONS INVENTORIES

### 2.5.1 GLOBAL

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2017. Based on the latest available data, the sum of these emissions totaled approximately 29,216,501 gigagram (Gg) CO<sub>2</sub>e<sup>1</sup> (29) (30) as summarized on Table 2-3.

<sup>1</sup> The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2017 data, the UNFCCC data for the most recent year were used. United Nations Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," The most recent GHG emissions for China and India are from 2014.

**2.5.2 UNITED STATES**

As noted in Table 2-3, the United States, as a single country, was the number two producer of GHG emissions in 2017.

**TABLE 2-3: TOP GHG PRODUCING COUNTRIES AND THE EUROPEAN UNION <sup>2</sup>**

Emitting Countries	GHG Emissions (Gg CO <sub>2</sub> e)
China	11,911,710
United States	6,456,718
European Union (28-member countries)	4,323,163
India	3,079,810
Russian Federation	2,155,470
Japan	1,289,630
<b>Total</b>	<b>29,216,501</b>

**2.5.3 STATE OF CALIFORNIA**

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls, but is still a substantial contributor to the U.S. emissions inventory total (31). The CARB compiles GHG inventories for the State of California. Based upon the 2019 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2017 GHG emissions period, California emitted an average 424.1 million metric tons of CO<sub>2</sub>e per year (MMTCO<sub>2</sub>e/yr) (32).

**2.6 EFFECTS OF CLIMATE CHANGE IN CALIFORNIA**

**2.6.1 PUBLIC HEALTH**

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of

<sup>2</sup> Used <http://unfccc.int> data for Annex I countries. Consulted the CAIT Climate Data Explorer in <https://www.climatewatchdata.org> site to reference Non-Annex I countries of China and India.

death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

### **2.6.2 WATER RESOURCES**

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

### **2.6.3 AGRICULTURE**

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO<sub>2</sub> levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations



already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

#### **2.6.4 FORESTS AND LANDSCAPES**

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.

#### **2.6.5 RISING SEA LEVELS**

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

### **2.7 REGULATORY SETTING**

#### **2.7.1 INTERNATIONAL**

Climate change is a global issue involving GHG emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce GHGs.

#### **IPCC**

In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

#### **UNITED NATION'S FRAMEWORK CONVENTION ON CLIMATE CHANGE (CONVENTION)**

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the Convention, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG

emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

#### **INTERNATIONAL CLIMATE CHANGE TREATIES**

The Kyoto Protocol is an international agreement linked to the Convention. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5% against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of “common but differentiated responsibilities.”

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius (°C) above pre-industrial levels, subject to a review in 2015. The UN Climate Change Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings are gradually gaining consensus among participants on individual climate change issues.

On September 23, 2014 more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the United Nations. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the U.N. Framework Convention on Climate Change (UNFCCC) reached a landmark agreement on December 12, 2015 in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21<sup>st</sup> session of the UNFCCC Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2 °C, while urging efforts to limit the increase to 1.5 degrees;

- Establish binding commitments by all parties to make “nationally determined contributions” (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and “progress made in implementing and achieving” their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they will “represent a progression” beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing \$100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address “loss and damage” resulting from climate change, which explicitly will not “involve or provide a basis for any liability or compensation;”
- Require parties engaging in international emissions trading to avoid “double counting;” and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country’s NDC (C2ES 2015a) (33).

On November 4, 2019, the Trump administration formally notified the United Nations that the United States would withdraw from the Paris Agreement. It should be noted that withdrawal would be effective one year after notification in November of 2020.

## 2.7.2 NATIONAL

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

### GHG ENDANGERMENT

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the United States Supreme Court (Court) found that four GHGs, including CO<sub>2</sub>, are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act (CAA). The Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the CAA:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs— CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section “Clean Vehicles” below. After a lengthy legal challenge, the U.S. Court declined to review an Appeals Court ruling that upheld the EPA Administrator’s findings (34).

## **CLEAN VEHICLES**

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the U.S. On April 1, 2010, the EPA and the Department of Transportation’s National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the U.S.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty (MD) passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO<sub>2</sub> per mile, equivalent to 35.5 miles per gallon (mpg) if the automobile industry were to meet this CO<sub>2</sub> level solely through fuel economy improvements. Together, these standards would cut CO<sub>2</sub> emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the NHTSA issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012. The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and MD passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO<sub>2</sub> in model year 2025, which is equivalent to 54.5 mpg if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks (HDT) and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20% reduction in CO<sub>2</sub> emissions and fuel consumption by the 2018 model year. For HDT and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10% reduction for gasoline vehicles and a 15% reduction for diesel vehicles by the 2018 model year (12 and 17% respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10% reduction in fuel consumption and CO<sub>2</sub> emissions from the 2014 to 2018 model years.

On April 2, 2018, the EPA signed the Mid-term Evaluation Final Determination, which finds that the model year 2022-2025 GHG standards are not appropriate and should be revised (35). This Final Determination serves to initiate a notice to further consider appropriate standards for model year 2022-2025 light-duty vehicles. On August 24, 2018, the EPA and NHTSA published a

proposal to freeze the model year 2020 standards through model year 2026 and to revoke California's waiver under the CAA to establish more stringent standards (36).

### **MANDATORY REPORTING OF GHGs**

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons per year (MT/yr) or more of GHG emissions are required to submit annual reports to the EPA.

### **NEW SOURCE REVIEW**

The EPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these CAA permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

*"This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the CAA, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016."*

The EPA estimates that facilities responsible for nearly 70% of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

### **STANDARDS OF PERFORMANCE FOR GHG EMISSIONS FOR NEW STATIONARY SOURCES: ELECTRIC UTILITY GENERATING UNITS**

As required by a settlement agreement, the EPA proposed new performance standards for emissions of CO<sub>2</sub> for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts (MW) would be required to meet an output-based standard of 1,000 pounds (lbs) of CO<sub>2</sub> per MW-hour (MWh), based on the performance of

widely used natural gas combined cycle technology. It should be noted that on February 9, 2016 the U.S. Court issued a stay of this regulation pending litigation. Additionally, the current EPA Administrator has also signed a measure to repeal the Clean Power Plan, including the CO<sub>2</sub> standards. The Clean Power Plan was officially repealed on June 19, 2019, when the EPA issued the final Affordable Clean Energy rule (ACE). Under ACE, new state emission guidelines were established that provided existing coal-fired electric utility generating units with achievable standards.

#### **CAP-AND-TRADE**

Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded or provides flexibility on how the emitter can comply. Successful examples in the U.S. include the Acid Rain Program and the N<sub>2</sub>O Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap-and-trade.

The Regional GHG Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO<sub>2</sub> emissions from power plants, auctions CO<sub>2</sub> emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008 and in 2020 has retained all participating states.

The Western Climate Initiative (WCI) partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15% below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system January 1, 2014, and joint offset auctions took place in 2015. While the WCI has yet to publish whether it has successfully reached the 2020 emissions goal initiative set in 2007, SB 32, requires that California, a major partner in the WCI, adopt the goal of reducing statewide GHG emissions to 40% below the 1990 level by 2030.

#### **SMARTWAY PROGRAM**

The SmartWay Program is a public-private initiative between the EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is comprised of four components (37):

1. SmartWay Transport Partnership: A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
2. SmartWay Technology Program: A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
3. SmartWay Vehicles: A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.

4. SmartWay International Interests: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared towards reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all HDTs will have to comply with the CARB GHG Regulation that is designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel-efficient. For instance, in 2015, 53 foot or longer dry vans or refrigerated trailers equipped with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10% or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, the EPA has evaluated the fuel saving benefits of various devices through grants, cooperative agreements, emissions and fuel economy testing, demonstration projects and technical literature review. As a result, the EPA has determined the following types of technologies provide fuel saving and/or emission reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies – less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel will eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

### **2.7.3 CALIFORNIA**

#### **LEGISLATIVE ACTIONS TO REDUCE GHGS**

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation such as the landmark AB 32 was specifically enacted to address GHG emissions. Other legislation such as Title 24 and Title 20 energy standards were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

## AB 32

The California State Legislature enacted AB 32, which required that GHGs emitted in California be reduced to 1990 levels by the year 2020 (this goal has been met<sup>3</sup>). GHGs as defined under AB 32 include CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The CARB is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

*“Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.”*

## SB 32

On September 8, 2016, Governor Jerry Brown signed the SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature (11).

## CARB SCOPING PLAN UPDATE

In November 2017, CARB released the *Final 2017 Scoping Plan Update*, which identifies the State’s post-2020 reduction strategy. The *Final 2017 Scoping Plan Update* reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the LCFS, and much cleaner cars, trucks and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH<sub>4</sub> emissions from agricultural and other wastes.

The *Final 2017 Scoping Plan Update* establishes a new emissions limit of 260 MMTCO<sub>2e</sub> for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030 (38).

California’s climate strategy will require contributions from all sectors of the economy, including the land base, and will include enhanced focus on zero- and near-zero-emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants

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<sup>3</sup> Based upon the 2019 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2017 GHG emissions period, California emitted an average 424.1 MMTCO<sub>2e</sub> (30). This is less than the 2020 emissions target of 431 MMTCO<sub>2e</sub>.



(CH<sub>4</sub>, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries will further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the *Final 2017 Scoping Plan Update* framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks.
- LCFS, with an increased stringency (18% by 2030).
- Implementing SB 350, which expands the RPS to 50% RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of zero-emission vehicles (ZEV) trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing CH<sub>4</sub> and hydrofluorocarbon emissions by 40% and anthropogenic black carbon emissions by 50% by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20% reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Note, however, that the *Final 2017 Scoping Plan Update* acknowledges that:

*"[a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."*

In addition to the statewide strategies listed above, the *Final 2017 Scoping Plan Update* also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO<sub>2</sub>e (MTCO<sub>2</sub>e) or less per capita by 2030 and 2 MTCO<sub>2</sub>e or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidenced-based bright-line numeric thresholds—consistent with the *Scoping Plan* and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and MMs that avoid or minimize project emissions to the degree feasible; or, a performance-based metric using a CAP or other plan to reduce GHG emissions is appropriate.

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) and supported by CARB, California, under its existing and proposed GHG reduction policies, could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that by 2030, emissions could range from 211 to 428 MTCO<sub>2e</sub> per year (MTCO<sub>2e</sub>/yr), indicating that “even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40% below the 1990 level [of SB 32].” CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions would not meet the State’s 80% reduction goal by 2050, various combinations of policies could allow California’s cumulative emissions to remain very low through 2050 (39) (40).

### **CAP-AND-TRADE PROGRAM**

The *Scoping Plan* identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program will help put California on the path to meet its goal of achieving a 40% reduction in GHG emissions from 1990 levels by 2030. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap will be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from regulated entities by more than 16% between 2013 and 2020, and by an additional 40% by 2030. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program’s duration.

Covered entities that emit more than 25,000 MTCO<sub>2e</sub>/yr must comply with the Cap-and-Trade Program. Triggering of the 25,000 MTCO<sub>2e</sub>/yr “inclusion threshold” is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or “MRR”).

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender “compliance instruments” for each MTCO<sub>2e</sub> of GHG they emit. There also are requirements to surrender compliance instruments covering 30% of the prior year’s compliance obligation by November of each year (41).

The Cap-and-Trade Program provides a firm cap, which provides the highest certainty of achieving the 2030 target. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by CARB in the *First Update to the Climate Change Scoping Plan*:

*“The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative.” (42)*

The Cap-and-Trade Program covered approximately 80% of California’s GHG emissions (38). The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects’ electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program’s first compliance period. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported.

#### **THE SUSTAINABLE COMMUNITIES AND CLIMATE PROTECTION ACT OF 2008 (SB 375)**

Passing the Senate on August 30, 2008, SB 375 was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40% of the total GHG emissions in California. SB 375 states, “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 does the following: it (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that the CARB accepts as achieving the GHG emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the MMs required by an applicable prior environmental document.

#### **AB 1493**

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the

regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.

The standards phase in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards will result in about a 22% reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30% reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program (LEV III) or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34% from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles (EV) and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.

#### **CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)**

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

### **2.7.3.1 EXECUTIVE ORDERS RELATED TO GHG EMISSIONS**

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the state and guide the actions of state agencies.

#### **EXECUTIVE ORDER B-55-18 AND SB 100**

Executive Order B-55-18 and SB 100. SB 100 and Executive Order B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing RPS, 25% of retail sales are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

#### **EXECUTIVE ORDER S-3-05**

Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

#### **EXECUTIVE ORDER S-01-07 (LCFS)**

The Governor signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. The CARB adopted the LCFS on April 23, 2009.

The LCFS was challenged in the U.S. District Court in Fresno in 2011. The court's ruling issued on December 29, 2011, included a preliminary injunction against CARB's implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012, pending final ruling on

appeal, allowing CARB to continue to implement and enforce the regulation. The Ninth Circuit Court's decision, filed September 18, 2013, vacated the preliminary injunction. In essence, the court held that LCFS adopted by CARB were not in conflict with federal law. On August 8, 2013, the Fifth District Court of Appeal (California) ruled CARB failed to comply with CEQA and the Administrative Procedure Act (APA) when adopting regulations for LCFS. In a partially published opinion, the Court of Appeal reversed the trial court's judgment and directed issuance of a writ of mandate setting aside Resolution 09-31 and two executive orders of CARB approving LCFS regulations promulgated to reduce GHG emissions. However, the court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while CARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015 the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

In 2018, the CARB approved amendments to the regulation, which included strengthening the carbon intensity benchmarks through 2030 in compliance with the SB 32 GHG emissions reduction target for 2030. The amendments included crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector (43).

#### **EXECUTIVE ORDER S-13-08**

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the Order, the 2009 California Climate Adaptation Strategy (CNRA 2009) was adopted, which is the "...first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

#### **EXECUTIVE ORDER B-30-15**

On April 29, 2015, Governor Edmund G. Brown Jr. issued an executive order to establish a California GHG reduction target of 40% below 1990 levels by 2030. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the Climate Change *Scoping Plan* to express the 2030 target in terms of MMTCO<sub>2</sub>e. The Order also requires the state's climate

adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable for local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

### **2.7.3.2 CALIFORNIA REGULATIONS AND BUILDING CODES**

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

#### **TITLE 20 CCR**

CCR, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. 23 categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles or other mobile equipment (CEC 2012).

#### **TITLE 24 CCR**

CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020.

The CEC indicates that the 2019 Title 24 standards will require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, update indoor and outdoor lighting for nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar photovoltaic systems, homes built under the 2019 standards will about 53% less energy than homes built under the 2016 standards. Nonresidential buildings will use approximately 30% less energy due to lighting upgrades (44).

CCR, Title 24, Part 11: CALGreen is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2011, and is administered by the California Building Standards Commission (BSC). CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2019 California Green Building Code Standards that have become effective on January 1, 2020. Local jurisdictions are

permitted to adopt more stringent requirements, as state law provides methods for local enhancements. CALGreen recognizes that many jurisdictions have developed existing construction and demolition ordinances and defers to them as the ruling guidance provided, they establish a minimum 65% diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings must meet in order to be certified for occupancy, which is generally enforced by the local building official. 2019 CALGreen standards are applicable to the Project and require (45):

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- Designated parking. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phase project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
  - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
  - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
  - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).



- Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
- Outdoor portable water use in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient (MWELO), whichever is more stringent (5.304.1).
- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 sf or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gallons per day (5.303.1.1 and 5.303.1.2).
- Outdoor water use in rehabilitated landscape projects equal or greater than 2,500 sf. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 sf requiring a building or landscape permit (5.304.3).
- Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

## **MWELO**

The MWELO was required by AB 1881, the Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Governor Brown's Drought Executive Order of April 1, 2015 (Executive Order B-29-15) directed Department of Water Resources (DWR) to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015 effective December 15, 2015. New development projects that include landscape areas of 500 sf or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems;
- Incentives for graywater usage;
- Improvements in on-site stormwater capture;
- Limiting the portion of landscapes that can be planted with high water use plants; and
- Reporting requirements for local agencies.

## **TRACTOR-TRAILER GHG REGULATION**

The tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the HD tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors model

year 2011 and later must be SmartWay certified. All other tractors must use SmartWay verified low rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

#### **PHASE 1 AND 2 HEAVY-DUTY VEHICLE GHG STANDARDS**

CARB has adopted a new regulation for GHG emissions from HDTs and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the EPA rule for new trucks and engines nationally. Existing HD vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer Greenhouse Gas Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation. In September 2011, the EPA adopted their new rule for HDTs and engines. The EPA rule has compliance requirements for new compression and spark ignition engines, as well as trucks from Class 2b through Class 8. Compliance requirements begin with model year (MY) 2014 with stringency levels increasing through MY 2018. The rule organizes truck compliance into three groupings, which include a) HD pickups and vans; b) vocational vehicles; and c) combination tractors. The EPA rule does not regulate trailers.

CARB staff has worked jointly with the EPA and the NHTSA on the next phase of federal GHG emission standards for medium-duty trucks (MDT) and HDT vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year HDT vehicles, including trailers. But as discussed above, the EPA and NHTSA have proposed to roll back GHG and fuel economy standards for cars and light-duty trucks, which suggests a similar rollback of Phase 2 standards for MDT and HDT vehicles may be pursued.

#### **SB 97 AND THE CEQA GUIDELINES UPDATE**

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the OPR shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the OPR pursuant to subdivision (a)." Section 21097 was also added to the Public Resources Code. It provided CEQA protection until January 1, 2010 for transportation projects funded by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 or projects funded by the Disaster Preparedness and Flood Prevention Bond Act of 2006, in stating that the failure to analyze adequately the effects of GHGs would not violate CEQA.

On December 28, 2018, the Natural Resources Agency announced the OAL approved the amendments to the *CEQA Guidelines* for implementing the CEQA. The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG

emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing *CEQA Guidelines* to reference climate change.

Section 15064.3 was added to the *CEQA Guidelines* and states that in determining the significance of a project's GHG emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. Additionally, a lead agency may use a model or methodology to estimate GHG emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use (46).

#### **2.7.4 REGIONAL**

The project is within the South Coast Air Basin (SCAB), which is under the jurisdiction of the SCAQMD.

#### **SCAQMD**

SCAQMD is the agency responsible for air quality planning and regulation in the SCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SCAB. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, that could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.

- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
  - Residential and Commercial land use: 3,000 MTCO<sub>2</sub>e/yr
  - Industrial land use: 10,000 MTCO<sub>2</sub>e/yr
  - Based on land use type: residential: 3,500 MTCO<sub>2</sub>e/yr; commercial: 1,400 MTCO<sub>2</sub>e/yr; or mixed use: 3,000 MTCO<sub>2</sub>e/yr
- Tier 4 has the following options:
  - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined.
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3: 2020 target for service populations, which includes residents and employees: 4.8 MTCO<sub>2</sub>e per service population per year for projects and 6.6 MTCO<sub>2</sub>e per service population per year for plans;
  - Option 3, 2035 target: 3.0 MTCO<sub>2</sub>e per service population per year for projects and 4.1 MTCO<sub>2</sub>e per service population per year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's interim thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO<sub>2</sub> concentrations at 450 ppm, thus stabilizing global climate.

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. At this time, it is unknown if the project would include stationary sources of emissions subject to SCAQMD permits. Notwithstanding, if the Project requires a stationary permit, it would be subject to the applicable SCAQMD regulations.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties

## **2.8 CITY OF PERRIS CLIMATE ACTION PLAN (CAP)**

The City of Perris Climate Action Plan (CAP) was adopted by the City Council (Resolution Number 4966) on February 23, 2016 (32). The CAP was developed to address global climate change through the reduction of harmful GHG emissions at the community level, and as part of California's mandated statewide GHG emissions reduction goals under AB 32. Perris's CAP,

including the GHG inventories and forecasts contained within, is based on WRCOG's Subregional CAP. The Perris CAP utilized WRCOG's analysis of existing GHG reduction programs and policies that have already been implemented in the subregion and applicable best practices from other regions to assist in meeting the 2020 subregional reduction target. The CAP reduction measures chosen for the City's CAP were based on their GHG reduction potential, cost-benefit characteristics, funding availability, and feasibility of implementation in the City of Perris. The CAP used an inventory base year of 2010 and included emissions from the following sectors: residential energy, commercial/industrial energy, transportation, waste, and wastewater. The CAP's 2020 reduction target is 15% below 2010 levels, and the 2035 reduction target is 47.5% below 2010 levels. The City of Perris is expected to meet these reduction targets through implementation of statewide and local measures. Beyond 2020, Executive Order S-03-05 calls for a reduction of GHG emissions to a level 80% below 1990 levels by 2050.

## 2.9 DISCUSSION ON ESTABLISHMENT OF SIGNIFICANCE THRESHOLDS

*CEQA Guidelines Section 15064.4(a)* further states:

*"...A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use ...; or (2) Rely on a qualitative analysis or performance-based standards."*

*CEQA Guidelines Section 15064.4* provides that a lead agency may take into account the following three considerations in assessing the significance of impacts from greenhouse gas emissions:

- **Consideration #1:** The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration #2:** Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration #3:** The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

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## **3 PROJECT GREENHOUSE GAS IMPACT**

### **3.1 INTRODUCTION**

The Project has been evaluated to determine if it will result in a significant GHG impact. The significance of these potential impacts is described in the following section.

### **3.2 STANDARDS OF SIGNIFICANCE**

The criteria used to determine the significance of potential Project-related GHG impacts are taken from the *CEQA Guidelines* (14 California Code of Regulations §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to GHG if it would (1):

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

### **3.3 MODELS EMPLOYED TO ANALYZE GREENHOUSE GASES**

Land uses such as the Project affect GHGs through construction-source and operational-source emissions.

#### **3.3.1 CALFEEMOD**

On October 17, 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod v2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from MMs (47). Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for are provided in Appendices 3.1 through 3.3 for construction and Appendix 3.4 for operations.

#### **3.3.2 EMFAC2017 EMISSION RATES**

On August 19, 2019, the EPA approved the 2017 version of the EMISSIONS FACTOR model (EMFAC) web database for use in SIP and transportation conformity analyses. EMFAC2017 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (48). This GHGA utilizes annual EMFAC2017 emission factors in order to derive vehicle emissions associated with Project operational activities.

Because the EMFAC2017 emission rates are associated with vehicle fuel types while CalEEMod vehicle emission factors are aggregated to include all fuel types for each individual vehicle class, the EMFAC2017 emission rates for different fuel types of a vehicle class are averaged by activity

or by population and activity to derive CalEEMod emission factors. The equations applied to obtain CalEEMod vehicle emission factors for each emission type are detailed in CalEEMod User’s Guide *Appendix A: Calculation Details for CalEEMod* (49).

**3.3.3 LAND USES MODELED**

The PVSD Channel Improvement area is approximately 29.7 acres and proposes improvements to the PVSD Channel from an area approximately 100 feet north of Morgan Street to an area approximately 120 feet south of Rider Street. The Rider 2 and 4 Warehouse Project is located on 38.33 net-acres for Rider 2 and 26.45-net acres for Rider 4 with a proposed development of up to 1,373,449 sf of High-Cube Transload Short-Term Storage Warehouse (without cold storage) use.

CalEEMod land uses that most closely fit the described Project are reflected in these analyses. For purposes of analysis, the following construction and operation scenarios and land uses were modeled.

**TABLE 3-1: PROJECT PROPOSED LAND USES**

Land Use	Quantity	Units
PVSD Channel Improvements		
Channel	29.7	AC
Rider 2 and 4 Warehouse		
High-Cube Transload Short-Term Storage Warehouse (without Cold Storage)	1,373.449	TSF

**3.4 LIFE-CYCLE ANALYSIS NOT REQUIRED**

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time (50). Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the project development, infrastructure and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time, an LCA would be extremely speculative and thus has not been prepared. Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood or documented, and would be challenging to mitigate (51). Additionally, the science to calculate life cycle emissions is not yet established or well defined; therefore, SCAQMD has not recommended, and is not requiring, life-cycle emissions analysis.



## 3.5 CONSTRUCTION EMISSIONS

### 3.5.1 CONSTRUCTION ACTIVITIES

Project construction activities would generate CO<sub>2</sub> and CH<sub>4</sub> emissions. The AQIA contains detailed information regarding Project construction activities (12). As discussed in the AQIA, Construction related emissions are expected from the following construction activities:

#### PVSD CHANNEL IMPROVEMENTS

- PVSD Channel Excavation
- PVSD Channel Construction
  - Detouring Traffic/Street Closure
  - Grubbing/Land Clearing
  - Grading/Excavation/Removing Existing Bridge
  - Bridge Construction
  - Drainage/Utilities/Sub-Grade
  - Paving

#### RIDER 2 AND 4 WAREHOUSE CONSTRUCTION

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

### 3.5.2 CONSTRUCTION DURATION

The construction schedule utilized in the analysis, shown in Tables 3-2 and 3-3, represents a “worst-case” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.<sup>4</sup> The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines*. The duration of construction activity was based on information provided by the Project applicant and the opening year.

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<sup>4</sup> As shown in the CalEEMod User’s Guide Version 2016.3.2, Section 4.3 “OFFROAD Equipment” as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

**TABLE 3-2: CONSTRUCTION DURATION – ONE STAGE BRIDGE CONSTRUCTION**

Phase Name	Start Date	End Date	Days
PVSD Channel Improvements – PVSD Channel Excavation			
Excavation/Grading	10/05/2020	11/30/2020	41
PVSD Channel Improvements – Channel Construction			
Detouring Traffic/Street Closure	12/01/2020	12/07/2020	5
Grubbing/Land Clearing	12/08/2020	12/19/2020	9
Grading/Excavation/Removing Existing Bridge	12/20/2020	02/14/2021	40
Bridge Construction	02/15/2021	11/05/2021	190
Drainage/Utilities/Sub-Grade	07/30/2021	09/16/2021	35
Paving	08/26/2021	09/16/2021	16
Rider 2 and 4 Warehouse Construction			
Site Preparation	12/01/2020	12/28/2020	20
Grading	12/29/2020	02/22/2021	40
Building Construction	02/23/2021	09/27/2021	155
Paving	09/28/2021	12/27/2021	65
Architectural Coating	11/02/2021	12/27/2021	40

**TABLE 3-3: CONSTRUCTION DURATION – TWO STAGE BRIDGE CONSTRUCTION (1 OF 2)**

Phase Name	Start Date	End Date	Days
PVSD Channel Improvements – PVSD Channel Excavation			
Excavation/Grading	10/05/2020	11/30/2020	41
PVSD Channel Improvements – Channel Construction			
Implementing Traffic Controls	12/01/2020	12/07/2020	5
Grubbing/Land Clearing	12/08/2020	12/21/2020	10
Stage 1: Grading/Excavation/Removing Existing Bridge	12/22/2020	2/01/2021	30
Stage 1: Bridge Construction	02/15/2021	07/15/2021	109
Implementing Traffic Controls (Shifting Traffic)	07/16/2021	07/21/2021	4
Stage 2: Grading/Excavation/Removing Existing Bridge	07/22/2021	09/01/2021	30

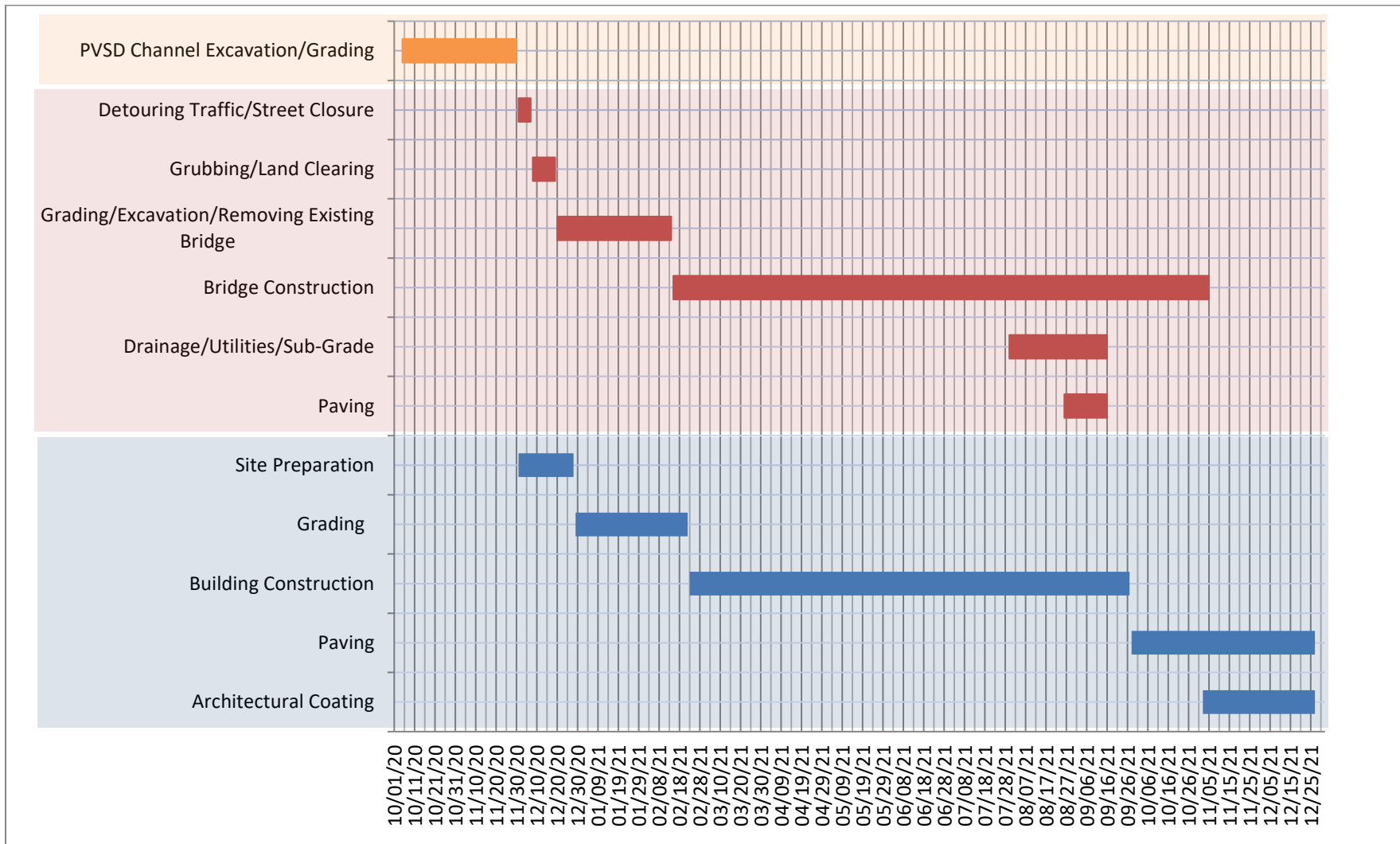
**TABLE 3-3: CONSTRUCTION DURATION – TWO STAGE BRIDGE CONSTRUCTION (2 OF 2)**

Phase Name	Start Date	End Date	Days
PVSD Channel Improvements – Channel Construction			
Stage 2: Bridge Construction	09/02/2021	03/12/2022	137
Drainage/Utilities/Sub-Grade	03/13/2022	04/12/2022	22
Paving	04/12/2022	05/02/2022	15
Rider 2 and 4 Warehouse Construction			
Site Preparation	12/01/2020	12/28/2020	20
Grading	12/29/2020	02/22/2021	40
Building Construction	02/23/2021	09/27/2021	155
Paving	09/28/2021	12/27/2021	65
Architectural Coating	11/02/2021	12/27/2021	40

**3.5.2.1 OVERLAP OF CONSTRUCTION-RELATED ACTIVITIES**

Based on the construction schedule, PVSD Channel Improvements (PVSD Channel Construction) activities will overlap with Rider 2 and 4 Warehouse Construction activities. Detailed information on overlap of construction-related activities is provided in Tables 3-4 and 3.5. It should be noted that the overlapping construction activity may affect the maximum peak daily construction emissions levels for criteria pollutants.

**TABLE 3-4: OVERLAP OF ONE STAGE BRIDGE CONSTRUCTION-RELATED ACTIVITIES**

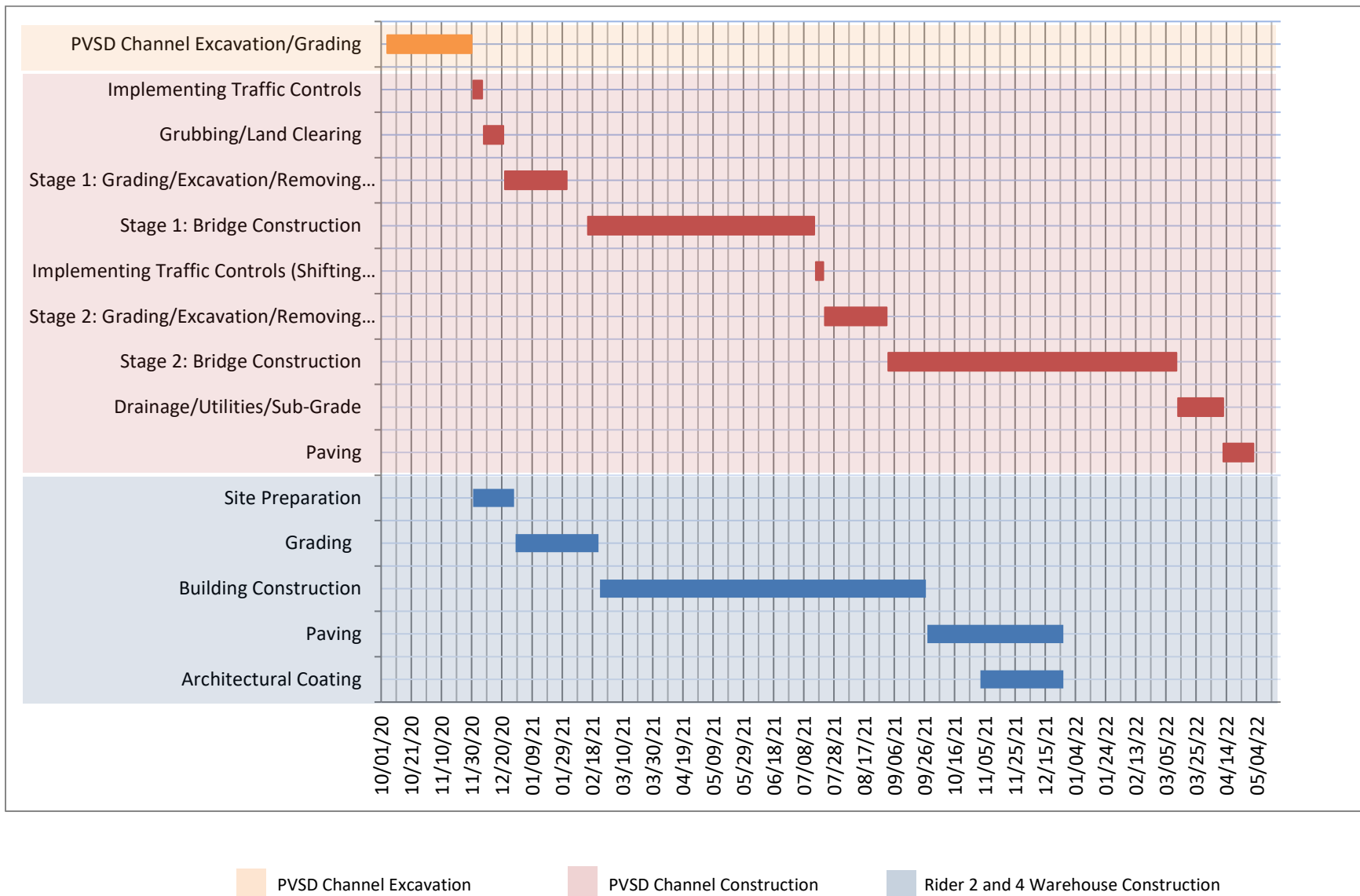


■ PVSD Channel Excavation

■ PVSD Channel Construction

■ Rider 2 and 4 Warehouse Construction

**TABLE 3-5: OVERLAP OF TWO STAGE BRIDGE CONSTRUCTION-RELATED ACTIVITIES**



**3.5.3 CONSTRUCTION EQUIPMENT**

Site specific construction fleet may vary due to specific project needs at the time of construction. The associated construction equipment was based on CalEEMod defaults and information provided by the Project Applicant. A detailed summary of construction equipment assumptions by phase is provided at Tables 3-6 and 3-7. Please refer to specific detailed modeling inputs/outputs contained in Appendices 3.1 through 3.4 of this GHGA.

**TABLE 3-6: CONSTRUCTION EQUIPMENT ASSUMPTIONS – ONE STAGE BRIDGE CONSTRUCTION (1 OF 2)**

Activity	Equipment	Amount	Hours Per Day
PVSD Channel Improvements –Channel Excavation			
Excavation	Scrapers	5	8
PVSD Channel Improvements – Channel Construction			
Detouring Traffic/Street Closure	Signal Boards	2	8
Grubbing/Land Clearing	Crawler Tractors	1	8
	Excavators	1	8
	Hauling Trucks	1	8
Grading/Excavation/ Removing Existing Bridge	Crawler Tractors	2	8
	Excavators	2	8
	Demolition Equipment	1	8
	Hauling Trucks	2	8
Bridge Construction	Drill Rig	1	8
	Cranes	1	8
	Excavators	1	8
	Compactors	1	8
	Concrete Paving Machine	1	8
Drainage/Utilities/ Sub-Grade	Crawler Tractors	2	8
	Scrapers	2	8
Paving	Pavers	1	8
	Paving Equipment	1	8
	Rollers	1	8
	Signal Boards	1	8
	Tractors/Loaders/Backhoes	2	8

**TABLE 3-6: CONSTRUCTION EQUIPMENT ASSUMPTIONS – ONE STAGE BRIDGE CONSTRUCTION (1 OF 2)**

Activity	Equipment	Amount	Hours Per Day
Rider 2 and 4 Warehouse Construction			
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
Grading	Crawler Tractors	2	8
	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
Building Construction	Cranes	1	8
	Crawler Tractors	3	8
	Forklifts	3	8
	Generator Sets	1	8
	Welders	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

Source: In order to account for fugitive dust emissions associated with Site Preparation and Grading activities, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes.

**TABLE 3-7: CONSTRUCTION EQUIPMENT ASSUMPTIONS – TWO STAGE BRIDGE CONSTRUCTION (1 OF 3)**

Activity	Equipment	Amount	Hours Per Day
PVSD Channel Improvements –Channel Excavation			
Excavation	Scrapers	5	8
PVSD Channel Improvements – Channel Construction			
Implementing Traffic Controls	Signal Boards	2	8
Grubbing/Land Clearing	Crawler Tractors	1	8
	Excavators	1	8
	Hauling Trucks	1	8
Stage 1: Grading/Excavation/ Removing Existing Bridge	Crawler Tractors	1	8
	Excavators	2	8
	Demolition Equipment	1	8
	Hauling Trucks	2	8

**TABLE 3-7: CONSTRUCTION EQUIPMENT ASSUMPTIONS – TWO STAGE BRIDGE CONSTRUCTION (2 OF 3)**

Activity	Equipment	Amount	Hours Per Day
PVSD Channel Improvements – Channel Construction			
Stage 1: Bridge Construction	Drill Rig	1	8
	Cranes	1	8
	Excavators	1	8
	Compactors	1	8
	Concrete Paving Machine	1	8
Implementing Traffic Controls (Shifting Traffic)	Signal Boards	2	8
Stage 2: Grading/Excavation/ Removing Existing Bridge	Crawler Tractors	1	8
	Excavators	2	8
	Demolition Equipment	1	8
	Hauling Trucks	2	8
Stage 2: Bridge Construction	Drill Rig	1	8
	Cranes	1	8
	Excavators	1	8
	Compactors	1	8
	Concrete Paving Machine	1	8
Drainage/Utilities/ Sub-Grade	Crawler Tractors	2	8
	Scrapers	2	8
Paving	Pavers	1	8
	Paving Equipment	1	8
	Rollers	1	8
	Signal Boards	1	8
	Tractors/Loaders/Backhoes	2	8
Rider 2 and 4 Warehouse Construction			
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
Grading	Crawler Tractors	2	8
	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8



**TABLE 3-7: CONSTRUCTION EQUIPMENT ASSUMPTIONS – TWO STAGE BRIDGE CONSTRUCTION (3 OF 3)**

Activity	Equipment	Amount	Hours Per Day
Rider 2 and 4 Warehouse Construction			
Building Construction	Cranes	1	8
	Crawler Tractors	3	8
	Forklifts	3	8
	Generator Sets	1	8
	Welders	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

### 3.5.3 CONSTRUCTION EMISSIONS SUMMARY

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year project life then adding that number to the annual operational phase GHG emissions (52). As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 3-5.

**TABLE 3-8: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS – ONE STAGE BRIDGE CONSTRUCTION**

Activity	Emissions (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E <sup>5</sup>
Channel Excavation	140.18	0.04	0.00	141.29
Channel Construction (2020)	40.26	0.01	0.00	40.57
Channel Construction (2021)	1,325.11	0.17	0.00	1,329.30
Rider 2 & 4 (2020)	61.46	0.02	0.00	61.95
Rider 2 & 4 (2021)	2,218.88	0.22	0.00	2,224.50
Total	3,785.90	0.47	0.00	3,797.60
<b>Amortized Construction Emissions (MTCO<sub>2</sub>e)</b>	<b>126.20</b>	<b>0.02</b>	<b>0.00</b>	<b>126.59</b>

Source: Annual construction outputs are provided in Appendices 3.1 and 3.2

5 CalEEMod reports the most common GHGs emitted which include CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. These GHGs are then converted into the CO<sub>2</sub>e in CalEEMod based on their corresponding GWP. Further, CO<sub>2</sub>e is a term used for describing the difference GHGs in a common unit. CO<sub>2</sub>e signifies the amount of CO<sub>2</sub> which would have the equivalent GWP.

**TABLE 3-9: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS – TWO STAGE BRIDGE CONSTRUCTION**

Activity	Emissions (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E <sup>6</sup>
Channel Excavation	140.18	0.04	0.00	141.29
Channel Construction (2020)	30.62	0.01	0.00	30.86
Channel Construction (2021)	1,318.32	0.16	0.00	1,322.25
Channel Construction (2022)	358.64	0.05	0.00	359.83
Rider 2 & 4 (2020)	61.46	0.02	0.00	61.95
Rider 2 & 4 (2021)	2,218.88	0.22	0.00	2,224.50
Total	4,128.09	0.50	0.00	4,140.67
<b>Amortized Construction Emissions (MTCO<sub>2</sub>e)</b>	<b>137.60</b>	<b>0.02</b>	<b>0.00</b>	<b>138.02</b>

Source: Annual construction outputs are provided in Appendices 3.1 and 3.2

### 3.6 OPERATIONAL EMISSIONS

Operational activities associated with the Project will result in emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- On-site Equipment Emissions
- Water Supply, Treatment, and Distribution
- Solid Waste

The Project related GHG emissions derive primarily from vehicle trips generated by the Rider 2 and 4 Warehouse Project as the development of the PVSD primarily involves construction activity. For on-going operations, vehicular trips would be generated by motor vehicles traveling to and from the PVSD Channel during periodic maintenance. As such, the PVSD Channel will not generate quantifiable GHG emissions from Project operations. Additionally, the PVSD Channel does not propose any buildings and therefore no permanent source or stationary source emissions. While it is anticipated that the Project would require intermittent maintenance, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. Therefore, there is no significant GHG emissions in regard to development of the PVSD Channel.

<sup>6</sup> CalEEMod reports the most common GHGs emitted which include CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. These GHGs are then converted into the CO<sub>2</sub>e in CalEEMod based on their corresponding GWP. Further, CO<sub>2</sub>e is a term used for describing the difference GHGs in a common unit. CO<sub>2</sub>e signifies the amount of CO<sub>2</sub> which would have the equivalent GWP.

### **3.6.1 AREA SOURCE EMISSIONS**

#### **LANDSCAPE MAINTENANCE EQUIPMENT**

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

### **3.6.2 ENERGY SOURCE EMISSIONS**

#### **COMBUSTION EMISSIONS ASSOCIATED WITH NATURAL GAS AND ELECTRICITY**

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO<sub>2</sub> and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting<sup>7</sup>. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Unless otherwise noted, CalEEMod default parameters were used.

#### **TITLE 24 ENERGY EFFICIENCY STANDARDS**

California's Energy Efficiency Standards for Residential and Nonresidential Buildings was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity. The 2019 version of Title 24 was adopted by the CEC and became effective on January 1, 2020. The CEC anticipates that nonresidential buildings will use approximately 30% less energy (44). The CalEEMod defaults for Title 24 – Electricity and Lighting Energy were reduced by 30% in order to reflect consistency with the 2019 Title 24 standard.

### **3.6.3 MOBILE SOURCE EMISSIONS**

Project-related GHG emissions derive predominantly from mobile sources. In this regard, an approximately 85% (by weight) of all Project GHG emissions would be generated by mobile sources (vehicles). Neither the Project applicant nor the City have any regulatory control over these tail pipe emissions. Rather, vehicle tail pipe source emissions are regulated by CARB and EPA.

Trip characteristics available from TIA were utilized in this analysis. Per TIA prepared by Urban Crossroads, Inc. the Project is expected to generate a total of approximately 1,926 two-way vehicular trips per day (963 inbound and 963 outbound) (15). The Project trip generation includes 1,304 two-way passenger car trips per day (652 inbound and 652 outbound) and 622 two-way

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<sup>7</sup> The CalEEMod emissions inventory model does not include indirect emission related to street lighting. Indirect emissions related to street lighting are expected to be negligible and cannot be accurately quantified at this time as there is insufficient information as to the number and type of street lighting that would occur.

truck trips per day (311 inbound and 311 outbound) from the proposed buildings within the Project sites.

**3.5.3.1 Approach for Analysis of the Project**

One model run was utilized in order to more accurately model emissions resulting from passenger car and truck operations. This run incorporates a trip length of 30.58 miles and an assumption of 100% primary trips. The trip length was determined by weighting the default trip length of 16.6 miles for passenger cars and the average truck trip length of 60 miles with the following fleet mix:

**TABLE 3-10: VEHICLE FLEET MIX**

Land Use	Vehicle Type	%
High-Cube Transload Short-Term Storage Warehouse (without cold storage)	LDA	41.60
	LDT1	2.90
	LDT2	14.20
	MDV	9.10
	LHDT	5.40
	MHDT	6.60
	HHDT	20.20

The truck fleet mix is estimated by rationing the trip for each truck type based on information provided in the TIA. Heavy trucks are broken down by truck type (or axle type) and are categorized as either Light-Heavy-Duty Trucks (LHDT)/2-axle, Medium-Heavy-Duty Trucks (MHDT)/3-axle, and Heavy-Heavy-Duty Trucks (HHDT)/4+-axle. Additionally, this analysis assumes that passenger cars include Light-Duty-Auto vehicles (LDA), Light-Duty-Trucks (LDT18 & LDT29), and Medium-Duty-Vehicles (MDV) vehicle types. The Project-specific passenger car fleet mix used in this analysis is based on a proportional split utilizing the default CalEEMod percentages assigned to LDA, LDT1, LDT2, and MDV vehicles types and then rationing between the total passenger car trips identified in the TIA.

**3.6.4 ON-SITE EQUIPMENT EMISSIONS**

It is common for industrial warehouse buildings to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. The cargo handling equipment is assumed to have a horsepower (hp) range of approximately 175 hp to 200 hp. Based on the latest available information from SCAQMD (53); for example, high-cube warehouse

<sup>8</sup> Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

<sup>9</sup> Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

projects typically have 3.6 yard trucks per million sf of building space. For this particular Project, based on the maximum square footage of building space permitted by the Project, on-site modeled operational equipment includes a total five (5) 200 hp, electric-powered yard tractors operating at 4 hours a day for 365 days of the year.

### **3.6.5 WATER SUPPLY, TREATMENT AND DISTRIBUTION**

Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water depends on the volume of water as well as the sources of the water. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated based on the PVCC SP EIR (54). According to the PVCC SP EIR, the projected water demand for commercial and industrial land uses is 0.75 acre-feet per year (AFY). The Project is anticipated to have a project water demand of 18.15 AFY.

### **3.6.6 SOLID WASTE**

Industrial land uses will result in the generation and disposal of solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the Project were calculated by CalEEMod using default parameters.

## **3.7 EMISSIONS SUMMARY**

### **ONE STAGE BRIDGE CONSTRUCTION**

The annual GHG emissions associated with the operation of the Project are estimated to be 13,440.86 MTCO<sub>2</sub>e per year as summarized in Table 3-11.

### **TWO STAGE BRIDGE CONSTRUCTION**

The annual GHG emissions associated with the operation of the Project are estimated to be 13,452.29 MTCO<sub>2</sub>e per year as summarized in Table 3-12.

**TABLE 3-11: PROJECT GHG EMISSIONS – ONE STAGE BRIDGE CONSTRUCTION**

Emission Source	Emissions (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E <sup>10</sup>
Annual construction-related emissions amortized over 30 years	126.20	0.02	0.00	126.59
Area Source	0.08	2.10E-04	0.00	0.08
Energy Source	957.00	0.04	9.18E-03	960.66
Mobile Source	11,355.41	0.19	0.00	11,360.24
On-Site Equipment	254.20	0.08	0.00	256.26
Waste	262.07	15.49	0.00	649.27
Water Usage	70.94	0.52	0.01	87.76
<b>Total CO<sub>2</sub>E (All Sources)</b>	<b>13,440.86</b>			

Source: Annual construction outputs are provided in Appendices 3.1 and 3.2; Annual operational outputs are provided in Appendix 3.4 (CalEEMod).

**TABLE 3-12: PROJECT GHG EMISSIONS – TWO STAGE BRIDGE CONSTRUCTION**

Emission Source	Emissions (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E <sup>11</sup>
Annual construction-related emissions amortized over 30 years	137.60	0.02	0.00	138.02
Area Source	0.08	2.10E-04	0.00	0.08
Energy Source	957.00	0.04	9.18E-03	960.66
Mobile Source	11,355.41	0.19	0.00	11,360.24
On-Site Equipment	254.20	0.08	0.00	256.26
Waste	262.07	15.49	0.00	649.27
Water Usage	70.94	0.52	0.01	87.76
<b>Total CO<sub>2</sub>E (All Sources)</b>	<b>13,452.29</b>			

Source: Annual construction outputs are provided in Appendices 3.1 and 3.2; Annual operational outputs are provided in Appendix 3.4 (CalEEMod).

10 CalEEMod reports the most common GHGs emitted which include CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. These GHGs are then converted into the CO<sub>2</sub>e in CalEEMod based on their corresponding GWP. Further, CO<sub>2</sub>e is a term used for describing the difference GHGs in a common unit. CO<sub>2</sub>e signifies the amount of CO<sub>2</sub> which would have the equivalent GWP.

11 CalEEMod reports the most common GHGs emitted which include CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. These GHGs are then converted into the CO<sub>2</sub>e in CalEEMod based on their corresponding GWP. Further, CO<sub>2</sub>e is a term used for describing the difference GHGs in a common unit. CO<sub>2</sub>e signifies the amount of CO<sub>2</sub> which would have the equivalent GWP.

### 3.8 GREENHOUSE GAS EMISSIONS FINDINGS AND RECOMMENDATIONS

***GHG Impact #1: The Project would generate direct or indirect GHG emissions that would result in a significant impact on the environment.***

The City of Perris does not have an adopted threshold of significance for GHG emissions. For CEQA purposes, the City has discretion to select an appropriate significance criterion, based on substantial evidence. The SCAQMD's adopted numerical threshold of 10,000 MTCO<sub>2</sub>e per year for industrial stationary source emissions is selected as the significance criterion. The SCAQMD-adopted industrial threshold was selected by the City because the proposed Project is more analogous to an industrial use than any other land use such as commercial or residential in terms of its expected operating characteristics. The Project proposes a warehouse use that will serve mid-stream functions in the goods movement chain between manufacturers and consumers, characteristic of an industrial operation. Further, analysis of the Project's traffic generation in this report is based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, 2017 for warehouse and industrial land use categories. Also, 10,000 MTCO<sub>2</sub>e has been used as the significance threshold by many local government lead agencies for logistics projects throughout the Southern California Association of Governments (SCAG) region since the SCAQMD adopted this threshold for its own use. Further, to ensure that the threshold is conservative in its application, although the SCAQMD uses their adopted 10,000 MTCO<sub>2</sub>e threshold to determine the significance of stationary source emissions for industrial projects, the 10,000 MTCO<sub>2</sub>e threshold used in this CEQA document is applied to all sources of Project-related GHG emissions whether stationary source, mobile source, area source, or other.

Use of this threshold is also consistent with guidance provided in the CAPCOA *CEQA and Climate Change* handbook, as such, the City has opted to use a non-zero threshold approach based on Approach 2 of the handbook. Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90% of emissions from future development. The latest threshold developed by SCAQMD using this method is 10,000 MTCO<sub>2</sub>e based on the review of 711 CEQA projects.

Project operational-source GHG emissions exceedances of applicable SCAQMD numeric threshold are therefore considered significant and unavoidable. Moreover, approximately 85% of all GHG emissions (by weight) would be generated by Project mobile sources (traffic). Neither the Project Applicant nor the Lead Agency (City of Perris) can substantively or materially affect reductions in Project mobile-source emissions beyond the regulatory requirements, PVCC SP EIR MMs, and additional MMs addressed in this GHGA. Further, although the mitigation measures suggested in this report will likely reduce emissions somewhat, actual quantifiable reductions due to implementation of these measures cannot be specified, because there is no way to quantify these reductions in CalEEMod. As such, Project operational-source GHG emissions exceedances of applicable SCAQMD numeric thresholds would be significant and unavoidable.

**GHG Impact #2: The Project could conflict with any applicable plan, policy or regulation for an agency adopted for the purpose of reducing the emissions of GHGs.**

As previously stated, pursuant to 15604.4 of the CEQA Guidelines, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions (55). As such, the Project’s consistency with SB 32 (2017 Scoping Plan), is discussed below. It should be noted that the Project’s consistency with the 2017 Scoping Plan also satisfies consistency with AB 32 since the 2017 Scoping Plan is based on the overall targets established by AB 32. Consistency with the 2008 Scoping Plan is not necessary, since the target year for the 2008 Scoping Plan was 2020, and the Project’s buildout year is 2021. As such the 2008 Scoping Plan does not apply and consistency with the 2017 Scoping Plan is relevant.

Project consistency with the 2017 Scoping Plan and the City’s CAP are evaluated in the following discussions.

**2017 Scoping Plan Consistency**

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Table 3-13 summarizes the project’s consistency with the 2017 Scoping Plan. As summarized, the project will not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories.

**TABLE 3-13: 2017 SCOPING PLAN CONSISTENCY SUMMARY<sup>12</sup>**

Action	Responsible Parties	Consistency
<b>Implement SB 350 by 2030</b>		
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.	CPUC, CEC, CARB	Consistent. The Project would use energy from Southern California Edison (SCE). SCE has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources. The Project would not interfere with or obstruct SCE energy source diversification efforts.
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.		Consistent. The Project would be constructed in compliance with current California Building Code requirements. Specifically, new buildings must achieve compliance with 2019 Building and Energy Efficiency Standards and the 2019 California Green Building Standards requirements. The proposed Project includes energy efficient field lighting and fixtures that meet the current Title 24 Standards throughout the Project Site and would be a modern development with energy efficient boilers, heaters, and air conditioning systems.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-		

<sup>12</sup> Measures can be found at the following link: [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf)



Action	Responsible Parties	Consistency
serving entities and publicly- owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.		
<b>Implement Mobile Source Strategy (Cleaner Technology and Fuels)</b>		
At least 1.5 million zero emission and plug-in hybrid light-duty EVs by 2025.	CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, OPR, Local Agencies	Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2025 targets. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.
At least 4.2 million zero emission and plug-in hybrid light-duty EVs by 2030.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2030 targets. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.
Medium- and Heavy-Duty GHG Phase 2.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to implement Medium- and Heavy-Duty GHG Phase 2. As this is a CARB enforced standard, vehicles that access the Project are required to comply with the standards and will therefore comply with the strategy.
Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration		Not applicable. This measure is not within the purview of this Project.

Action	Responsible Parties	Consistency
<p>of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO<sub>x</sub> standard.</p>		
<p>Last Mile Delivery: New regulation that would result in the use of low NO<sub>x</sub> or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10% in 2025 and remaining flat through 2030.</p>		<p>Not applicable. This Project is not responsible for implementation of SB 375 and would therefore not conflict with this measure</p>
<p>Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document “Potential VMT Reduction Strategies for Discussion.”</p>		<p>Consistent. This Project would not obstruct or interfere with implementation of SB 375 and would therefore not conflict with this measure.</p>
<p>Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).</p>	<p>CARB</p>	<p>Not applicable. The Project is not within the purview of SB 375 and would therefore not conflict with this measure.</p>
<p>Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g. via guideline documents, funding programs, project selection, etc.).</p>	<p>CalSTA, SGC, OPR, CARB, Governor’s Office of Business and Economic Development (GO-Biz), California Infrastructure and Economic Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans</p>	<p>Consistent. The Project would not obstruct or interfere with agency efforts to harmonize transportation facility project performance with emissions reductions and increase competitiveness of transit and active transportation modes.</p>

Action	Responsible Parties	Consistency
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR, SGC, CARB	Consistent. The Project would not obstruct or interfere with agency efforts to develop pricing policies to support low-GHG transportation.
<b>Implement California Sustainable Freight Action Plan</b>		
Improve freight system efficiency.	CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GO-Biz	Consistent. This measure would apply to all trucks accessing the Project sites, this may include existing trucks or new trucks that are part of the statewide goods movement sector. The Project would not obstruct or interfere with agency efforts to Improve freight system efficiency.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.		Not applicable. This measure is not within the purview of this Project.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.	CARB	Consistent. When adopted, this measure would apply to all fuel purchased and used by the Project in the state. The Project would not obstruct or interfere with agency efforts to adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.
<b>Implement the Short-Lived Climate Pollutant Strategy (SLPS) by 2030</b>		
40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.	CARB, CalRecycle, CDFA, California State Water Resource Control Board (SWRCB), Local Air Districts	Not applicable. This measure is not within the purview of this Project.
50% reduction in black carbon emissions below 2013 levels.		
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	CARB, CalRecycle, CDFA, SWRCB, Local Air Districts	Not applicable. This measure is not within the purview of this Project.

Action	Responsible Parties	Consistency
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	Consistent. The Project would be required to comply with any applicable Cap-and-Trade Program provisions. The Project would not obstruct or interfere agency efforts to implement the post-2020 Cap-and-Trade Program.
<b>By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California’s land base as a net carbon sink</b>		
Protect land from conversion through conservation easements and other incentives.	CNRA, Departments Within CDFA, CalEPA, CARB	Consistent. The Project would not obstruct or interfere agency efforts to protect land from conversion through conservation easements and other incentives. Notably, the Project would expand the PVSD Channel, which is Public/Quasi-Public (PQP) Conserved Lands, by approximately 20 acres.
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity		Consistent. The Project site is vacant disturbed property and does not comprise an area that would effectively provide for carbon sequestration. The Project would not obstruct or interfere agency efforts to increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments		Consistent. To the extent appropriate for the proposed industrial buildings, wood products would be used in construction, including for the roof structure. Additionally, the proposed project includes landscaping, including.
Establish scenario projections to serve as the foundation for the Implementation Plan		Not applicable. This measure is not within the purview of this Project.
Implement Forest Carbon Plan	CNRA, California Department of Forestry and Fire Protection (CAL FIRE), CalEPA and Departments Within	Not applicable. This measure is not within the purview of this Project.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies & Local Agencies	Not applicable. This measure is not within the purview of this Project.

Action	Responsible Parties	Consistency

As shown above, the Project would not conflict with any of the 2017 Scoping Plan elements as any regulations adopted would apply directly or indirectly to the Project. Further, recent studies show that the State’s existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40% below 1990 levels by 2030 (39).

**City of Perris CAP Consistency**

The City of Perris adopted its CAP in February 2016. The measures identified in the CAP represent the City’s actions to achieve the GHG reduction targets of AB 32 for target year 2020. Local measures incorporated in the CAP include:

- An energy measure that directs the City to create an energy action plan to reduce energy consumption citywide
- Land use and transportation measures that encourage alternative modes of transportation (walking, biking, and transit), reduce motor vehicle use by allowing a reduction in parking supply, voluntary transportation demand management to reduce vehicle miles traveled, and land use strategies that improve jobs-housing balance (increased density and mixed-use)
- Solid waste measures that reduce landfilled solid waste in the City

The Project would comply with the CAP through compliance with the PVCCSP EIR mitigation measures and additional Project-level air quality mitigation measures identified previously, which would lessen the Project’s contribution of GHG emissions from both construction and operation. The Project would not conflict with local strategies and state/regional strategies listed in the Perris CAP.

Further, the Project is subject to California Building Code requirements. New buildings must achieve the 2019 Building and Energy Efficiency Standards and the 2019 California Green Building Standards requirements, which include energy conservation measures and solid waste reduction measures. While the Project does not include reduced parking, increased density, or a mixed-use development, it would provide sidewalks, bike racks, pedestrian walkways, and Transportation Demand Management (TDM) measures to encourage the use of alternative modes of transportation (walking, biking, and transit). As such, the Project would not conflict with applicable GHG reduction measures in the CAP and a less than significant impact is expected to occur.

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## **5 CERTIFICATIONS**

The contents of this GHG study report represent an accurate depiction of the GHG impacts associated with the proposed IDI Rider 2 and 4 High Cube Warehouses and Perris Valley Storm Drain Channel Improvement Project. The information contained in this GHG report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 336-5987.

Haseeb Qureshi  
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### **EDUCATION**

Master of Science in Environmental Studies  
California State University, Fullerton • May 2010

Bachelor of Arts in Environmental Analysis and Design  
University of California, Irvine • June 2006

### **PROFESSIONAL AFFILIATIONS**

AEP – Association of Environmental Planners  
AWMA – Air and Waste Management Association  
ASTM – American Society for Testing and Materials

### **PROFESSIONAL CERTIFICATIONS**

Planned Communities and Urban Infill – Urban Land Institute • June 2011  
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008  
Principles of Ambient Air Monitoring – California Air Resources Board • August 2007  
AB2588 Regulatory Standards – Trinity Consultants • November 2006  
Air Dispersion Modeling – Lakes Environmental • June 2006

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## **APPENDIX 3.1:**

### **CALEEMOD PVSD CHANNEL IMPROVEMENTS – CHANNEL EXCAVATION ANNUAL EMISSIONS MODEL OUTPUTS**

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

**Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated)**  
**Riverside-South Coast County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	29.70	Acre	29.70	1,293,732.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2020
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use -

Construction Phase - Construction Schedule approved by the Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Grading - For purposes of analysis, total acres graded per day is based on the equipment specific grading rates (CalEEMod Appendix A) and the equipment list.

Construction Off-road Equipment Mitigation - MM Air 3 and MM Air 6

Trips and VMT - Material will be pushed on-site by Scrapers

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	45.00	41.00
tblGrading	MaterialImported	0.00	180,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	HaulingTripNumber	22,500.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	20.00
tblVehicleEF	HHD	1.50	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.11	0.00
tblVehicleEF	HHD	3.46	5.47



Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.46	0.49
tblVehicleEF	HHD	1.51	5.9260e-003
tblVehicleEF	HHD	6,555.40	1,091.81
tblVehicleEF	HHD	1,477.34	1,404.21
tblVehicleEF	HHD	4.68	0.05
tblVehicleEF	HHD	27.96	5.98
tblVehicleEF	HHD	3.07	3.84
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.07
tblVehicleEF	HHD	4.0000e-005	1.0000e-006
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.8120e-003
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	9.2000e-005	5.0000e-006
tblVehicleEF	HHD	2.7720e-003	1.6900e-004
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tblVehicleEF	HHD	5.1000e-005	3.0000e-006
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tblVehicleEF	HHD	1.9500e-004	8.9300e-004
tblVehicleEF	HHD	0.05	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.2000e-005	0.00

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	9.2000e-005	5.0000e-006
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tblVehicleEF	HHD	5.1000e-005	3.0000e-006
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tblVehicleEF	HHD	1.9500e-004	8.9300e-004
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tblVehicleEF	HHD	1,477.34	1,404.21
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tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.07
tblVehicleEF	HHD	4.0000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.8120e-003
tblVehicleEF	HHD	0.02	0.06

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	3.7000e-005	1.0000e-006
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tblVehicleEF	HHD	1.0100e-004	6.0000e-006
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tblVehicleEF	HHD	0.05	1.0000e-006
tblVehicleEF	HHD	0.07	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	0.00
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tblVehicleEF	HHD	1.0100e-004	6.0000e-006
tblVehicleEF	HHD	0.11	0.14
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tblVehicleEF	HHD	4.76	5.65
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.51	5.8630e-003
tblVehicleEF	HHD	6,023.73	1,087.43
tblVehicleEF	HHD	1,477.34	1,390.01
tblVehicleEF	HHD	4.68	0.05

## Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	26.74	6.15
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tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.7740e-003
tblVehicleEF	HHD	0.02	0.06
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tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.2000e-005	0.00
tblVehicleEF	HHD	7.4000e-005	5.0000e-006
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tblVehicleEF	HHD	1.11	0.48
tblVehicleEF	HHD	4.5000e-005	3.0000e-006
tblVehicleEF	HHD	0.11	0.12

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	2.0800e-004	9.4500e-004
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tblVehicleEF	LDA	4.4730e-003	2.7930e-003
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tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	1.6430e-003	1.5090e-003
tblVehicleEF	LDA	2.2790e-003	1.9900e-003
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tblVehicleEF	LDA	2.0950e-003	1.8300e-003
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
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tblVehicleEF	LDA	0.08	0.25
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tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.22
tblVehicleEF	LDA	0.09	0.28

## Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	5.0810e-003	3.1460e-003
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tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	0.13	0.12
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.22
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tblVehicleEF	LDA	6.2800e-004	5.5100e-004
tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	0.13	0.12
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.21
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## Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.58	0.68
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tblVehicleEF	LDA	0.05	0.04
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tblVehicleEF	LDA	2.2790e-003	1.9900e-003
tblVehicleEF	LDA	1.5150e-003	1.3900e-003
tblVehicleEF	LDA	2.0950e-003	1.8300e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.12	0.12
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.09	0.25
tblVehicleEF	LDA	2.5980e-003	2.6430e-003
tblVehicleEF	LDA	6.3200e-004	5.5700e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.12	0.12
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.02	0.02
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tblVehicleEF	LDT1	0.02	0.10
tblVehicleEF	LDT1	1.62	1.77
tblVehicleEF	LDT1	3.78	2.55

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	325.17	321.11
tblVehicleEF	LDT1	74.01	68.76
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	2.6810e-003	2.4860e-003
tblVehicleEF	LDT1	3.8960e-003	3.2220e-003
tblVehicleEF	LDT1	2.4680e-003	2.2880e-003
tblVehicleEF	LDT1	3.5830e-003	2.9620e-003
tblVehicleEF	LDT1	0.22	0.21
tblVehicleEF	LDT1	0.37	0.29
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.22	0.95
tblVehicleEF	LDT1	0.27	0.51
tblVehicleEF	LDT1	3.2720e-003	3.1780e-003
tblVehicleEF	LDT1	8.0700e-004	6.8000e-004
tblVehicleEF	LDT1	0.22	0.21
tblVehicleEF	LDT1	0.37	0.29
tblVehicleEF	LDT1	0.15	0.14
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.22	0.95
tblVehicleEF	LDT1	0.30	0.56
tblVehicleEF	LDT1	0.02	9.9410e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.95	2.08
tblVehicleEF	LDT1	3.33	2.13
tblVehicleEF	LDT1	353.10	344.18
tblVehicleEF	LDT1	74.01	67.84



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tblVehicleEF	LDT1	0.15	0.15
tblVehicleEF	LDT1	2.6810e-003	2.4860e-003
tblVehicleEF	LDT1	3.8960e-003	3.2220e-003
tblVehicleEF	LDT1	2.4680e-003	2.2880e-003
tblVehicleEF	LDT1	3.5830e-003	2.9620e-003
tblVehicleEF	LDT1	0.44	0.40
tblVehicleEF	LDT1	0.46	0.35
tblVehicleEF	LDT1	0.29	0.28
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.23	0.44
tblVehicleEF	LDT1	3.5570e-003	3.4060e-003
tblVehicleEF	LDT1	7.9900e-004	6.7100e-004
tblVehicleEF	LDT1	0.44	0.40
tblVehicleEF	LDT1	0.46	0.35
tblVehicleEF	LDT1	0.29	0.28
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.26	0.48
tblVehicleEF	LDT1	0.01	8.7780e-003
tblVehicleEF	LDT1	0.02	0.10
tblVehicleEF	LDT1	1.52	1.71
tblVehicleEF	LDT1	3.84	2.53
tblVehicleEF	LDT1	316.88	317.20
tblVehicleEF	LDT1	74.01	68.72
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	2.6810e-003	2.4860e-003

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tblVehicleEF	LDT1	3.8960e-003	3.2220e-003
tblVehicleEF	LDT1	2.4680e-003	2.2880e-003
tblVehicleEF	LDT1	3.5830e-003	2.9620e-003
tblVehicleEF	LDT1	0.19	0.22
tblVehicleEF	LDT1	0.41	0.34
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.25	1.11
tblVehicleEF	LDT1	0.28	0.51
tblVehicleEF	LDT1	3.1880e-003	3.1390e-003
tblVehicleEF	LDT1	8.0800e-004	6.8000e-004
tblVehicleEF	LDT1	0.19	0.22
tblVehicleEF	LDT1	0.41	0.34
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.25	1.11
tblVehicleEF	LDT1	0.30	0.56
tblVehicleEF	LDT2	6.1110e-003	4.5190e-003
tblVehicleEF	LDT2	8.2750e-003	0.08
tblVehicleEF	LDT2	0.82	1.03
tblVehicleEF	LDT2	1.71	2.88
tblVehicleEF	LDT2	366.61	346.07
tblVehicleEF	LDT2	83.75	74.26
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	1.6030e-003	1.5600e-003
tblVehicleEF	LDT2	2.3200e-003	2.0370e-003
tblVehicleEF	LDT2	1.4740e-003	1.4360e-003

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tblVehicleEF	LDT2	2.1330e-003	1.8730e-003
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	3.6730e-003	3.4240e-003
tblVehicleEF	LDT2	8.6600e-004	7.3500e-004
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.12	0.40
tblVehicleEF	LDT2	6.9350e-003	5.0670e-003
tblVehicleEF	LDT2	7.1890e-003	0.07
tblVehicleEF	LDT2	1.00	1.22
tblVehicleEF	LDT2	1.51	2.40
tblVehicleEF	LDT2	398.95	368.67
tblVehicleEF	LDT2	83.75	73.33
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	1.6030e-003	1.5600e-003
tblVehicleEF	LDT2	2.3200e-003	2.0370e-003
tblVehicleEF	LDT2	1.4740e-003	1.4360e-003
tblVehicleEF	LDT2	2.1330e-003	1.8730e-003
tblVehicleEF	LDT2	0.14	0.18

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tblVehicleEF	LDT2	0.15	0.16
tblVehicleEF	LDT2	0.11	0.15
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.43
tblVehicleEF	LDT2	0.10	0.32
tblVehicleEF	LDT2	3.9980e-003	3.6480e-003
tblVehicleEF	LDT2	8.6300e-004	7.2600e-004
tblVehicleEF	LDT2	0.14	0.18
tblVehicleEF	LDT2	0.15	0.16
tblVehicleEF	LDT2	0.11	0.15
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.07	0.43
tblVehicleEF	LDT2	0.11	0.35
tblVehicleEF	LDT2	5.8750e-003	4.4430e-003
tblVehicleEF	LDT2	8.5090e-003	0.08
tblVehicleEF	LDT2	0.76	0.99
tblVehicleEF	LDT2	1.74	2.86
tblVehicleEF	LDT2	356.95	342.25
tblVehicleEF	LDT2	83.75	74.23
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	1.6030e-003	1.5600e-003
tblVehicleEF	LDT2	2.3200e-003	2.0370e-003
tblVehicleEF	LDT2	1.4740e-003	1.4360e-003
tblVehicleEF	LDT2	2.1330e-003	1.8730e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.05	0.08

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tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	3.5750e-003	3.3860e-003
tblVehicleEF	LDT2	8.6700e-004	7.3500e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.14	0.16
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.13	0.40
tblVehicleEF	LHD1	5.6490e-003	4.8670e-003
tblVehicleEF	LHD1	0.01	5.8570e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	1.03	0.81
tblVehicleEF	LHD1	2.54	0.98
tblVehicleEF	LHD1	9.27	9.54
tblVehicleEF	LHD1	612.92	640.47
tblVehicleEF	LHD1	30.90	10.51
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.35	1.83
tblVehicleEF	LHD1	9.6900e-004	9.8900e-004
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	9.2500e-004	2.4800e-004
tblVehicleEF	LHD1	9.2700e-004	9.4600e-004

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tblVehicleEF	LHD1	2.5280e-003	2.5110e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.5100e-004	2.2800e-004
tblVehicleEF	LHD1	3.9460e-003	2.7760e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9130e-003	1.4100e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.31	0.50
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	6.0140e-003	6.2270e-003
tblVehicleEF	LHD1	3.5800e-004	1.0400e-004
tblVehicleEF	LHD1	3.9460e-003	2.7760e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9130e-003	1.4100e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.50
tblVehicleEF	LHD1	0.30	0.09
tblVehicleEF	LHD1	5.6490e-003	4.8810e-003
tblVehicleEF	LHD1	0.01	5.9510e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	1.05	0.82
tblVehicleEF	LHD1	2.42	0.93
tblVehicleEF	LHD1	9.27	9.54

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tblVehicleEF	LHD1	612.92	640.49
tblVehicleEF	LHD1	30.90	10.41
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.21	1.72
tblVehicleEF	LHD1	9.6900e-004	9.8900e-004
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	9.2500e-004	2.4800e-004
tblVehicleEF	LHD1	9.2700e-004	9.4600e-004
tblVehicleEF	LHD1	2.5280e-003	2.5110e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.5100e-004	2.2800e-004
tblVehicleEF	LHD1	7.3960e-003	4.9530e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6890e-003	2.7430e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.31	0.50
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	6.0140e-003	6.2270e-003
tblVehicleEF	LHD1	3.5500e-004	1.0300e-004
tblVehicleEF	LHD1	7.3960e-003	4.9530e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6890e-003	2.7430e-003
tblVehicleEF	LHD1	0.10	0.08

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tblVehicleEF	LHD1	0.31	0.50
tblVehicleEF	LHD1	0.29	0.09
tblVehicleEF	LHD1	5.6490e-003	4.8700e-003
tblVehicleEF	LHD1	0.01	5.8660e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	1.03	0.80
tblVehicleEF	LHD1	2.54	0.97
tblVehicleEF	LHD1	9.27	9.54
tblVehicleEF	LHD1	612.92	640.47
tblVehicleEF	LHD1	30.90	10.49
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.32	1.80
tblVehicleEF	LHD1	9.6900e-004	9.8900e-004
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	9.2500e-004	2.4800e-004
tblVehicleEF	LHD1	9.2700e-004	9.4600e-004
tblVehicleEF	LHD1	2.5280e-003	2.5110e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.5100e-004	2.2800e-004
tblVehicleEF	LHD1	3.5540e-003	2.9670e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7480e-003	1.4870e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.33	0.54



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tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	6.0140e-003	6.2270e-003
tblVehicleEF	LHD1	3.5800e-004	1.0400e-004
tblVehicleEF	LHD1	3.5540e-003	2.9670e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7480e-003	1.4870e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.33	0.54
tblVehicleEF	LHD1	0.30	0.09
tblVehicleEF	LHD2	3.8330e-003	2.9660e-003
tblVehicleEF	LHD2	5.1000e-003	4.0970e-003
tblVehicleEF	LHD2	9.1950e-003	8.6540e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.56	0.56
tblVehicleEF	LHD2	1.23	0.53
tblVehicleEF	LHD2	14.53	15.23
tblVehicleEF	LHD2	609.83	634.08
tblVehicleEF	LHD2	23.90	6.70
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.94	2.00
tblVehicleEF	LHD2	1.3510e-003	1.4960e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1000e-004	1.1100e-004
tblVehicleEF	LHD2	1.2930e-003	1.4310e-003

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tblVehicleEF	LHD2	2.6930e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.0200e-004
tblVehicleEF	LHD2	1.5990e-003	1.2810e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	8.1500e-004	6.6500e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.09	0.23
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	LHD2	1.4200e-004	1.4500e-004
tblVehicleEF	LHD2	5.9300e-003	6.1000e-003
tblVehicleEF	LHD2	2.6200e-004	6.6000e-005
tblVehicleEF	LHD2	1.5990e-003	1.2810e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	8.1500e-004	6.6500e-004
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.09	0.23
tblVehicleEF	LHD2	0.14	0.05
tblVehicleEF	LHD2	3.8330e-003	2.9740e-003
tblVehicleEF	LHD2	5.1600e-003	4.1300e-003
tblVehicleEF	LHD2	8.8690e-003	8.3230e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.56	0.57
tblVehicleEF	LHD2	1.18	0.50
tblVehicleEF	LHD2	14.53	15.23

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tblVehicleEF	LHD2	609.83	634.09
tblVehicleEF	LHD2	23.90	6.65
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.83	1.89
tblVehicleEF	LHD2	1.3510e-003	1.4960e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1000e-004	1.1100e-004
tblVehicleEF	LHD2	1.2930e-003	1.4310e-003
tblVehicleEF	LHD2	2.6930e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.0200e-004
tblVehicleEF	LHD2	3.0260e-003	2.2870e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.5540e-003	1.2930e-003
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.09	0.23
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	LHD2	1.4200e-004	1.4500e-004
tblVehicleEF	LHD2	5.9300e-003	6.1000e-003
tblVehicleEF	LHD2	2.6100e-004	6.6000e-005
tblVehicleEF	LHD2	3.0260e-003	2.2870e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.5540e-003	1.2930e-003
tblVehicleEF	LHD2	0.07	0.08

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tblVehicleEF	LHD2	0.09	0.23
tblVehicleEF	LHD2	0.13	0.04
tblVehicleEF	LHD2	3.8330e-003	2.9680e-003
tblVehicleEF	LHD2	5.0860e-003	4.1010e-003
tblVehicleEF	LHD2	9.2490e-003	8.5930e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.56	0.56
tblVehicleEF	LHD2	1.24	0.52
tblVehicleEF	LHD2	14.53	15.23
tblVehicleEF	LHD2	609.83	634.08
tblVehicleEF	LHD2	23.90	6.69
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.92	1.97
tblVehicleEF	LHD2	1.3510e-003	1.4960e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.1000e-004	1.1100e-004
tblVehicleEF	LHD2	1.2930e-003	1.4310e-003
tblVehicleEF	LHD2	2.6930e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.0200e-004
tblVehicleEF	LHD2	1.2860e-003	1.3430e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.9100e-004	6.9400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.10	0.25

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tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	LHD2	1.4200e-004	1.4500e-004
tblVehicleEF	LHD2	5.9300e-003	6.1000e-003
tblVehicleEF	LHD2	2.6200e-004	6.6000e-005
tblVehicleEF	LHD2	1.2860e-003	1.3430e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.9100e-004	6.9400e-004
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.10	0.25
tblVehicleEF	LHD2	0.14	0.05
tblVehicleEF	MCY	0.41	0.32
tblVehicleEF	MCY	0.15	0.25
tblVehicleEF	MCY	19.93	19.76
tblVehicleEF	MCY	9.66	8.58
tblVehicleEF	MCY	164.88	207.31
tblVehicleEF	MCY	46.70	61.27
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	1.7160e-003	1.6670e-003
tblVehicleEF	MCY	3.4600e-003	2.9080e-003
tblVehicleEF	MCY	1.6070e-003	1.5620e-003
tblVehicleEF	MCY	3.2650e-003	2.7430e-003
tblVehicleEF	MCY	1.68	1.41
tblVehicleEF	MCY	0.86	0.79
tblVehicleEF	MCY	0.93	0.75
tblVehicleEF	MCY	2.17	2.17
tblVehicleEF	MCY	0.58	1.92

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tblVehicleEF	MCY	2.09	1.86
tblVehicleEF	MCY	2.0370e-003	2.0520e-003
tblVehicleEF	MCY	6.8600e-004	6.0600e-004
tblVehicleEF	MCY	1.68	1.41
tblVehicleEF	MCY	0.86	0.79
tblVehicleEF	MCY	0.93	0.75
tblVehicleEF	MCY	2.66	2.66
tblVehicleEF	MCY	0.58	1.92
tblVehicleEF	MCY	2.27	2.02
tblVehicleEF	MCY	0.41	0.31
tblVehicleEF	MCY	0.14	0.22
tblVehicleEF	MCY	20.66	19.72
tblVehicleEF	MCY	9.11	7.89
tblVehicleEF	MCY	164.88	207.06
tblVehicleEF	MCY	46.70	59.40
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	1.7160e-003	1.6670e-003
tblVehicleEF	MCY	3.4600e-003	2.9080e-003
tblVehicleEF	MCY	1.6070e-003	1.5620e-003
tblVehicleEF	MCY	3.2650e-003	2.7430e-003
tblVehicleEF	MCY	3.35	2.71
tblVehicleEF	MCY	1.25	1.08
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.15	2.12
tblVehicleEF	MCY	0.58	1.89
tblVehicleEF	MCY	1.87	1.63
tblVehicleEF	MCY	2.0470e-003	2.0490e-003

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tblVehicleEF	MCY	6.7100e-004	5.8800e-004
tblVehicleEF	MCY	3.35	2.71
tblVehicleEF	MCY	1.25	1.08
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.63	2.60
tblVehicleEF	MCY	0.58	1.89
tblVehicleEF	MCY	2.03	1.77
tblVehicleEF	MCY	0.41	0.32
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.43	19.16
tblVehicleEF	MCY	9.60	8.36
tblVehicleEF	MCY	164.88	206.28
tblVehicleEF	MCY	46.70	60.77
tblVehicleEF	MCY	1.13	1.10
tblVehicleEF	MCY	1.7160e-003	1.6670e-003
tblVehicleEF	MCY	3.4600e-003	2.9080e-003
tblVehicleEF	MCY	1.6070e-003	1.5620e-003
tblVehicleEF	MCY	3.2650e-003	2.7430e-003
tblVehicleEF	MCY	1.60	1.62
tblVehicleEF	MCY	1.06	1.05
tblVehicleEF	MCY	0.75	0.76
tblVehicleEF	MCY	2.17	2.15
tblVehicleEF	MCY	0.66	2.19
tblVehicleEF	MCY	2.10	1.82
tblVehicleEF	MCY	2.0290e-003	2.0410e-003
tblVehicleEF	MCY	6.8600e-004	6.0100e-004
tblVehicleEF	MCY	1.60	1.62

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tblVehicleEF	MCY	1.06	1.05
tblVehicleEF	MCY	0.75	0.76
tblVehicleEF	MCY	2.66	2.63
tblVehicleEF	MCY	0.66	2.19
tblVehicleEF	MCY	2.28	1.98
tblVehicleEF	MDV	0.01	6.2680e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.58	1.28
tblVehicleEF	MDV	3.47	3.47
tblVehicleEF	MDV	501.88	430.06
tblVehicleEF	MDV	112.78	91.68
tblVehicleEF	MDV	0.19	0.13
tblVehicleEF	MDV	1.7360e-003	1.6260e-003
tblVehicleEF	MDV	2.5110e-003	2.1320e-003
tblVehicleEF	MDV	1.6010e-003	1.5010e-003
tblVehicleEF	MDV	2.3110e-003	1.9620e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.49
tblVehicleEF	MDV	0.27	0.49
tblVehicleEF	MDV	5.0330e-003	4.2520e-003
tblVehicleEF	MDV	1.1890e-003	9.0700e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.09	0.10



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tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.11	0.49
tblVehicleEF	MDV	0.30	0.54
tblVehicleEF	MDV	0.02	6.9690e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.91	1.51
tblVehicleEF	MDV	3.08	2.90
tblVehicleEF	MDV	544.80	454.20
tblVehicleEF	MDV	112.78	90.55
tblVehicleEF	MDV	0.18	0.12
tblVehicleEF	MDV	1.7360e-003	1.6260e-003
tblVehicleEF	MDV	2.5110e-003	2.1320e-003
tblVehicleEF	MDV	1.6010e-003	1.5010e-003
tblVehicleEF	MDV	2.3110e-003	1.9620e-003
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.24	0.19
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.24	0.42
tblVehicleEF	MDV	5.4670e-003	4.4910e-003
tblVehicleEF	MDV	1.1820e-003	8.9600e-004
tblVehicleEF	MDV	0.22	0.21
tblVehicleEF	MDV	0.24	0.19
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.06	0.04
tblVehicleEF	MDV	0.11	0.48

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tblVehicleEF	MDV	0.26	0.46
tblVehicleEF	MDV	0.01	6.1580e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.48	1.23
tblVehicleEF	MDV	3.54	3.44
tblVehicleEF	MDV	489.12	425.98
tblVehicleEF	MDV	112.78	91.64
tblVehicleEF	MDV	0.18	0.13
tblVehicleEF	MDV	1.7360e-003	1.6260e-003
tblVehicleEF	MDV	2.5110e-003	2.1320e-003
tblVehicleEF	MDV	1.6010e-003	1.5010e-003
tblVehicleEF	MDV	2.3110e-003	1.9620e-003
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.56
tblVehicleEF	MDV	0.28	0.49
tblVehicleEF	MDV	4.9040e-003	4.2120e-003
tblVehicleEF	MDV	1.1910e-003	9.0700e-004
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.22	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.13	0.56
tblVehicleEF	MDV	0.31	0.54
tblVehicleEF	MH	0.03	3.4320e-003

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tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.14	0.36
tblVehicleEF	MH	6.37	0.00
tblVehicleEF	MH	1,005.77	948.91
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.76	4.66
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.15
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9900e-003	8.9710e-003
tblVehicleEF	MH	7.0000e-004	0.00
tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.42	0.00
tblVehicleEF	MH	0.03	3.4320e-003

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tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.24	0.36
tblVehicleEF	MH	5.95	0.00
tblVehicleEF	MH	1,005.77	948.91
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.63	4.40
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.15
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	9.9910e-003	8.9710e-003
tblVehicleEF	MH	6.9300e-004	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.40	0.00
tblVehicleEF	MH	0.03	3.4320e-003

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tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.12	0.36
tblVehicleEF	MH	6.40	0.00
tblVehicleEF	MH	1,005.77	948.91
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.74	4.59
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.15
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00
tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9890e-003	8.9710e-003
tblVehicleEF	MH	7.0000e-004	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00
tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.42	0.00
tblVehicleEF	MHD	0.02	2.7420e-003

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tblVehicleEF	MHD	6.1240e-003	7.1090e-003
tblVehicleEF	MHD	0.06	7.3100e-003
tblVehicleEF	MHD	0.43	0.32
tblVehicleEF	MHD	0.47	0.63
tblVehicleEF	MHD	6.54	0.89
tblVehicleEF	MHD	156.54	74.92
tblVehicleEF	MHD	1,067.94	996.67
tblVehicleEF	MHD	55.18	7.09
tblVehicleEF	MHD	1.06	0.76
tblVehicleEF	MHD	1.70	3.03
tblVehicleEF	MHD	3.7720e-003	2.9760e-003
tblVehicleEF	MHD	0.06	0.10
tblVehicleEF	MHD	8.1800e-004	8.6000e-005
tblVehicleEF	MHD	3.6080e-003	2.8470e-003
tblVehicleEF	MHD	0.05	0.10
tblVehicleEF	MHD	7.5200e-004	8.0000e-005
tblVehicleEF	MHD	1.8750e-003	5.2000e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	9.0500e-004	2.6800e-004
tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.40	0.04
tblVehicleEF	MHD	1.5050e-003	7.1000e-004
tblVehicleEF	MHD	0.01	9.4650e-003
tblVehicleEF	MHD	6.6700e-004	7.0000e-005
tblVehicleEF	MHD	1.8750e-003	5.2000e-004

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tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	9.0500e-004	2.6800e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.44	0.04
tblVehicleEF	MHD	0.02	2.6020e-003
tblVehicleEF	MHD	6.1890e-003	7.1350e-003
tblVehicleEF	MHD	0.06	7.0200e-003
tblVehicleEF	MHD	0.31	0.26
tblVehicleEF	MHD	0.47	0.63
tblVehicleEF	MHD	6.24	0.84
tblVehicleEF	MHD	165.81	76.81
tblVehicleEF	MHD	1,067.94	996.67
tblVehicleEF	MHD	55.18	7.00
tblVehicleEF	MHD	1.10	0.77
tblVehicleEF	MHD	1.60	2.86
tblVehicleEF	MHD	3.1790e-003	2.5110e-003
tblVehicleEF	MHD	0.06	0.10
tblVehicleEF	MHD	8.1800e-004	8.6000e-005
tblVehicleEF	MHD	3.0420e-003	2.4020e-003
tblVehicleEF	MHD	0.05	0.10
tblVehicleEF	MHD	7.5200e-004	8.0000e-005
tblVehicleEF	MHD	3.6340e-003	9.4200e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.7950e-003	5.4000e-004

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tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.38	0.04
tblVehicleEF	MHD	1.5920e-003	7.2800e-004
tblVehicleEF	MHD	0.01	9.4650e-003
tblVehicleEF	MHD	6.6100e-004	6.9000e-005
tblVehicleEF	MHD	3.6340e-003	9.4200e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	1.7950e-003	5.4000e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.42	0.04
tblVehicleEF	MHD	0.02	2.9470e-003
tblVehicleEF	MHD	6.0850e-003	7.1100e-003
tblVehicleEF	MHD	0.06	7.2440e-003
tblVehicleEF	MHD	0.60	0.40
tblVehicleEF	MHD	0.47	0.63
tblVehicleEF	MHD	6.63	0.88
tblVehicleEF	MHD	143.73	72.32
tblVehicleEF	MHD	1,067.94	996.67
tblVehicleEF	MHD	55.18	7.07
tblVehicleEF	MHD	1.01	0.74
tblVehicleEF	MHD	1.68	2.98
tblVehicleEF	MHD	4.5890e-003	3.6170e-003
tblVehicleEF	MHD	0.06	0.10
tblVehicleEF	MHD	8.1800e-004	8.6000e-005



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tblVehicleEF	MHD	4.3910e-003	3.4610e-003
tblVehicleEF	MHD	0.05	0.10
tblVehicleEF	MHD	7.5200e-004	8.0000e-005
tblVehicleEF	MHD	1.4650e-003	5.6500e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	7.2400e-004	2.8600e-004
tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.40	0.04
tblVehicleEF	MHD	1.3840e-003	6.8500e-004
tblVehicleEF	MHD	0.01	9.4650e-003
tblVehicleEF	MHD	6.6800e-004	7.0000e-005
tblVehicleEF	MHD	1.4650e-003	5.6500e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	7.2400e-004	2.8600e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.44	0.04
tblVehicleEF	OBUS	0.01	8.9420e-003
tblVehicleEF	OBUS	9.4560e-003	0.01
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.28	0.48
tblVehicleEF	OBUS	0.63	1.34
tblVehicleEF	OBUS	6.57	2.88
tblVehicleEF	OBUS	74.57	69.58

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tblVehicleEF	OBUS	1,103.17	1,428.61
tblVehicleEF	OBUS	70.73	22.18
tblVehicleEF	OBUS	0.39	0.48
tblVehicleEF	OBUS	1.35	2.46
tblVehicleEF	OBUS	1.7700e-004	2.3590e-003
tblVehicleEF	OBUS	7.1510e-003	0.06
tblVehicleEF	OBUS	8.2800e-004	2.2300e-004
tblVehicleEF	OBUS	1.6900e-004	2.2570e-003
tblVehicleEF	OBUS	6.8270e-003	0.06
tblVehicleEF	OBUS	7.6200e-004	2.0600e-004
tblVehicleEF	OBUS	2.2350e-003	2.6690e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	9.4600e-004	1.1510e-003
tblVehicleEF	OBUS	0.04	0.13
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.41	0.14
tblVehicleEF	OBUS	7.2400e-004	6.6400e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.2300e-004	2.1900e-004
tblVehicleEF	OBUS	2.2350e-003	2.6690e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.4600e-004	1.1510e-003
tblVehicleEF	OBUS	0.06	0.16
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.45	0.15

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tblVehicleEF	OBUS	0.01	8.9520e-003
tblVehicleEF	OBUS	9.6420e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.46
tblVehicleEF	OBUS	0.65	1.36
tblVehicleEF	OBUS	6.15	2.67
tblVehicleEF	OBUS	77.97	70.42
tblVehicleEF	OBUS	1,103.17	1,428.65
tblVehicleEF	OBUS	70.73	21.83
tblVehicleEF	OBUS	0.40	0.48
tblVehicleEF	OBUS	1.26	2.30
tblVehicleEF	OBUS	1.4900e-004	1.9920e-003
tblVehicleEF	OBUS	7.1510e-003	0.06
tblVehicleEF	OBUS	8.2800e-004	2.2300e-004
tblVehicleEF	OBUS	1.4300e-004	1.9050e-003
tblVehicleEF	OBUS	6.8270e-003	0.06
tblVehicleEF	OBUS	7.6200e-004	2.0600e-004
tblVehicleEF	OBUS	4.1760e-003	4.7160e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	1.8320e-003	2.2510e-003
tblVehicleEF	OBUS	0.04	0.13
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.39	0.13
tblVehicleEF	OBUS	7.5600e-004	6.7200e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.1600e-004	2.1600e-004

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tblVehicleEF	OBUS	4.1760e-003	4.7160e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.8320e-003	2.2510e-003
tblVehicleEF	OBUS	0.06	0.16
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.43	0.15
tblVehicleEF	OBUS	0.01	8.9650e-003
tblVehicleEF	OBUS	9.4220e-003	0.01
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.29	0.52
tblVehicleEF	OBUS	0.63	1.34
tblVehicleEF	OBUS	6.63	2.86
tblVehicleEF	OBUS	69.87	68.41
tblVehicleEF	OBUS	1,103.17	1,428.61
tblVehicleEF	OBUS	70.73	22.16
tblVehicleEF	OBUS	0.37	0.47
tblVehicleEF	OBUS	1.34	2.41
tblVehicleEF	OBUS	2.1500e-004	2.8660e-003
tblVehicleEF	OBUS	7.1510e-003	0.06
tblVehicleEF	OBUS	8.2800e-004	2.2300e-004
tblVehicleEF	OBUS	2.0600e-004	2.7420e-003
tblVehicleEF	OBUS	6.8270e-003	0.06
tblVehicleEF	OBUS	7.6200e-004	2.0600e-004
tblVehicleEF	OBUS	1.9540e-003	2.8450e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.06

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tblVehicleEF	OBUS	8.7300e-004	1.2350e-003
tblVehicleEF	OBUS	0.04	0.13
tblVehicleEF	OBUS	0.05	0.30
tblVehicleEF	OBUS	0.42	0.14
tblVehicleEF	OBUS	6.7900e-004	6.5300e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.2400e-004	2.1900e-004
tblVehicleEF	OBUS	1.9540e-003	2.8450e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	8.7300e-004	1.2350e-003
tblVehicleEF	OBUS	0.06	0.16
tblVehicleEF	OBUS	0.05	0.30
tblVehicleEF	OBUS	0.45	0.15
tblVehicleEF	SBUS	0.85	0.09
tblVehicleEF	SBUS	0.01	7.4060e-003
tblVehicleEF	SBUS	0.06	7.9380e-003
tblVehicleEF	SBUS	7.81	3.35
tblVehicleEF	SBUS	0.66	0.61
tblVehicleEF	SBUS	6.73	1.11
tblVehicleEF	SBUS	1,154.91	376.79
tblVehicleEF	SBUS	1,108.94	1,127.22
tblVehicleEF	SBUS	53.24	7.00
tblVehicleEF	SBUS	10.58	3.63
tblVehicleEF	SBUS	4.99	4.99
tblVehicleEF	SBUS	0.01	4.3170e-003
tblVehicleEF	SBUS	0.01	0.01

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tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.4200e-004	4.2000e-005
tblVehicleEF	SBUS	0.01	4.1300e-003
tblVehicleEF	SBUS	2.7000e-003	2.6420e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	3.9000e-005
tblVehicleEF	SBUS	4.5410e-003	1.2790e-003
tblVehicleEF	SBUS	0.03	9.1190e-003
tblVehicleEF	SBUS	0.94	0.41
tblVehicleEF	SBUS	2.0600e-003	6.3500e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.6030e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.4900e-004	6.9000e-005
tblVehicleEF	SBUS	4.5410e-003	1.2790e-003
tblVehicleEF	SBUS	0.03	9.1190e-003
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	2.0600e-003	6.3500e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.40	0.05
tblVehicleEF	SBUS	0.85	0.09
tblVehicleEF	SBUS	0.01	7.5000e-003
tblVehicleEF	SBUS	0.05	6.6170e-003
tblVehicleEF	SBUS	7.67	3.30

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tblVehicleEF	SBUS	0.67	0.62
tblVehicleEF	SBUS	4.88	0.79
tblVehicleEF	SBUS	1,207.92	387.95
tblVehicleEF	SBUS	1,108.94	1,127.24
tblVehicleEF	SBUS	53.24	6.47
tblVehicleEF	SBUS	10.92	3.73
tblVehicleEF	SBUS	4.69	4.70
tblVehicleEF	SBUS	0.01	3.6450e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.4200e-004	4.2000e-005
tblVehicleEF	SBUS	9.8070e-003	3.4870e-003
tblVehicleEF	SBUS	2.7000e-003	2.6420e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	3.9000e-005
tblVehicleEF	SBUS	8.2250e-003	2.2470e-003
tblVehicleEF	SBUS	0.03	9.5230e-003
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	3.8990e-003	1.1950e-003
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.31	0.04
tblVehicleEF	SBUS	0.01	3.7090e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.1800e-004	6.4000e-005
tblVehicleEF	SBUS	8.2250e-003	2.2470e-003
tblVehicleEF	SBUS	0.03	9.5230e-003

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tblVehicleEF	SBUS	1.35	0.58
tblVehicleEF	SBUS	3.8990e-003	1.1950e-003
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.04
tblVehicleEF	SBUS	0.85	0.09
tblVehicleEF	SBUS	0.01	7.4050e-003
tblVehicleEF	SBUS	0.07	8.0800e-003
tblVehicleEF	SBUS	7.99	3.41
tblVehicleEF	SBUS	0.66	0.61
tblVehicleEF	SBUS	7.09	1.13
tblVehicleEF	SBUS	1,081.70	361.38
tblVehicleEF	SBUS	1,108.94	1,127.22
tblVehicleEF	SBUS	53.24	7.04
tblVehicleEF	SBUS	10.11	3.49
tblVehicleEF	SBUS	4.94	4.92
tblVehicleEF	SBUS	0.01	5.2440e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.4200e-004	4.2000e-005
tblVehicleEF	SBUS	0.01	5.0170e-003
tblVehicleEF	SBUS	2.7000e-003	2.6420e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	3.9000e-005
tblVehicleEF	SBUS	4.1410e-003	1.2310e-003
tblVehicleEF	SBUS	0.03	9.3800e-003
tblVehicleEF	SBUS	0.94	0.41



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tblVehicleEF	SBUS	1.9980e-003	6.6000e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.38	0.05
tblVehicleEF	SBUS	0.01	3.4570e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5500e-004	7.0000e-005
tblVehicleEF	SBUS	4.1410e-003	1.2310e-003
tblVehicleEF	SBUS	0.03	9.3800e-003
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	1.9980e-003	6.6000e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.42	0.05
tblVehicleEF	UBUS	1.60	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	10.35	23.58
tblVehicleEF	UBUS	16.43	1.95
tblVehicleEF	UBUS	1,836.48	1,641.57
tblVehicleEF	UBUS	155.92	23.42
tblVehicleEF	UBUS	5.46	0.30
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1590e-003
tblVehicleEF	UBUS	1.6630e-003	2.0900e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003

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tblVehicleEF	UBUS	0.06	2.0460e-003
tblVehicleEF	UBUS	1.5380e-003	1.9200e-004
tblVehicleEF	UBUS	0.01	2.0160e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	7.7200e-004
tblVehicleEF	UBUS	0.64	0.05
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	1.28	0.09
tblVehicleEF	UBUS	0.01	6.3860e-003
tblVehicleEF	UBUS	1.8570e-003	2.3200e-004
tblVehicleEF	UBUS	0.01	2.0160e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	7.7200e-004
tblVehicleEF	UBUS	2.30	3.11
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	1.40	0.10
tblVehicleEF	UBUS	1.61	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	10.64	23.58
tblVehicleEF	UBUS	14.18	1.66
tblVehicleEF	UBUS	1,836.48	1,641.57
tblVehicleEF	UBUS	155.92	22.93
tblVehicleEF	UBUS	5.09	0.29
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1590e-003
tblVehicleEF	UBUS	1.6630e-003	2.0900e-004

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.06	2.0460e-003
tblVehicleEF	UBUS	1.5380e-003	1.9200e-004
tblVehicleEF	UBUS	0.02	3.6260e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	1.6240e-003
tblVehicleEF	UBUS	0.65	0.05
tblVehicleEF	UBUS	0.03	0.04
tblVehicleEF	UBUS	1.17	0.08
tblVehicleEF	UBUS	0.01	6.3870e-003
tblVehicleEF	UBUS	1.8170e-003	2.2700e-004
tblVehicleEF	UBUS	0.02	3.6260e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	1.6240e-003
tblVehicleEF	UBUS	2.31	3.11
tblVehicleEF	UBUS	0.03	0.04
tblVehicleEF	UBUS	1.28	0.09
tblVehicleEF	UBUS	1.60	3.04
tblVehicleEF	UBUS	0.10	0.02
tblVehicleEF	UBUS	10.37	23.58
tblVehicleEF	UBUS	16.61	1.93
tblVehicleEF	UBUS	1,836.48	1,641.57
tblVehicleEF	UBUS	155.92	23.40
tblVehicleEF	UBUS	5.42	0.29
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02

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tblVehicleEF	UBUS	0.06	2.1590e-003
tblVehicleEF	UBUS	1.6630e-003	2.0900e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.06	2.0460e-003
tblVehicleEF	UBUS	1.5380e-003	1.9200e-004
tblVehicleEF	UBUS	0.01	2.1860e-003
tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	8.2500e-004
tblVehicleEF	UBUS	0.64	0.05
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	1.29	0.09
tblVehicleEF	UBUS	0.01	6.3860e-003
tblVehicleEF	UBUS	1.8600e-003	2.3200e-004
tblVehicleEF	UBUS	0.01	2.1860e-003
tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	8.2500e-004
tblVehicleEF	UBUS	2.30	3.11
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	1.42	0.10

**2.0 Emissions Summary**

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

**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	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
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	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>

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**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	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
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	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Excavation	Grading	10/5/2020	11/30/2020	5	41	

**Acres of Grading (Site Preparation Phase): 0**

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**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 29.7**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Excavation	Excavators	0	8.00	158	0.38
Excavation	Graders	0	8.00	187	0.41
Excavation	Rubber Tired Dozers	0	8.00	247	0.40
Excavation	Scrapers	5	8.00	367	0.48
Excavation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

**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
Excavation	5	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area



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**3.2 Excavation - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1201	0.0000	0.1201	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1018	1.2046	0.7645	1.5500e-003		0.0470	0.0470		0.0432	0.0432	0.0000	136.4125	136.4125	0.0441	0.0000	137.5155
<b>Total</b>	<b>0.1018</b>	<b>1.2046</b>	<b>0.7645</b>	<b>1.5500e-003</b>	<b>0.1201</b>	<b>0.0470</b>	<b>0.1671</b>	<b>0.0135</b>	<b>0.0432</b>	<b>0.0567</b>	<b>0.0000</b>	<b>136.4125</b>	<b>136.4125</b>	<b>0.0441</b>	<b>0.0000</b>	<b>137.5155</b>

**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	1.8800e-003	1.3200e-003	0.0141	4.0000e-005	4.5100e-003	3.0000e-005	4.5300e-003	1.2000e-003	3.0000e-005	1.2200e-003	0.0000	3.7703	3.7703	9.0000e-005	0.0000	3.7727
<b>Total</b>	<b>1.8800e-003</b>	<b>1.3200e-003</b>	<b>0.0141</b>	<b>4.0000e-005</b>	<b>4.5100e-003</b>	<b>3.0000e-005</b>	<b>4.5300e-003</b>	<b>1.2000e-003</b>	<b>3.0000e-005</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>3.7703</b>	<b>3.7703</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>3.7727</b>

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**3.2 Excavation - 2020**

**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					0.0468	0.0000	0.0468	5.2500e-003	0.0000	5.2500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0382	0.7388	0.8280	1.5500e-003		0.0280	0.0280		0.0280	0.0280	0.0000	136.4123	136.4123	0.0441	0.0000	137.5153
<b>Total</b>	<b>0.0382</b>	<b>0.7388</b>	<b>0.8280</b>	<b>1.5500e-003</b>	<b>0.0468</b>	<b>0.0280</b>	<b>0.0749</b>	<b>5.2500e-003</b>	<b>0.0280</b>	<b>0.0333</b>	<b>0.0000</b>	<b>136.4123</b>	<b>136.4123</b>	<b>0.0441</b>	<b>0.0000</b>	<b>137.5153</b>

**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	1.8800e-003	1.3200e-003	0.0141	4.0000e-005	4.5100e-003	3.0000e-005	4.5300e-003	1.2000e-003	3.0000e-005	1.2200e-003	0.0000	3.7703	3.7703	9.0000e-005	0.0000	3.7727
<b>Total</b>	<b>1.8800e-003</b>	<b>1.3200e-003</b>	<b>0.0141</b>	<b>4.0000e-005</b>	<b>4.5100e-003</b>	<b>3.0000e-005</b>	<b>4.5300e-003</b>	<b>1.2000e-003</b>	<b>3.0000e-005</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>3.7703</b>	<b>3.7703</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>3.7727</b>

**4.0 Operational Detail - Mobile**

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	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
Other Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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



Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
Unmitigated	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

**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	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**



Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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

Perris Valley Storm Drain - Channel Excavation (Construction - Mitigated) - Riverside-South Coast County, Annual

## 10.0 Stationary Equipment

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### 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
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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## **APPENDIX 3.2:**

### **CALEEMOD PVSD CHANNEL IMPROVEMENTS – CHANNEL CONSTRUCTION ANNUAL EMISSIONS MODEL OUTPUTS**

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**Perris Valley Storm Drain (Construction - Mitigated)**  
**Riverside-South Coast County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	29.70	Acre	29.70	1,293,732.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use -

Construction Phase - Construction Schedule approved by the Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Grading - For purposes of analysis, total acres graded per day is based on the equipment specific grading rates (CalEEMod Appendix A) and the equipment list.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Construction Off-road Equipment Mitigation - MM Air 3 and MM Air 6

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00



Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	5.00
tblConstructionPhase	NumDays	20.00	9.00
tblConstructionPhase	NumDays	45.00	40.00
tblConstructionPhase	NumDays	440.00	190.00
tblConstructionPhase	NumDays	45.00	35.00
tblConstructionPhase	NumDays	35.00	16.00
tblGrading	AcresOfGrading	4.50	9.00

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleEF	HHD	1.43	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	0.00
tblVehicleEF	HHD	3.28	5.70
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.46	5.1290e-003
tblVehicleEF	HHD	6,485.38	1,098.23

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	26.41	5.91
tblVehicleEF	HHD	2.69	3.40
tblVehicleEF	HHD	0.01	8.1210e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	7.7690e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8100e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	1.0000e-006
tblVehicleEF	HHD	8.4000e-005	4.0000e-006
tblVehicleEF	HHD	2.5800e-003	1.4100e-004
tblVehicleEF	HHD	0.85	0.44
tblVehicleEF	HHD	4.8000e-005	2.0000e-006
tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8000e-004	7.3300e-004
tblVehicleEF	HHD	0.05	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	0.00
tblVehicleEF	HHD	8.4000e-005	4.0000e-006
tblVehicleEF	HHD	2.5800e-003	1.4100e-004
tblVehicleEF	HHD	0.97	0.51

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	4.8000e-005	2.0000e-006
tblVehicleEF	HHD	0.11	0.12
tblVehicleEF	HHD	1.8000e-004	7.3300e-004
tblVehicleEF	HHD	0.05	1.0000e-006
tblVehicleEF	HHD	1.35	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	0.00
tblVehicleEF	HHD	2.39	5.56
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.39	4.8400e-003
tblVehicleEF	HHD	6,867.98	1,095.85
tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	27.25	5.75
tblVehicleEF	HHD	2.54	3.21
tblVehicleEF	HHD	0.01	7.5760e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	7.2480e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8100e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	1.0000e-006
tblVehicleEF	HHD	1.6300e-004	7.0000e-006
tblVehicleEF	HHD	2.9560e-003	1.5600e-004

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.80	0.46
tblVehicleEF	HHD	9.2000e-005	5.0000e-006
tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8400e-004	7.4800e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	1.6300e-004	7.0000e-006
tblVehicleEF	HHD	2.9560e-003	1.5600e-004
tblVehicleEF	HHD	0.92	0.53
tblVehicleEF	HHD	9.2000e-005	5.0000e-006
tblVehicleEF	HHD	0.11	0.12
tblVehicleEF	HHD	1.8400e-004	7.4800e-004
tblVehicleEF	HHD	0.05	1.0000e-006
tblVehicleEF	HHD	1.54	0.02
tblVehicleEF	HHD	0.03	3.9260e-003
tblVehicleEF	HHD	0.10	0.00
tblVehicleEF	HHD	4.51	5.86
tblVehicleEF	HHD	0.45	0.36
tblVehicleEF	HHD	1.47	5.0740e-003
tblVehicleEF	HHD	5,957.03	1,095.99
tblVehicleEF	HHD	1,461.92	1,363.80
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	25.25	6.10
tblVehicleEF	HHD	2.67	3.34
tblVehicleEF	HHD	0.02	8.8010e-003

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	1.0000e-006
tblVehicleEF	HHD	0.02	8.4210e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.7660e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	1.0000e-006
tblVehicleEF	HHD	6.7000e-005	4.0000e-006
tblVehicleEF	HHD	2.7490e-003	1.5900e-004
tblVehicleEF	HHD	0.91	0.42
tblVehicleEF	HHD	4.1000e-005	3.0000e-006
tblVehicleEF	HHD	0.07	0.08
tblVehicleEF	HHD	1.9200e-004	7.7700e-004
tblVehicleEF	HHD	0.05	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	0.00
tblVehicleEF	HHD	6.7000e-005	4.0000e-006
tblVehicleEF	HHD	2.7490e-003	1.5900e-004
tblVehicleEF	HHD	1.05	0.48
tblVehicleEF	HHD	4.1000e-005	3.0000e-006
tblVehicleEF	HHD	0.11	0.10
tblVehicleEF	HHD	1.9200e-004	7.7700e-004
tblVehicleEF	HHD	0.05	1.0000e-006
tblVehicleEF	LDA	4.0430e-003	2.4280e-003

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tblVehicleEF	LDA	5.4670e-003	0.05
tblVehicleEF	LDA	0.58	0.65
tblVehicleEF	LDA	1.16	2.15
tblVehicleEF	LDA	255.91	264.02
tblVehicleEF	LDA	58.81	54.78
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	1.6140e-003	1.4410e-003
tblVehicleEF	LDA	2.2650e-003	1.9140e-003
tblVehicleEF	LDA	1.4880e-003	1.3280e-003
tblVehicleEF	LDA	2.0830e-003	1.7600e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	9.3160e-003
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	2.5630e-003	2.6120e-003
tblVehicleEF	LDA	6.0800e-004	5.4200e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.08	0.25
tblVehicleEF	LDA	4.5900e-003	2.7360e-003
tblVehicleEF	LDA	4.7470e-003	0.05
tblVehicleEF	LDA	0.71	0.77

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tblVehicleEF	LDA	1.02	1.80
tblVehicleEF	LDA	278.73	285.50
tblVehicleEF	LDA	58.81	54.12
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	1.6140e-003	1.4410e-003
tblVehicleEF	LDA	2.2650e-003	1.9140e-003
tblVehicleEF	LDA	1.4880e-003	1.3280e-003
tblVehicleEF	LDA	2.0830e-003	1.7600e-003
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.12	0.11
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	2.7930e-003	2.8240e-003
tblVehicleEF	LDA	6.0500e-004	5.3600e-004
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.12	0.11
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.22
tblVehicleEF	LDA	3.8980e-003	2.3850e-003
tblVehicleEF	LDA	5.6140e-003	0.05
tblVehicleEF	LDA	0.54	0.62
tblVehicleEF	LDA	1.19	2.13
tblVehicleEF	LDA	249.57	260.40



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tblVehicleEF	LDA	58.81	54.76
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	1.6140e-003	1.4410e-003
tblVehicleEF	LDA	2.2650e-003	1.9140e-003
tblVehicleEF	LDA	1.4880e-003	1.3280e-003
tblVehicleEF	LDA	2.0830e-003	1.7600e-003
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	9.8140e-003	9.1470e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.23
tblVehicleEF	LDA	2.4990e-003	2.5760e-003
tblVehicleEF	LDA	6.0800e-004	5.4200e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.25
tblVehicleEF	LDT1	0.01	7.6990e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.46	1.55
tblVehicleEF	LDT1	3.40	2.46
tblVehicleEF	LDT1	315.98	313.01
tblVehicleEF	LDT1	72.28	66.81
tblVehicleEF	LDT1	0.14	0.14

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tblVehicleEF	LDT1	2.5300e-003	2.2620e-003
tblVehicleEF	LDT1	3.6970e-003	2.9790e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7390e-003
tblVehicleEF	LDT1	0.21	0.19
tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.24	0.46
tblVehicleEF	LDT1	3.1780e-003	3.0970e-003
tblVehicleEF	LDT1	7.8300e-004	6.6100e-004
tblVehicleEF	LDT1	0.21	0.19
tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.26	0.50
tblVehicleEF	LDT1	0.01	8.5810e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.76	1.83
tblVehicleEF	LDT1	2.99	2.05
tblVehicleEF	LDT1	343.19	335.41
tblVehicleEF	LDT1	72.28	65.94
tblVehicleEF	LDT1	0.13	0.13
tblVehicleEF	LDT1	2.5300e-003	2.2620e-003
tblVehicleEF	LDT1	3.6970e-003	2.9790e-003

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tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7390e-003
tblVehicleEF	LDT1	0.41	0.36
tblVehicleEF	LDT1	0.43	0.32
tblVehicleEF	LDT1	0.27	0.26
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.20	0.85
tblVehicleEF	LDT1	0.21	0.39
tblVehicleEF	LDT1	3.4550e-003	3.3190e-003
tblVehicleEF	LDT1	7.7500e-004	6.5300e-004
tblVehicleEF	LDT1	0.41	0.36
tblVehicleEF	LDT1	0.43	0.32
tblVehicleEF	LDT1	0.27	0.26
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.20	0.85
tblVehicleEF	LDT1	0.23	0.43
tblVehicleEF	LDT1	0.01	7.5730e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.37	1.50
tblVehicleEF	LDT1	3.46	2.44
tblVehicleEF	LDT1	307.88	309.22
tblVehicleEF	LDT1	72.28	66.78
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	2.5300e-003	2.2620e-003
tblVehicleEF	LDT1	3.6970e-003	2.9790e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7390e-003

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tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.23	1.01
tblVehicleEF	LDT1	0.25	0.46
tblVehicleEF	LDT1	3.0960e-003	3.0600e-003
tblVehicleEF	LDT1	7.8400e-004	6.6100e-004
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.23	1.02
tblVehicleEF	LDT1	0.27	0.50
tblVehicleEF	LDT2	5.6080e-003	4.0030e-003
tblVehicleEF	LDT2	7.2840e-003	0.07
tblVehicleEF	LDT2	0.76	0.93
tblVehicleEF	LDT2	1.53	2.77
tblVehicleEF	LDT2	355.02	334.40
tblVehicleEF	LDT2	81.24	71.60
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	1.6030e-003	1.4810e-003
tblVehicleEF	LDT2	2.3320e-003	1.9490e-003
tblVehicleEF	LDT2	1.4740e-003	1.3630e-003
tblVehicleEF	LDT2	2.1450e-003	1.7930e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13

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tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	3.5560e-003	3.3080e-003
tblVehicleEF	LDT2	8.3800e-004	7.0900e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	6.3630e-003	4.4910e-003
tblVehicleEF	LDT2	6.3270e-003	0.06
tblVehicleEF	LDT2	0.93	1.11
tblVehicleEF	LDT2	1.35	2.31
tblVehicleEF	LDT2	386.34	356.10
tblVehicleEF	LDT2	81.24	70.71
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	1.6030e-003	1.4810e-003
tblVehicleEF	LDT2	2.3320e-003	1.9490e-003
tblVehicleEF	LDT2	1.4740e-003	1.3630e-003
tblVehicleEF	LDT2	2.1450e-003	1.7930e-003
tblVehicleEF	LDT2	0.14	0.17
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02

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tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.09	0.29
tblVehicleEF	LDT2	3.8710e-003	3.5230e-003
tblVehicleEF	LDT2	8.3500e-004	7.0000e-004
tblVehicleEF	LDT2	0.14	0.17
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.09	0.32
tblVehicleEF	LDT2	5.3900e-003	3.9360e-003
tblVehicleEF	LDT2	7.4940e-003	0.07
tblVehicleEF	LDT2	0.71	0.90
tblVehicleEF	LDT2	1.57	2.75
tblVehicleEF	LDT2	345.65	330.74
tblVehicleEF	LDT2	81.24	71.57
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	1.6030e-003	1.4810e-003
tblVehicleEF	LDT2	2.3320e-003	1.9490e-003
tblVehicleEF	LDT2	1.4740e-003	1.3630e-003
tblVehicleEF	LDT2	2.1450e-003	1.7930e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.10	0.34

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tblVehicleEF	LDT2	3.4620e-003	3.2720e-003
tblVehicleEF	LDT2	8.3900e-004	7.0800e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LHD1	5.4460e-003	4.7710e-003
tblVehicleEF	LHD1	0.01	5.3520e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.96	0.72
tblVehicleEF	LHD1	2.41	0.95
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.36
tblVehicleEF	LHD1	30.36	10.31
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.21	1.68
tblVehicleEF	LHD1	9.7200e-004	9.9700e-004
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2900e-004
tblVehicleEF	LHD1	9.3000e-004	9.5400e-004
tblVehicleEF	LHD1	2.5390e-003	2.5130e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1000e-004

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tblVehicleEF	LHD1	3.8710e-003	2.6460e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9010e-003	1.3630e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.48
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	5.9620e-003	6.1770e-003
tblVehicleEF	LHD1	3.4900e-004	1.0200e-004
tblVehicleEF	LHD1	3.8710e-003	2.6460e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9010e-003	1.3630e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.48
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	5.4460e-003	4.7850e-003
tblVehicleEF	LHD1	0.01	5.4440e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.97	0.74
tblVehicleEF	LHD1	2.29	0.90
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.38
tblVehicleEF	LHD1	30.36	10.22
tblVehicleEF	LHD1	0.09	0.09



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tblVehicleEF	LHD1	2.08	1.58
tblVehicleEF	LHD1	9.7200e-004	9.9700e-004
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2900e-004
tblVehicleEF	LHD1	9.3000e-004	9.5400e-004
tblVehicleEF	LHD1	2.5390e-003	2.5130e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1000e-004
tblVehicleEF	LHD1	7.2450e-003	4.7130e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6380e-003	2.6330e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.32	0.48
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	5.9620e-003	6.1770e-003
tblVehicleEF	LHD1	3.4700e-004	1.0100e-004
tblVehicleEF	LHD1	7.2450e-003	4.7130e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6380e-003	2.6330e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.32	0.48
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.4460e-003	4.7740e-003

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tblVehicleEF	LHD1	0.01	5.3630e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.96	0.73
tblVehicleEF	LHD1	2.41	0.94
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.36
tblVehicleEF	LHD1	30.36	10.30
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.18	1.65
tblVehicleEF	LHD1	9.7200e-004	9.9700e-004
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2900e-004
tblVehicleEF	LHD1	9.3000e-004	9.5400e-004
tblVehicleEF	LHD1	2.5390e-003	2.5130e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1000e-004
tblVehicleEF	LHD1	3.4570e-003	2.8040e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7350e-003	1.4340e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.52
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	5.9620e-003	6.1770e-003

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tblVehicleEF	LHD1	3.4900e-004	1.0200e-004
tblVehicleEF	LHD1	3.4570e-003	2.8040e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7350e-003	1.4340e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.33	0.52
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD2	3.6660e-003	2.9070e-003
tblVehicleEF	LHD2	4.5290e-003	3.7990e-003
tblVehicleEF	LHD2	8.3110e-003	8.1460e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.15	0.51
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.61
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.71	1.83
tblVehicleEF	LHD2	1.3360e-003	1.5020e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0500e-004
tblVehicleEF	LHD2	1.2780e-003	1.4370e-003
tblVehicleEF	LHD2	2.6970e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.7000e-005

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tblVehicleEF	LHD2	1.4980e-003	1.2260e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.7800e-004	6.4800e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4400e-004
tblVehicleEF	LHD2	5.8740e-003	6.0520e-003
tblVehicleEF	LHD2	2.5700e-004	6.5000e-005
tblVehicleEF	LHD2	1.4980e-003	1.2260e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.7800e-004	6.4800e-004
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	LHD2	3.6660e-003	2.9150e-003
tblVehicleEF	LHD2	4.5800e-003	3.8270e-003
tblVehicleEF	LHD2	8.0210e-003	7.8340e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.51	0.52
tblVehicleEF	LHD2	1.10	0.48
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.56
tblVehicleEF	LHD2	0.12	0.13

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tblVehicleEF	LHD2	1.62	1.73
tblVehicleEF	LHD2	1.3360e-003	1.5020e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0500e-004
tblVehicleEF	LHD2	1.2780e-003	1.4370e-003
tblVehicleEF	LHD2	2.6970e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.7000e-005
tblVehicleEF	LHD2	2.8320e-003	2.1860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.4720e-003	1.2510e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4400e-004
tblVehicleEF	LHD2	5.8740e-003	6.0520e-003
tblVehicleEF	LHD2	2.5600e-004	6.5000e-005
tblVehicleEF	LHD2	2.8320e-003	2.1860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4720e-003	1.2510e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	LHD2	3.6660e-003	2.9080e-003

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tblVehicleEF	LHD2	4.5170e-003	3.8020e-003
tblVehicleEF	LHD2	8.3600e-003	8.0900e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.16	0.50
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.60
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.70	1.81
tblVehicleEF	LHD2	1.3360e-003	1.5020e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0500e-004
tblVehicleEF	LHD2	1.2780e-003	1.4370e-003
tblVehicleEF	LHD2	2.6970e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.7000e-005
tblVehicleEF	LHD2	1.1910e-003	1.2710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7400e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.24
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4400e-004
tblVehicleEF	LHD2	5.8740e-003	6.0520e-003

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tblVehicleEF	LHD2	2.5700e-004	6.5000e-005
tblVehicleEF	LHD2	1.1910e-003	1.2710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7400e-004
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.24
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	MCY	0.42	0.32
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.52	19.50
tblVehicleEF	MCY	9.67	8.60
tblVehicleEF	MCY	165.74	207.81
tblVehicleEF	MCY	46.23	60.96
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	1.7750e-003	1.7170e-003
tblVehicleEF	MCY	3.4010e-003	2.8690e-003
tblVehicleEF	MCY	1.6600e-003	1.6070e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	1.69	1.42
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.15	2.15
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.0380e-003	2.0560e-003
tblVehicleEF	MCY	6.8100e-004	6.0300e-004

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tblVehicleEF	MCY	1.69	1.42
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.65	2.64
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.26	2.01
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.22
tblVehicleEF	MCY	20.23	19.46
tblVehicleEF	MCY	9.11	7.90
tblVehicleEF	MCY	165.74	207.59
tblVehicleEF	MCY	46.23	59.07
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	1.7750e-003	1.7170e-003
tblVehicleEF	MCY	3.4010e-003	2.8690e-003
tblVehicleEF	MCY	1.6600e-003	1.6070e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	3.35	2.73
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.13	2.10
tblVehicleEF	MCY	0.57	1.84
tblVehicleEF	MCY	1.86	1.62
tblVehicleEF	MCY	2.0490e-003	2.0540e-003
tblVehicleEF	MCY	6.6500e-004	5.8500e-004
tblVehicleEF	MCY	3.35	2.73
tblVehicleEF	MCY	1.24	1.09



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tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.62	2.59
tblVehicleEF	MCY	0.57	1.84
tblVehicleEF	MCY	2.02	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.04	18.91
tblVehicleEF	MCY	9.62	8.38
tblVehicleEF	MCY	165.74	206.80
tblVehicleEF	MCY	46.23	60.47
tblVehicleEF	MCY	1.12	1.10
tblVehicleEF	MCY	1.7750e-003	1.7170e-003
tblVehicleEF	MCY	3.4010e-003	2.8690e-003
tblVehicleEF	MCY	1.6600e-003	1.6070e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	1.60	1.63
tblVehicleEF	MCY	1.05	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.15	2.13
tblVehicleEF	MCY	0.65	2.13
tblVehicleEF	MCY	2.08	1.81
tblVehicleEF	MCY	2.0310e-003	2.0460e-003
tblVehicleEF	MCY	6.8100e-004	5.9800e-004
tblVehicleEF	MCY	1.60	1.63
tblVehicleEF	MCY	1.05	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.64	2.62

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tblVehicleEF	MCY	0.65	2.13
tblVehicleEF	MCY	2.27	1.97
tblVehicleEF	MDV	0.01	5.5310e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.42	1.15
tblVehicleEF	MDV	3.18	3.31
tblVehicleEF	MDV	488.89	418.28
tblVehicleEF	MDV	110.15	88.92
tblVehicleEF	MDV	0.17	0.12
tblVehicleEF	MDV	1.7110e-003	1.5590e-003
tblVehicleEF	MDV	2.4630e-003	2.0460e-003
tblVehicleEF	MDV	1.5780e-003	1.4390e-003
tblVehicleEF	MDV	2.2660e-003	1.8820e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MDV	4.9000e-003	4.1360e-003
tblVehicleEF	MDV	1.1570e-003	8.8000e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.27	0.50

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tblVehicleEF	MDV	0.01	6.1670e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.73	1.36
tblVehicleEF	MDV	2.81	2.77
tblVehicleEF	MDV	530.71	441.48
tblVehicleEF	MDV	110.15	87.84
tblVehicleEF	MDV	0.16	0.11
tblVehicleEF	MDV	1.7110e-003	1.5590e-003
tblVehicleEF	MDV	2.4630e-003	2.0460e-003
tblVehicleEF	MDV	1.5780e-003	1.4390e-003
tblVehicleEF	MDV	2.2660e-003	1.8820e-003
tblVehicleEF	MDV	0.22	0.20
tblVehicleEF	MDV	0.23	0.18
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	5.3230e-003	4.3650e-003
tblVehicleEF	MDV	1.1510e-003	8.6900e-004
tblVehicleEF	MDV	0.22	0.20
tblVehicleEF	MDV	0.23	0.18
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.23	0.42
tblVehicleEF	MDV	0.01	5.4330e-003
tblVehicleEF	MDV	0.02	0.09

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tblVehicleEF	MDV	1.33	1.11
tblVehicleEF	MDV	3.24	3.29
tblVehicleEF	MDV	476.42	414.36
tblVehicleEF	MDV	110.15	88.88
tblVehicleEF	MDV	0.16	0.11
tblVehicleEF	MDV	1.7110e-003	1.5590e-003
tblVehicleEF	MDV	2.4630e-003	2.0460e-003
tblVehicleEF	MDV	1.5780e-003	1.4390e-003
tblVehicleEF	MDV	2.2660e-003	1.8820e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.55
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MDV	4.7750e-003	4.0970e-003
tblVehicleEF	MDV	1.1590e-003	8.8000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.13	0.55
tblVehicleEF	MDV	0.28	0.50
tblVehicleEF	MH	0.03	3.3940e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	2.70	0.35
tblVehicleEF	MH	5.98	0.00

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tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.67	4.53
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
tblVehicleEF	MH	9.9460e-003	8.9090e-003
tblVehicleEF	MH	6.8100e-004	0.00
tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	0.03	3.3940e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.78	0.35
tblVehicleEF	MH	5.56	0.00

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tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.55	4.28
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	2.87	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	9.9470e-003	8.9090e-003
tblVehicleEF	MH	6.7400e-004	0.00
tblVehicleEF	MH	2.87	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	0.03	3.3940e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	2.70	0.35
tblVehicleEF	MH	6.02	0.00

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tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.65	4.46
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	1.58	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.53	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
tblVehicleEF	MH	9.9460e-003	8.9090e-003
tblVehicleEF	MH	6.8200e-004	0.00
tblVehicleEF	MH	1.58	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.53	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MHD	0.02	2.7460e-003
tblVehicleEF	MHD	3.7220e-003	5.6870e-003
tblVehicleEF	MHD	0.06	7.1020e-003
tblVehicleEF	MHD	0.35	0.32

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tblVehicleEF	MHD	0.28	0.52
tblVehicleEF	MHD	6.06	0.85
tblVehicleEF	MHD	151.96	73.08
tblVehicleEF	MHD	1,066.63	977.33
tblVehicleEF	MHD	55.49	7.02
tblVehicleEF	MHD	0.65	0.69
tblVehicleEF	MHD	0.99	2.47
tblVehicleEF	MHD	1.0680e-003	2.4550e-003
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3000e-005
tblVehicleEF	MHD	1.0220e-003	2.3490e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6000e-005
tblVehicleEF	MHD	1.7450e-003	4.7300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.5800e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.11
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	MHD	1.4610e-003	6.9300e-004
tblVehicleEF	MHD	0.01	9.2820e-003
tblVehicleEF	MHD	6.6100e-004	6.9000e-005
tblVehicleEF	MHD	1.7450e-003	4.7300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.5800e-004	2.4800e-004



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tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.40	0.04
tblVehicleEF	MHD	0.02	2.6080e-003
tblVehicleEF	MHD	3.7740e-003	5.7080e-003
tblVehicleEF	MHD	0.05	6.8220e-003
tblVehicleEF	MHD	0.26	0.26
tblVehicleEF	MHD	0.28	0.52
tblVehicleEF	MHD	5.78	0.80
tblVehicleEF	MHD	160.96	74.59
tblVehicleEF	MHD	1,066.63	977.34
tblVehicleEF	MHD	55.49	6.94
tblVehicleEF	MHD	0.67	0.70
tblVehicleEF	MHD	0.93	2.33
tblVehicleEF	MHD	9.0000e-004	2.0720e-003
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3000e-005
tblVehicleEF	MHD	8.6100e-004	1.9830e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6000e-005
tblVehicleEF	MHD	3.3760e-003	8.5300e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.6840e-003	4.9500e-004
tblVehicleEF	MHD	0.03	0.11
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04

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tblVehicleEF	MHD	1.5460e-003	7.0700e-004
tblVehicleEF	MHD	0.01	9.2820e-003
tblVehicleEF	MHD	6.5600e-004	6.9000e-005
tblVehicleEF	MHD	3.3760e-003	8.5300e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	1.6840e-003	4.9500e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.39	0.04
tblVehicleEF	MHD	0.02	2.9480e-003
tblVehicleEF	MHD	3.6890e-003	5.6880e-003
tblVehicleEF	MHD	0.06	7.0370e-003
tblVehicleEF	MHD	0.49	0.40
tblVehicleEF	MHD	0.27	0.52
tblVehicleEF	MHD	6.14	0.84
tblVehicleEF	MHD	139.53	71.00
tblVehicleEF	MHD	1,066.63	977.33
tblVehicleEF	MHD	55.49	7.00
tblVehicleEF	MHD	0.62	0.67
tblVehicleEF	MHD	0.98	2.43
tblVehicleEF	MHD	1.2990e-003	2.9840e-003
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3000e-005
tblVehicleEF	MHD	1.2430e-003	2.8550e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6000e-005

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	1.3320e-003	5.0600e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.7900e-004	2.6300e-004
tblVehicleEF	MHD	0.03	0.11
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	MHD	1.3440e-003	6.7300e-004
tblVehicleEF	MHD	0.01	9.2820e-003
tblVehicleEF	MHD	6.6300e-004	6.9000e-005
tblVehicleEF	MHD	1.3320e-003	5.0600e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.7900e-004	2.6300e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.41	0.04
tblVehicleEF	OBUS	0.01	8.8300e-003
tblVehicleEF	OBUS	8.0950e-003	9.8620e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.54	1.11
tblVehicleEF	OBUS	6.17	2.80
tblVehicleEF	OBUS	75.04	68.90
tblVehicleEF	OBUS	1,098.07	1,401.75
tblVehicleEF	OBUS	70.10	21.77
tblVehicleEF	OBUS	0.35	0.41

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	1.12	1.96
tblVehicleEF	OBUS	1.2100e-004	1.7090e-003
tblVehicleEF	OBUS	6.0450e-003	0.05
tblVehicleEF	OBUS	8.2300e-004	2.0900e-004
tblVehicleEF	OBUS	1.1600e-004	1.6350e-003
tblVehicleEF	OBUS	5.7680e-003	0.04
tblVehicleEF	OBUS	7.5700e-004	1.9300e-004
tblVehicleEF	OBUS	2.1800e-003	2.6440e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.3000e-004	1.1510e-003
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.13
tblVehicleEF	OBUS	7.2800e-004	6.5800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.0900e-004	2.1500e-004
tblVehicleEF	OBUS	2.1800e-003	2.6440e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.3000e-004	1.1510e-003
tblVehicleEF	OBUS	0.05	0.13
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.42	0.15
tblVehicleEF	OBUS	0.01	8.8560e-003
tblVehicleEF	OBUS	8.2540e-003	0.01
tblVehicleEF	OBUS	0.03	0.02

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.26	0.46
tblVehicleEF	OBUS	0.55	1.14
tblVehicleEF	OBUS	5.76	2.60
tblVehicleEF	OBUS	78.48	69.40
tblVehicleEF	OBUS	1,098.07	1,401.78
tblVehicleEF	OBUS	70.10	21.43
tblVehicleEF	OBUS	0.36	0.41
tblVehicleEF	OBUS	1.04	1.83
tblVehicleEF	OBUS	1.0200e-004	1.4440e-003
tblVehicleEF	OBUS	6.0450e-003	0.05
tblVehicleEF	OBUS	8.2300e-004	2.0900e-004
tblVehicleEF	OBUS	9.8000e-005	1.3810e-003
tblVehicleEF	OBUS	5.7680e-003	0.04
tblVehicleEF	OBUS	7.5700e-004	1.9300e-004
tblVehicleEF	OBUS	4.0690e-003	4.6630e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7890e-003	2.2350e-003
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	7.6100e-004	6.6300e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.0200e-004	2.1200e-004
tblVehicleEF	OBUS	4.0690e-003	4.6630e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	1.7890e-003	2.2350e-003
tblVehicleEF	OBUS	0.05	0.13
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	OBUS	0.01	8.8320e-003
tblVehicleEF	OBUS	8.0660e-003	9.8760e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.28	0.51
tblVehicleEF	OBUS	0.54	1.12
tblVehicleEF	OBUS	6.22	2.79
tblVehicleEF	OBUS	70.30	68.21
tblVehicleEF	OBUS	1,098.07	1,401.75
tblVehicleEF	OBUS	70.10	21.75
tblVehicleEF	OBUS	0.34	0.41
tblVehicleEF	OBUS	1.11	1.93
tblVehicleEF	OBUS	1.4700e-004	2.0750e-003
tblVehicleEF	OBUS	6.0450e-003	0.05
tblVehicleEF	OBUS	8.2300e-004	2.0900e-004
tblVehicleEF	OBUS	1.4100e-004	1.9850e-003
tblVehicleEF	OBUS	5.7680e-003	0.04
tblVehicleEF	OBUS	7.5700e-004	1.9300e-004
tblVehicleEF	OBUS	1.8870e-003	2.7900e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.5400e-004	1.2290e-003
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.05	0.30

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.39	0.13
tblVehicleEF	OBUS	6.8300e-004	6.5100e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.1000e-004	2.1500e-004
tblVehicleEF	OBUS	1.8870e-003	2.7900e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	8.5400e-004	1.2290e-003
tblVehicleEF	OBUS	0.05	0.13
tblVehicleEF	OBUS	0.05	0.30
tblVehicleEF	OBUS	0.42	0.15
tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.1350e-003
tblVehicleEF	SBUS	0.06	7.9940e-003
tblVehicleEF	SBUS	7.83	3.38
tblVehicleEF	SBUS	0.64	0.59
tblVehicleEF	SBUS	6.66	1.10
tblVehicleEF	SBUS	1,146.29	374.62
tblVehicleEF	SBUS	1,103.40	1,117.10
tblVehicleEF	SBUS	53.92	6.97
tblVehicleEF	SBUS	10.00	3.53
tblVehicleEF	SBUS	4.65	4.80
tblVehicleEF	SBUS	0.01	3.9570e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4000e-005
tblVehicleEF	SBUS	0.01	3.7860e-003

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tblVehicleEF	SBUS	2.6950e-003	2.6440e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.2000e-004	4.1000e-005
tblVehicleEF	SBUS	4.6830e-003	1.3760e-003
tblVehicleEF	SBUS	0.03	9.8810e-003
tblVehicleEF	SBUS	0.94	0.41
tblVehicleEF	SBUS	2.1770e-003	6.8600e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.5830e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5500e-004	6.9000e-005
tblVehicleEF	SBUS	4.6830e-003	1.3760e-003
tblVehicleEF	SBUS	0.03	9.8810e-003
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	2.1770e-003	6.8600e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.40	0.05
tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.2250e-003
tblVehicleEF	SBUS	0.05	6.6640e-003
tblVehicleEF	SBUS	7.71	3.33
tblVehicleEF	SBUS	0.65	0.60
tblVehicleEF	SBUS	4.83	0.79
tblVehicleEF	SBUS	1,198.60	385.14



## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	1,103.40	1,117.12
tblVehicleEF	SBUS	53.92	6.45
tblVehicleEF	SBUS	10.32	3.62
tblVehicleEF	SBUS	4.37	4.52
tblVehicleEF	SBUS	9.1190e-003	3.3420e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4000e-005
tblVehicleEF	SBUS	8.7240e-003	3.1980e-003
tblVehicleEF	SBUS	2.6950e-003	2.6440e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.2000e-004	4.1000e-005
tblVehicleEF	SBUS	8.4640e-003	2.4140e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	4.0830e-003	1.2840e-003
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.31	0.04
tblVehicleEF	SBUS	0.01	3.6820e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2400e-004	6.4000e-005
tblVehicleEF	SBUS	8.4640e-003	2.4140e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	4.0830e-003	1.2840e-003
tblVehicleEF	SBUS	0.13	0.12

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.04
tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.1340e-003
tblVehicleEF	SBUS	0.07	8.1370e-003
tblVehicleEF	SBUS	8.00	3.43
tblVehicleEF	SBUS	0.63	0.59
tblVehicleEF	SBUS	7.02	1.12
tblVehicleEF	SBUS	1,074.07	360.11
tblVehicleEF	SBUS	1,103.40	1,117.10
tblVehicleEF	SBUS	53.92	7.01
tblVehicleEF	SBUS	9.56	3.40
tblVehicleEF	SBUS	4.60	4.73
tblVehicleEF	SBUS	0.01	4.8060e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4000e-005
tblVehicleEF	SBUS	0.01	4.5980e-003
tblVehicleEF	SBUS	2.6950e-003	2.6440e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.2000e-004	4.1000e-005
tblVehicleEF	SBUS	4.1680e-003	1.3130e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.94	0.41
tblVehicleEF	SBUS	2.1000e-003	7.1200e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.07

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.38	0.05
tblVehicleEF	SBUS	0.01	3.4450e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6100e-004	6.9000e-005
tblVehicleEF	SBUS	4.1680e-003	1.3130e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	2.1000e-003	7.1200e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.45	23.57
tblVehicleEF	UBUS	15.26	1.95
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.43
tblVehicleEF	UBUS	4.95	0.30
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1610e-003
tblVehicleEF	UBUS	1.4200e-003	2.0900e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.05	2.0480e-003
tblVehicleEF	UBUS	1.3060e-003	1.9200e-004
tblVehicleEF	UBUS	9.7430e-003	2.3410e-003

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2400e-004
tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10
tblVehicleEF	UBUS	9.9960e-003	6.3900e-003
tblVehicleEF	UBUS	1.8100e-003	2.3200e-004
tblVehicleEF	UBUS	9.7430e-003	2.3410e-003
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2400e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.28	0.10
tblVehicleEF	UBUS	1.52	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	8.53	23.58
tblVehicleEF	UBUS	13.06	1.66
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	22.94
tblVehicleEF	UBUS	4.62	0.29
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1610e-003
tblVehicleEF	UBUS	1.4200e-003	2.0900e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.05	2.0480e-003

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tblVehicleEF	UBUS	1.3060e-003	1.9200e-004
tblVehicleEF	UBUS	0.02	4.1840e-003
tblVehicleEF	UBUS	0.14	0.02
tblVehicleEF	UBUS	9.6600e-003	1.8850e-003
tblVehicleEF	UBUS	0.53	0.05
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.06	0.09
tblVehicleEF	UBUS	9.9970e-003	6.3900e-003
tblVehicleEF	UBUS	1.7720e-003	2.2700e-004
tblVehicleEF	UBUS	0.02	4.1840e-003
tblVehicleEF	UBUS	0.14	0.02
tblVehicleEF	UBUS	9.6600e-003	1.8850e-003
tblVehicleEF	UBUS	2.09	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.44	23.57
tblVehicleEF	UBUS	15.44	1.93
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.40
tblVehicleEF	UBUS	4.92	0.30
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1610e-003
tblVehicleEF	UBUS	1.4200e-003	2.0900e-004
tblVehicleEF	UBUS	0.21	0.04

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tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.05	2.0480e-003
tblVehicleEF	UBUS	1.3060e-003	1.9200e-004
tblVehicleEF	UBUS	8.9770e-003	2.4590e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	4.3820e-003	9.7700e-004
tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.18	0.10
tblVehicleEF	UBUS	9.9960e-003	6.3900e-003
tblVehicleEF	UBUS	1.8130e-003	2.3200e-004
tblVehicleEF	UBUS	8.9770e-003	2.4590e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	4.3820e-003	9.7700e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.29	0.10

## 2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-1-2020	2-28-2021	1.0319	0.8437
2	3-1-2021	5-31-2021	1.2308	1.1952
3	6-1-2021	8-31-2021	1.7202	1.4999
4	9-1-2021	9-30-2021	0.7162	0.6051
		Highest	1.7202	1.4999

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	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
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	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>



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**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	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
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	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>

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

**3.0 Construction Detail**

**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Detouring Traffic/Street Closure	Site Preparation	12/1/2020	12/7/2020	5	5	
2	Grubbing/Land Clearing	Site Preparation	12/8/2020	12/19/2020	5	9	
3	Grading/Excavation/Removing Existing Bridge	Grading	12/20/2020	2/12/2021	5	40	
4	Bridge Construction	Building Construction	2/15/2021	11/5/2021	5	190	
5	Drainage/Utilities/Sub-Grade	Grading	7/30/2021	9/16/2021	5	35	
6	Paving	Paving	8/26/2021	9/16/2021	5	16	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 29.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Detouring Traffic/Street Closure	Rubber Tired Dozers	0	8.00	247	0.40
Detouring Traffic/Street Closure	Signal Boards	2	8.00	6	0.82
Detouring Traffic/Street Closure	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grubbing/Land Clearing	Crawler Tractors	1	8.00	212	0.43
Grubbing/Land Clearing	Excavators	1	8.00	158	0.38
Grubbing/Land Clearing	Off-Highway Trucks	2	8.00	402	0.38
Grubbing/Land Clearing	Rubber Tired Dozers	0	8.00	247	0.40
Grubbing/Land Clearing	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading/Excavation/Removing Existing Bridge	Crawler Tractors	2	8.00	212	0.43
Grading/Excavation/Removing Existing Bridge	Excavators	2	8.00	158	0.38

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Grading/Excavation/Removing Existing Bridge	Graders	0	8.00	187	0.41
Grading/Excavation/Removing Existing Bridge	Off-Highway Trucks	2	8.00	402	0.38
Grading/Excavation/Removing Existing Bridge	Other Construction Equipment	1	8.00	172	0.42
Grading/Excavation/Removing Existing Bridge	Rubber Tired Dozers	0	8.00	247	0.40
Grading/Excavation/Removing Existing Bridge	Scrapers	0	8.00	367	0.48
Grading/Excavation/Removing Existing Bridge	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Bridge Construction	Bore/Drill Rigs	1	8.00	221	0.50
Bridge Construction	Cranes	1	8.00	231	0.29
Bridge Construction	Excavators	1	8.00	158	0.38
Bridge Construction	Forklifts	0	8.00	89	0.20
Bridge Construction	Generator Sets	0	8.00	84	0.74
Bridge Construction	Paving Equipment	1	8.00	132	0.36
Bridge Construction	Plate Compactors	1	8.00	8	0.43
Bridge Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Bridge Construction	Welders	0	8.00	46	0.45
Drainage/Utilities/Sub-Grade	Crawler Tractors	2	8.00	212	0.43
Drainage/Utilities/Sub-Grade	Excavators	0	8.00	158	0.38
Drainage/Utilities/Sub-Grade	Graders	0	8.00	187	0.41
Drainage/Utilities/Sub-Grade	Rubber Tired Dozers	0	8.00	247	0.40
Drainage/Utilities/Sub-Grade	Scrapers	2	8.00	367	0.48
Drainage/Utilities/Sub-Grade	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Signal Boards	1	8.00	6	0.82
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

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**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	
Detouring		2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Traffic/Street Closure											
Grubbing/Land Clearing		4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Excavation/Removing Existing Bridge		7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Bridge Construction		5	543.00	212.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Sub-Grade		4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving		6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Detouring Traffic/Street Closure - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	1.8000e-003	1.5100e-003	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.2237	0.2237	2.0000e-005	0.0000	0.2243
<b>Total</b>	<b>2.9000e-004</b>	<b>1.8000e-003</b>	<b>1.5100e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.2237</b>	<b>0.2237</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.2243</b>

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**3.2 Detouring Traffic/Street Closure - 2020**

**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	6.0000e-005	4.0000e-005	4.3000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1150	0.1150	0.0000	0.0000	0.1150
<b>Total</b>	<b>6.0000e-005</b>	<b>4.0000e-005</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1150</b>	<b>0.1150</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1150</b>

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.2237	0.2237	2.0000e-005	0.0000	0.2243
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.2237</b>	<b>0.2237</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.2243</b>

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**3.2 Detouring Traffic/Street Closure - 2020**

**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	6.0000e-005	4.0000e-005	4.3000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1150	0.1150	0.0000	0.0000	0.1150
<b>Total</b>	<b>6.0000e-005</b>	<b>4.0000e-005</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1150</b>	<b>0.1150</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1150</b>

**3.3 Grubbing/Land Clearing - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.7700e-003	0.0000	4.7700e-003	5.2000e-004	0.0000	5.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6800e-003	0.1013	0.0603	1.8000e-004		3.8600e-003	3.8600e-003		3.5500e-003	3.5500e-003	0.0000	15.5853	15.5853	5.0400e-003	0.0000	15.7113
<b>Total</b>	<b>9.6800e-003</b>	<b>0.1013</b>	<b>0.0603</b>	<b>1.8000e-004</b>	<b>4.7700e-003</b>	<b>3.8600e-003</b>	<b>8.6300e-003</b>	<b>5.2000e-004</b>	<b>3.5500e-003</b>	<b>4.0700e-003</b>	<b>0.0000</b>	<b>15.5853</b>	<b>15.5853</b>	<b>5.0400e-003</b>	<b>0.0000</b>	<b>15.7113</b>

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**3.3 Grubbing/Land Clearing - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.4000e-004	1.5500e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4138	0.4138	1.0000e-005	0.0000	0.4141
<b>Total</b>	<b>2.1000e-004</b>	<b>1.4000e-004</b>	<b>1.5500e-003</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>5.0000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.4138</b>	<b>0.4138</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4141</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.8600e-003	0.0000	1.8600e-003	2.0000e-004	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3500e-003	0.0841	0.0995	1.8000e-004		3.3000e-003	3.3000e-003		3.3000e-003	3.3000e-003	0.0000	15.5853	15.5853	5.0400e-003	0.0000	15.7113
<b>Total</b>	<b>4.3500e-003</b>	<b>0.0841</b>	<b>0.0995</b>	<b>1.8000e-004</b>	<b>1.8600e-003</b>	<b>3.3000e-003</b>	<b>5.1600e-003</b>	<b>2.0000e-004</b>	<b>3.3000e-003</b>	<b>3.5000e-003</b>	<b>0.0000</b>	<b>15.5853</b>	<b>15.5853</b>	<b>5.0400e-003</b>	<b>0.0000</b>	<b>15.7113</b>

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**3.3 Grubbing/Land Clearing - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.4000e-004	1.5500e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4138	0.4138	1.0000e-005	0.0000	0.4141
<b>Total</b>	<b>2.1000e-004</b>	<b>1.4000e-004</b>	<b>1.5500e-003</b>	<b>0.0000</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>5.0000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.4138</b>	<b>0.4138</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4141</b>

**3.4 Grading/Excavation/Removing Existing Bridge - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0212	0.0000	0.0212	2.2900e-003	0.0000	2.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0156	0.1692	0.1048	2.6000e-004		6.8900e-003	6.8900e-003		6.3400e-003	6.3400e-003	0.0000	23.1757	23.1757	7.5000e-003	0.0000	23.3630
<b>Total</b>	<b>0.0156</b>	<b>0.1692</b>	<b>0.1048</b>	<b>2.6000e-004</b>	<b>0.0212</b>	<b>6.8900e-003</b>	<b>0.0281</b>	<b>2.2900e-003</b>	<b>6.3400e-003</b>	<b>8.6300e-003</b>	<b>0.0000</b>	<b>23.1757</b>	<b>23.1757</b>	<b>7.5000e-003</b>	<b>0.0000</b>	<b>23.3630</b>



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**3.4 Grading/Excavation/Removing Existing Bridge - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.6000e-004	2.7900e-003	1.0000e-005	8.9000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7449	0.7449	2.0000e-005	0.0000	0.7453
<b>Total</b>	<b>3.7000e-004</b>	<b>2.6000e-004</b>	<b>2.7900e-003</b>	<b>1.0000e-005</b>	<b>8.9000e-004</b>	<b>1.0000e-005</b>	<b>9.0000e-004</b>	<b>2.4000e-004</b>	<b>1.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.7449</b>	<b>0.7449</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.7453</b>

**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					8.2700e-003	0.0000	8.2700e-003	8.9000e-004	0.0000	8.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4800e-003	0.1252	0.1571	2.6000e-004		5.1200e-003	5.1200e-003		5.1200e-003	5.1200e-003	0.0000	23.1756	23.1756	7.5000e-003	0.0000	23.3630
<b>Total</b>	<b>6.4800e-003</b>	<b>0.1252</b>	<b>0.1571</b>	<b>2.6000e-004</b>	<b>8.2700e-003</b>	<b>5.1200e-003</b>	<b>0.0134</b>	<b>8.9000e-004</b>	<b>5.1200e-003</b>	<b>6.0100e-003</b>	<b>0.0000</b>	<b>23.1756</b>	<b>23.1756</b>	<b>7.5000e-003</b>	<b>0.0000</b>	<b>23.3630</b>

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**3.4 Grading/Excavation/Removing Existing Bridge - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.6000e-004	2.7900e-003	1.0000e-005	8.9000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7449	0.7449	2.0000e-005	0.0000	0.7453
<b>Total</b>	<b>3.7000e-004</b>	<b>2.6000e-004</b>	<b>2.7900e-003</b>	<b>1.0000e-005</b>	<b>8.9000e-004</b>	<b>1.0000e-005</b>	<b>9.0000e-004</b>	<b>2.4000e-004</b>	<b>1.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.7449</b>	<b>0.7449</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.7453</b>

**3.4 Grading/Excavation/Removing Existing Bridge - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0212	0.0000	0.0212	2.2900e-003	0.0000	2.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0495	0.5138	0.3515	9.1000e-004		0.0209	0.0209		0.0192	0.0192	0.0000	79.8218	79.8218	0.0258	0.0000	80.4672
<b>Total</b>	<b>0.0495</b>	<b>0.5138</b>	<b>0.3515</b>	<b>9.1000e-004</b>	<b>0.0212</b>	<b>0.0209</b>	<b>0.0421</b>	<b>2.2900e-003</b>	<b>0.0192</b>	<b>0.0215</b>	<b>0.0000</b>	<b>79.8218</b>	<b>79.8218</b>	<b>0.0258</b>	<b>0.0000</b>	<b>80.4672</b>

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**3.4 Grading/Excavation/Removing Existing Bridge - 2021**

**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	1.2000e-003	8.1000e-004	8.7800e-003	3.0000e-005	3.0700e-003	2.0000e-005	3.0800e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.4799	2.4799	6.0000e-005	0.0000	2.4813
<b>Total</b>	<b>1.2000e-003</b>	<b>8.1000e-004</b>	<b>8.7800e-003</b>	<b>3.0000e-005</b>	<b>3.0700e-003</b>	<b>2.0000e-005</b>	<b>3.0800e-003</b>	<b>8.1000e-004</b>	<b>2.0000e-005</b>	<b>8.3000e-004</b>	<b>0.0000</b>	<b>2.4799</b>	<b>2.4799</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>2.4813</b>

**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					8.2700e-003	0.0000	8.2700e-003	8.9000e-004	0.0000	8.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.4314	0.5413	9.1000e-004		0.0176	0.0176		0.0176	0.0176	0.0000	79.8217	79.8217	0.0258	0.0000	80.4671
<b>Total</b>	<b>0.0223</b>	<b>0.4314</b>	<b>0.5413</b>	<b>9.1000e-004</b>	<b>8.2700e-003</b>	<b>0.0176</b>	<b>0.0259</b>	<b>8.9000e-004</b>	<b>0.0176</b>	<b>0.0185</b>	<b>0.0000</b>	<b>79.8217</b>	<b>79.8217</b>	<b>0.0258</b>	<b>0.0000</b>	<b>80.4671</b>

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**3.4 Grading/Excavation/Removing Existing Bridge - 2021**

**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	1.2000e-003	8.1000e-004	8.7800e-003	3.0000e-005	3.0700e-003	2.0000e-005	3.0800e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.4799	2.4799	6.0000e-005	0.0000	2.4813
<b>Total</b>	<b>1.2000e-003</b>	<b>8.1000e-004</b>	<b>8.7800e-003</b>	<b>3.0000e-005</b>	<b>3.0700e-003</b>	<b>2.0000e-005</b>	<b>3.0800e-003</b>	<b>8.1000e-004</b>	<b>2.0000e-005</b>	<b>8.3000e-004</b>	<b>0.0000</b>	<b>2.4799</b>	<b>2.4799</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>2.4813</b>

**3.5 Bridge Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1076	1.1606	0.9577	2.3700e-003		0.0474	0.0474		0.0437	0.0437	0.0000	206.8319	206.8319	0.0662	0.0000	208.4880
<b>Total</b>	<b>0.1076</b>	<b>1.1606</b>	<b>0.9577</b>	<b>2.3700e-003</b>		<b>0.0474</b>	<b>0.0474</b>		<b>0.0437</b>	<b>0.0437</b>	<b>0.0000</b>	<b>206.8319</b>	<b>206.8319</b>	<b>0.0662</b>	<b>0.0000</b>	<b>208.4880</b>

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**3.5 Bridge Construction - 2021**

**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	0.0481	1.8779	0.3613	5.1400e-003	0.1272	3.5900e-003	0.1308	0.0367	3.4300e-003	0.0401	0.0000	491.3620	491.3620	0.0375	0.0000	492.2991
Worker	0.2212	0.1490	1.6239	5.0700e-003	0.5670	3.4000e-003	0.5704	0.1506	3.1300e-003	0.1537	0.0000	458.5114	458.5114	0.0107	0.0000	458.7784
<b>Total</b>	<b>0.2692</b>	<b>2.0269</b>	<b>1.9852</b>	<b>0.0102</b>	<b>0.6942</b>	<b>6.9900e-003</b>	<b>0.7012</b>	<b>0.1873</b>	<b>6.5600e-003</b>	<b>0.1938</b>	<b>0.0000</b>	<b>949.8734</b>	<b>949.8734</b>	<b>0.0482</b>	<b>0.0000</b>	<b>951.0775</b>

**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	0.0573	1.1080	1.4400	2.3700e-003		0.0464	0.0464		0.0464	0.0464	0.0000	206.8317	206.8317	0.0662	0.0000	208.4877
<b>Total</b>	<b>0.0573</b>	<b>1.1080</b>	<b>1.4400</b>	<b>2.3700e-003</b>		<b>0.0464</b>	<b>0.0464</b>		<b>0.0464</b>	<b>0.0464</b>	<b>0.0000</b>	<b>206.8317</b>	<b>206.8317</b>	<b>0.0662</b>	<b>0.0000</b>	<b>208.4877</b>

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**3.5 Bridge Construction - 2021**

**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	0.0481	1.8779	0.3613	5.1400e-003	0.1272	3.5900e-003	0.1308	0.0367	3.4300e-003	0.0401	0.0000	491.3620	491.3620	0.0375	0.0000	492.2991
Worker	0.2212	0.1490	1.6239	5.0700e-003	0.5670	3.4000e-003	0.5704	0.1506	3.1300e-003	0.1537	0.0000	458.5114	458.5114	0.0107	0.0000	458.7784
<b>Total</b>	<b>0.2692</b>	<b>2.0269</b>	<b>1.9852</b>	<b>0.0102</b>	<b>0.6942</b>	<b>6.9900e-003</b>	<b>0.7012</b>	<b>0.1873</b>	<b>6.5600e-003</b>	<b>0.1938</b>	<b>0.0000</b>	<b>949.8734</b>	<b>949.8734</b>	<b>0.0482</b>	<b>0.0000</b>	<b>951.0775</b>

**3.6 Drainage/Utilities/Sub-Grade - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0557	0.0000	0.0557	6.0100e-003	0.0000	6.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0518	0.6185	0.3304	8.1000e-004		0.0238	0.0238		0.0219	0.0219	0.0000	70.7510	70.7510	0.0229	0.0000	71.3230
<b>Total</b>	<b>0.0518</b>	<b>0.6185</b>	<b>0.3304</b>	<b>8.1000e-004</b>	<b>0.0557</b>	<b>0.0238</b>	<b>0.0794</b>	<b>6.0100e-003</b>	<b>0.0219</b>	<b>0.0279</b>	<b>0.0000</b>	<b>70.7510</b>	<b>70.7510</b>	<b>0.0229</b>	<b>0.0000</b>	<b>71.3230</b>

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**3.6 Drainage/Utilities/Sub-Grade - 2021**

**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	7.5000e-004	5.1000e-004	5.5100e-003	2.0000e-005	1.9200e-003	1.0000e-005	1.9400e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.5555	1.5555	4.0000e-005	0.0000	1.5564
<b>Total</b>	<b>7.5000e-004</b>	<b>5.1000e-004</b>	<b>5.5100e-003</b>	<b>2.0000e-005</b>	<b>1.9200e-003</b>	<b>1.0000e-005</b>	<b>1.9400e-003</b>	<b>5.1000e-004</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>1.5555</b>	<b>1.5555</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.5564</b>

**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					0.0217	0.0000	0.0217	2.3400e-003	0.0000	2.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0198	0.3828	0.4290	8.1000e-004		0.0145	0.0145		0.0145	0.0145	0.0000	70.7509	70.7509	0.0229	0.0000	71.3229
<b>Total</b>	<b>0.0198</b>	<b>0.3828</b>	<b>0.4290</b>	<b>8.1000e-004</b>	<b>0.0217</b>	<b>0.0145</b>	<b>0.0362</b>	<b>2.3400e-003</b>	<b>0.0145</b>	<b>0.0169</b>	<b>0.0000</b>	<b>70.7509</b>	<b>70.7509</b>	<b>0.0229</b>	<b>0.0000</b>	<b>71.3229</b>

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**3.6 Drainage/Utilities/Sub-Grade - 2021**

**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	7.5000e-004	5.1000e-004	5.5100e-003	2.0000e-005	1.9200e-003	1.0000e-005	1.9400e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.5555	1.5555	4.0000e-005	0.0000	1.5564
<b>Total</b>	<b>7.5000e-004</b>	<b>5.1000e-004</b>	<b>5.5100e-003</b>	<b>2.0000e-005</b>	<b>1.9200e-003</b>	<b>1.0000e-005</b>	<b>1.9400e-003</b>	<b>5.1000e-004</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>1.5555</b>	<b>1.5555</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.5564</b>

**3.7 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.4800e-003	0.0849	0.0972	1.5000e-004		4.6100e-003	4.6100e-003		4.2500e-003	4.2500e-003	0.0000	12.7348	12.7348	4.0400e-003	0.0000	12.8358
Paving	0.0389					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0474</b>	<b>0.0849</b>	<b>0.0972</b>	<b>1.5000e-004</b>		<b>4.6100e-003</b>	<b>4.6100e-003</b>		<b>4.2500e-003</b>	<b>4.2500e-003</b>	<b>0.0000</b>	<b>12.7348</b>	<b>12.7348</b>	<b>4.0400e-003</b>	<b>0.0000</b>	<b>12.8358</b>



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**3.7 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	3.5000e-004	3.7800e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.0666	1.0666	2.0000e-005	0.0000	1.0672
<b>Total</b>	<b>5.1000e-004</b>	<b>3.5000e-004</b>	<b>3.7800e-003</b>	<b>1.0000e-005</b>	<b>1.3200e-003</b>	<b>1.0000e-005</b>	<b>1.3300e-003</b>	<b>3.5000e-004</b>	<b>1.0000e-005</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>1.0666</b>	<b>1.0666</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.0672</b>

**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	3.4600e-003	0.0729	0.1067	1.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003	0.0000	12.7348	12.7348	4.0400e-003	0.0000	12.8358
Paving	0.0389					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0424</b>	<b>0.0729</b>	<b>0.1067</b>	<b>1.5000e-004</b>		<b>4.3800e-003</b>	<b>4.3800e-003</b>		<b>4.3800e-003</b>	<b>4.3800e-003</b>	<b>0.0000</b>	<b>12.7348</b>	<b>12.7348</b>	<b>4.0400e-003</b>	<b>0.0000</b>	<b>12.8358</b>

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**3.7 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	3.5000e-004	3.7800e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.0666	1.0666	2.0000e-005	0.0000	1.0672
<b>Total</b>	<b>5.1000e-004</b>	<b>3.5000e-004</b>	<b>3.7800e-003</b>	<b>1.0000e-005</b>	<b>1.3200e-003</b>	<b>1.0000e-005</b>	<b>1.3300e-003</b>	<b>3.5000e-004</b>	<b>1.0000e-005</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>1.0666</b>	<b>1.0666</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>1.0672</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	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
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

5.0 Energy Detail

Historical Energy Use: N



Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**5.2 Energy by Land Use - Natural Gas**

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

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**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
Unmitigated	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**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	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>

**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	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>

**7.0 Water Detail**

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**Perris Valley Storm Drain (Construction - Mitigated)**  
**Riverside-South Coast County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	29.70	Acre	29.70	1,293,732.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2022
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use -

Construction Phase - Construction Schedule approved by the Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

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Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Off-road Equipment - Construction Equipment based on consultation with Project Applicant

Grading - For purposes of analysis, total acres graded per day is based on the equipment specific grading rates (CalEEMod Appendix A) and the equipment list.

Construction Off-road Equipment Mitigation - MM Air 3 and MM Air 6

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstructionPhase	NumDays	45.00	30.00
tblConstructionPhase	NumDays	440.00	109.00
tblConstructionPhase	NumDays	20.00	4.00
tblConstructionPhase	NumDays	45.00	30.00
tblConstructionPhase	NumDays	440.00	137.00
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	35.00	15.00
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tblGrading	AcresOfGrading	15.00	30.00
tblGrading	AcresOfGrading	15.00	30.00
tblGrading	AcresOfGrading	66.00	44.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleEF	HHD	1.36	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	3.11	6.00

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tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.41	4.6550e-003
tblVehicleEF	HHD	6,423.61	1,112.99
tblVehicleEF	HHD	1,444.51	1,341.20
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tblVehicleEF	HHD	0.06	0.06
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tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	2.9000e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	7.3000e-005	3.0000e-006
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tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00



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tblVehicleEF	HHD	7.3000e-005	3.0000e-006
tblVehicleEF	HHD	2.3460e-003	1.1000e-004
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tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.08
tblVehicleEF	HHD	1.5800e-004	5.0300e-004
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tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	2.26	5.87
tblVehicleEF	HHD	0.45	0.30
tblVehicleEF	HHD	1.34	4.3930e-003
tblVehicleEF	HHD	6,805.04	1,108.39
tblVehicleEF	HHD	1,444.51	1,341.20
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tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	8.9510e-003	2.5580e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8650e-003	8.8080e-003
tblVehicleEF	HHD	0.01	0.03

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tblVehicleEF	HHD	3.4000e-005	0.00
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tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.8000e-005	0.00
tblVehicleEF	HHD	1.3900e-004	6.0000e-006
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tblVehicleEF	HHD	8.2000e-005	4.0000e-006
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tblVehicleEF	HHD	1.6100e-004	5.1000e-004
tblVehicleEF	HHD	0.04	1.0000e-006
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tblVehicleEF	HHD	0.09	0.00
tblVehicleEF	HHD	4.28	6.14
tblVehicleEF	HHD	0.44	0.23
tblVehicleEF	HHD	1.42	4.6050e-003
tblVehicleEF	HHD	5,896.87	1,113.28
tblVehicleEF	HHD	1,444.51	1,323.58
tblVehicleEF	HHD	4.59	0.04

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tblVehicleEF	HHD	23.77	6.08
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tblVehicleEF	HHD	3.7000e-005	1.0000e-006
tblVehicleEF	HHD	0.01	3.3110e-003
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tblVehicleEF	HHD	8.8650e-003	8.7590e-003
tblVehicleEF	HHD	0.01	0.03
tblVehicleEF	HHD	3.4000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
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tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	0.00
tblVehicleEF	HHD	5.5000e-005	3.0000e-006
tblVehicleEF	HHD	2.4470e-003	1.2300e-004
tblVehicleEF	HHD	0.99	0.47
tblVehicleEF	HHD	3.6000e-005	2.0000e-006
tblVehicleEF	HHD	0.10	0.05

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tblVehicleEF	HHD	1.6900e-004	5.3500e-004
tblVehicleEF	HHD	0.04	1.0000e-006
tblVehicleEF	LDA	3.6620e-003	2.1320e-003
tblVehicleEF	LDA	4.7760e-003	0.05
tblVehicleEF	LDA	0.54	0.60
tblVehicleEF	LDA	1.05	2.09
tblVehicleEF	LDA	245.52	256.38
tblVehicleEF	LDA	56.65	53.20
tblVehicleEF	LDA	0.05	0.03
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	9.2080e-003	8.0170e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.4580e-003	2.5360e-003
tblVehicleEF	LDA	5.8400e-004	5.2600e-004
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.23

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tblVehicleEF	LDA	4.1530e-003	2.4040e-003
tblVehicleEF	LDA	4.1450e-003	0.04
tblVehicleEF	LDA	0.66	0.72
tblVehicleEF	LDA	0.93	1.75
tblVehicleEF	LDA	267.36	277.20
tblVehicleEF	LDA	56.65	52.57
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.01	8.9450e-003
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	2.6780e-003	2.7420e-003
tblVehicleEF	LDA	5.8200e-004	5.2000e-004
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.07	0.08
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	3.5320e-003	2.0960e-003
tblVehicleEF	LDA	4.9050e-003	0.05

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tblVehicleEF	LDA	0.51	0.58
tblVehicleEF	LDA	1.08	2.07
tblVehicleEF	LDA	239.46	252.87
tblVehicleEF	LDA	56.65	53.18
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	1.5830e-003	1.3710e-003
tblVehicleEF	LDA	2.2500e-003	1.8340e-003
tblVehicleEF	LDA	1.4580e-003	1.2630e-003
tblVehicleEF	LDA	2.0690e-003	1.6860e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.8850e-003	7.8720e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.21
tblVehicleEF	LDA	2.3970e-003	2.5010e-003
tblVehicleEF	LDA	5.8500e-004	5.2600e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDT1	0.01	6.6590e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.32	1.37
tblVehicleEF	LDT1	3.05	2.37

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tblVehicleEF	LDT1	305.87	304.11
tblVehicleEF	LDT1	70.39	64.86
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.21	0.41
tblVehicleEF	LDT1	3.0750e-003	3.0090e-003
tblVehicleEF	LDT1	7.5800e-004	6.4200e-004
tblVehicleEF	LDT1	0.20	0.18
tblVehicleEF	LDT1	0.32	0.25
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.19	0.80
tblVehicleEF	LDT1	0.23	0.45
tblVehicleEF	LDT1	0.01	7.4260e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.59	1.62
tblVehicleEF	LDT1	2.68	1.98
tblVehicleEF	LDT1	332.27	325.77
tblVehicleEF	LDT1	70.39	64.04

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tblVehicleEF	LDT1	0.12	0.11
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003
tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.18	0.35
tblVehicleEF	LDT1	3.3430e-003	3.2240e-003
tblVehicleEF	LDT1	7.5100e-004	6.3400e-004
tblVehicleEF	LDT1	0.38	0.33
tblVehicleEF	LDT1	0.40	0.29
tblVehicleEF	LDT1	0.25	0.23
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.19	0.78
tblVehicleEF	LDT1	0.20	0.38
tblVehicleEF	LDT1	0.01	6.5510e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.24	1.33
tblVehicleEF	LDT1	3.11	2.35
tblVehicleEF	LDT1	298.00	300.45
tblVehicleEF	LDT1	70.39	64.83
tblVehicleEF	LDT1	0.12	0.12
tblVehicleEF	LDT1	2.3960e-003	2.0660e-003



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tblVehicleEF	LDT1	3.5150e-003	2.7560e-003
tblVehicleEF	LDT1	2.2060e-003	1.9010e-003
tblVehicleEF	LDT1	3.2320e-003	2.5340e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.22	0.41
tblVehicleEF	LDT1	2.9950e-003	2.9730e-003
tblVehicleEF	LDT1	7.5900e-004	6.4200e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.36	0.28
tblVehicleEF	LDT1	0.11	0.12
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.22	0.93
tblVehicleEF	LDT1	0.24	0.45
tblVehicleEF	LDT2	5.1640e-003	3.5680e-003
tblVehicleEF	LDT2	6.4600e-003	0.07
tblVehicleEF	LDT2	0.71	0.85
tblVehicleEF	LDT2	1.39	2.68
tblVehicleEF	LDT2	342.68	322.21
tblVehicleEF	LDT2	78.65	68.98
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003

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tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.4320e-003	3.1880e-003
tblVehicleEF	LDT2	8.1000e-004	6.8300e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.11	0.13
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.41
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	5.8560e-003	4.0040e-003
tblVehicleEF	LDT2	5.6090e-003	0.06
tblVehicleEF	LDT2	0.87	1.02
tblVehicleEF	LDT2	1.23	2.24
tblVehicleEF	LDT2	372.88	342.99
tblVehicleEF	LDT2	78.65	68.14
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.13	0.16

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tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	3.7360e-003	3.3930e-003
tblVehicleEF	LDT2	8.0700e-004	6.7400e-004
tblVehicleEF	LDT2	0.13	0.16
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.40
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LDT2	4.9650e-003	3.5090e-003
tblVehicleEF	LDT2	6.6500e-003	0.07
tblVehicleEF	LDT2	0.67	0.82
tblVehicleEF	LDT2	1.42	2.66
tblVehicleEF	LDT2	333.62	318.70
tblVehicleEF	LDT2	78.65	68.95
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	1.6000e-003	1.4090e-003
tblVehicleEF	LDT2	2.3460e-003	1.8660e-003
tblVehicleEF	LDT2	1.4710e-003	1.2970e-003
tblVehicleEF	LDT2	2.1570e-003	1.7160e-003
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07

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tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	3.3410e-003	3.1530e-003
tblVehicleEF	LDT2	8.1000e-004	6.8200e-004
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.12	0.14
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.47
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LHD1	5.1810e-003	4.6570e-003
tblVehicleEF	LHD1	9.5070e-003	4.8740e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.92
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.02
tblVehicleEF	LHD1	29.86	10.15
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.06	1.53
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004

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tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.7780e-003	2.5170e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.8760e-003	1.3130e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.31	0.46
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6710e-003
tblVehicleEF	LHD1	9.6980e-003	4.9550e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.89	0.67
tblVehicleEF	LHD1	2.15	0.87
tblVehicleEF	LHD1	9.26	9.43

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tblVehicleEF	LHD1	602.20	628.04
tblVehicleEF	LHD1	29.86	10.07
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.94	1.44
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9030e-003	6.1050e-003
tblVehicleEF	LHD1	3.4000e-004	1.0000e-004
tblVehicleEF	LHD1	7.0590e-003	4.4750e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.5660e-003	2.5190e-003
tblVehicleEF	LHD1	0.09	0.07

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tblVehicleEF	LHD1	0.32	0.46
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	5.1810e-003	4.6600e-003
tblVehicleEF	LHD1	9.4900e-003	4.8830e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.17
tblVehicleEF	LHD1	0.88	0.66
tblVehicleEF	LHD1	2.26	0.91
tblVehicleEF	LHD1	9.26	9.43
tblVehicleEF	LHD1	602.20	628.03
tblVehicleEF	LHD1	29.86	10.14
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.04	1.51
tblVehicleEF	LHD1	9.7000e-004	1.0050e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.2900e-004	2.1900e-004
tblVehicleEF	LHD1	9.2800e-004	9.6200e-004
tblVehicleEF	LHD1	2.5490e-003	2.5150e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.6200e-004	2.0100e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.34	0.49

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tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	9.2000e-005	9.1000e-005
tblVehicleEF	LHD1	5.9020e-003	6.1050e-003
tblVehicleEF	LHD1	3.4200e-004	1.0000e-004
tblVehicleEF	LHD1	3.3490e-003	2.6470e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7110e-003	1.3780e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.34	0.49
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD2	3.4600e-003	2.8390e-003
tblVehicleEF	LHD2	4.0020e-003	3.5160e-003
tblVehicleEF	LHD2	7.4040e-003	7.6560e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.08	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.52
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.50	1.67
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003



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tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.5000e-005
tblVehicleEF	LHD2	1.4050e-003	1.1710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.4200e-004	6.3000e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8460e-003
tblVehicleEF	LHD2	4.0450e-003	3.5410e-003
tblVehicleEF	LHD2	7.1500e-003	7.3630e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.04	0.47
tblVehicleEF	LHD2	14.41	15.04

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tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.47
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.41	1.58
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5100e-004	6.4000e-005
tblVehicleEF	LHD2	2.6530e-003	2.0860e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.3950e-003	1.2080e-003
tblVehicleEF	LHD2	0.06	0.07

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tblVehicleEF	LHD2	0.08	0.21
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	3.4600e-003	2.8400e-003
tblVehicleEF	LHD2	3.9920e-003	3.5200e-003
tblVehicleEF	LHD2	7.4470e-003	7.6030e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.48
tblVehicleEF	LHD2	1.09	0.49
tblVehicleEF	LHD2	14.41	15.04
tblVehicleEF	LHD2	598.41	622.37
tblVehicleEF	LHD2	23.24	6.51
tblVehicleEF	LHD2	0.11	0.13
tblVehicleEF	LHD2	1.48	1.65
tblVehicleEF	LHD2	1.3120e-003	1.5070e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7000e-004	1.0100e-004
tblVehicleEF	LHD2	1.2550e-003	1.4420e-003
tblVehicleEF	LHD2	2.7000e-003	2.7370e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.4000e-004	9.3000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.08	0.22

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tblVehicleEF	LHD2	0.10	0.04
tblVehicleEF	LHD2	1.4000e-004	1.4300e-004
tblVehicleEF	LHD2	5.8170e-003	5.9880e-003
tblVehicleEF	LHD2	2.5200e-004	6.4000e-005
tblVehicleEF	LHD2	1.1040e-003	1.2010e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.2900e-004	6.5400e-004
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.08	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.14	19.16
tblVehicleEF	MCY	9.69	8.62
tblVehicleEF	MCY	166.26	207.70
tblVehicleEF	MCY	45.80	60.67
tblVehicleEF	MCY	1.12	1.13
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.56	1.82

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tblVehicleEF	MCY	2.06	1.84
tblVehicleEF	MCY	2.0370e-003	2.0550e-003
tblVehicleEF	MCY	6.7700e-004	6.0000e-004
tblVehicleEF	MCY	1.69	1.43
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.63	2.63
tblVehicleEF	MCY	0.56	1.82
tblVehicleEF	MCY	2.24	2.00
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	19.85	19.13
tblVehicleEF	MCY	9.10	7.90
tblVehicleEF	MCY	166.26	207.50
tblVehicleEF	MCY	45.80	58.76
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.11	2.09
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	1.85	1.61
tblVehicleEF	MCY	2.0480e-003	2.0530e-003

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tblVehicleEF	MCY	6.6100e-004	5.8100e-004
tblVehicleEF	MCY	3.36	2.74
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.61	2.57
tblVehicleEF	MCY	0.56	1.79
tblVehicleEF	MCY	2.01	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.68	18.59
tblVehicleEF	MCY	9.65	8.41
tblVehicleEF	MCY	166.26	206.72
tblVehicleEF	MCY	45.80	60.18
tblVehicleEF	MCY	1.12	1.09
tblVehicleEF	MCY	1.8240e-003	1.7610e-003
tblVehicleEF	MCY	3.3680e-003	2.8430e-003
tblVehicleEF	MCY	1.7050e-003	1.6470e-003
tblVehicleEF	MCY	3.1720e-003	2.6760e-003
tblVehicleEF	MCY	1.60	1.64
tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.12	2.11
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.07	1.80
tblVehicleEF	MCY	2.0300e-003	2.0460e-003
tblVehicleEF	MCY	6.7700e-004	5.9600e-004
tblVehicleEF	MCY	1.60	1.64

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tblVehicleEF	MCY	1.04	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.62	2.60
tblVehicleEF	MCY	0.64	2.08
tblVehicleEF	MCY	2.26	1.96
tblVehicleEF	MDV	0.01	4.7140e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.26	1.01
tblVehicleEF	MDV	2.88	3.15
tblVehicleEF	MDV	474.24	404.92
tblVehicleEF	MDV	107.24	85.97
tblVehicleEF	MDV	0.15	0.10
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	4.7510e-003	4.0030e-003
tblVehicleEF	MDV	1.1230e-003	8.5100e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.09

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tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.24	0.45
tblVehicleEF	MDV	0.01	5.2950e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.53	1.20
tblVehicleEF	MDV	2.54	2.62
tblVehicleEF	MDV	514.80	427.12
tblVehicleEF	MDV	107.24	84.94
tblVehicleEF	MDV	0.14	0.09
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.46
tblVehicleEF	MDV	0.19	0.35
tblVehicleEF	MDV	5.1610e-003	4.2230e-003
tblVehicleEF	MDV	1.1170e-003	8.4100e-004
tblVehicleEF	MDV	0.21	0.20
tblVehicleEF	MDV	0.23	0.17
tblVehicleEF	MDV	0.17	0.17
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.46



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tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	0.01	4.6310e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.18	0.97
tblVehicleEF	MDV	2.94	3.12
tblVehicleEF	MDV	462.11	401.17
tblVehicleEF	MDV	107.24	85.93
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	1.6800e-003	1.4810e-003
tblVehicleEF	MDV	2.4130e-003	1.9440e-003
tblVehicleEF	MDV	1.5490e-003	1.3660e-003
tblVehicleEF	MDV	2.2190e-003	1.7870e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.23	0.41
tblVehicleEF	MDV	4.6290e-003	3.9660e-003
tblVehicleEF	MDV	1.1240e-003	8.5000e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.17
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MH	0.03	3.3380e-003

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tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.33	0.34
tblVehicleEF	MH	5.58	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.57	4.40
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7100e-004	0.00
tblVehicleEF	MH	1.47	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.51	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MH	0.03	3.3380e-003

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tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.40	0.34
tblVehicleEF	MH	5.19	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.46	4.15
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.31	0.00
tblVehicleEF	MH	9.9080e-003	8.8470e-003
tblVehicleEF	MH	6.6400e-004	0.00
tblVehicleEF	MH	2.69	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	1.00	0.00
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	0.03	3.3380e-003

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tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.32	0.34
tblVehicleEF	MH	5.61	0.00
tblVehicleEF	MH	998.83	935.85
tblVehicleEF	MH	57.38	0.00
tblVehicleEF	MH	1.55	4.33
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	1.0280e-003	0.00
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.13
tblVehicleEF	MH	9.4600e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.08	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.33	0.00
tblVehicleEF	MH	9.9070e-003	8.8470e-003
tblVehicleEF	MH	6.7200e-004	0.00
tblVehicleEF	MH	1.48	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.50	0.00
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.36	0.00
tblVehicleEF	MHD	0.02	2.7360e-003

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tblVehicleEF	MHD	3.1970e-003	3.0240e-003
tblVehicleEF	MHD	0.05	7.0010e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.47	0.82
tblVehicleEF	MHD	152.51	70.86
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.06
tblVehicleEF	MHD	0.61	0.56
tblVehicleEF	MHD	0.89	1.59
tblVehicleEF	MHD	9.8000e-004	1.4660e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	9.3700e-004	1.4030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.33	0.04
tblVehicleEF	MHD	1.4660e-003	6.7200e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4200e-004	7.0000e-005
tblVehicleEF	MHD	1.6000e-003	4.3900e-004

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tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.0100e-004	2.3500e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	0.02	2.6030e-003
tblVehicleEF	MHD	3.2380e-003	3.0420e-003
tblVehicleEF	MHD	0.05	6.7280e-003
tblVehicleEF	MHD	0.25	0.27
tblVehicleEF	MHD	0.25	0.31
tblVehicleEF	MHD	5.23	0.77
tblVehicleEF	MHD	161.54	71.77
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	6.98
tblVehicleEF	MHD	0.63	0.57
tblVehicleEF	MHD	0.83	1.50
tblVehicleEF	MHD	8.2600e-004	1.2390e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005
tblVehicleEF	MHD	7.9000e-004	1.1850e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004

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tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	MHD	1.5510e-003	6.8000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.3800e-004	6.9000e-005
tblVehicleEF	MHD	3.0890e-003	7.9100e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.5560e-003	4.6400e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.35	0.04
tblVehicleEF	MHD	0.02	2.9320e-003
tblVehicleEF	MHD	3.1690e-003	3.0250e-003
tblVehicleEF	MHD	0.05	6.9370e-003
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	0.24	0.31
tblVehicleEF	MHD	5.56	0.81
tblVehicleEF	MHD	140.03	69.60
tblVehicleEF	MHD	1,062.94	946.77
tblVehicleEF	MHD	54.61	7.04
tblVehicleEF	MHD	0.58	0.56
tblVehicleEF	MHD	0.88	1.57
tblVehicleEF	MHD	1.1920e-003	1.7800e-003
tblVehicleEF	MHD	5.7040e-003	0.05
tblVehicleEF	MHD	7.4900e-004	8.2000e-005

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	1.1400e-003	1.7030e-003
tblVehicleEF	MHD	5.4540e-003	0.04
tblVehicleEF	MHD	6.8900e-004	7.5000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.34	0.04
tblVehicleEF	MHD	1.3480e-003	6.6000e-004
tblVehicleEF	MHD	0.01	8.9930e-003
tblVehicleEF	MHD	6.4300e-004	7.0000e-005
tblVehicleEF	MHD	1.1940e-003	4.6300e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	6.2900e-004	2.4800e-004
tblVehicleEF	MHD	0.03	0.06
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	OBUS	0.01	8.6190e-003
tblVehicleEF	OBUS	6.8270e-003	7.1940e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.79	2.73
tblVehicleEF	OBUS	74.97	66.93



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tblVehicleEF	OBUS	1,092.94	1,366.52
tblVehicleEF	OBUS	69.71	21.52
tblVehicleEF	OBUS	0.31	0.30
tblVehicleEF	OBUS	0.97	1.35
tblVehicleEF	OBUS	6.8000e-005	5.7600e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	6.5000e-005	5.5200e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	7.2800e-004	6.3900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	2.1110e-003	2.6570e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	9.1000e-004	1.1650e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.14

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tblVehicleEF	OBUS	0.01	8.6710e-003
tblVehicleEF	OBUS	6.9570e-003	7.3440e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.47
tblVehicleEF	OBUS	0.46	0.88
tblVehicleEF	OBUS	5.41	2.54
tblVehicleEF	OBUS	78.41	66.84
tblVehicleEF	OBUS	1,092.94	1,366.56
tblVehicleEF	OBUS	69.71	21.19
tblVehicleEF	OBUS	0.32	0.29
tblVehicleEF	OBUS	0.91	1.26
tblVehicleEF	OBUS	5.7000e-005	4.8900e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	5.4000e-005	4.6800e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	OBUS	7.6000e-004	6.3800e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9200e-004	2.1000e-004

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	3.9250e-003	4.6820e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7420e-003	2.2520e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.38	0.14
tblVehicleEF	OBUS	0.01	8.5850e-003
tblVehicleEF	OBUS	6.8060e-003	7.2070e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.49
tblVehicleEF	OBUS	0.46	0.87
tblVehicleEF	OBUS	5.84	2.72
tblVehicleEF	OBUS	70.22	67.05
tblVehicleEF	OBUS	1,092.94	1,366.53
tblVehicleEF	OBUS	69.71	21.50
tblVehicleEF	OBUS	0.29	0.31
tblVehicleEF	OBUS	0.97	1.33
tblVehicleEF	OBUS	8.2000e-005	6.9700e-004
tblVehicleEF	OBUS	5.0070e-003	0.02
tblVehicleEF	OBUS	8.4500e-004	2.1400e-004
tblVehicleEF	OBUS	7.9000e-005	6.6700e-004
tblVehicleEF	OBUS	4.7740e-003	0.02
tblVehicleEF	OBUS	7.7700e-004	1.9600e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05

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tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.03	0.06
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.36	0.13
tblVehicleEF	OBUS	6.8200e-004	6.4000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9900e-004	2.1300e-004
tblVehicleEF	OBUS	1.8300e-003	2.7860e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	8.3900e-004	1.2410e-003
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.05	0.31
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8650e-003
tblVehicleEF	SBUS	0.06	8.0490e-003
tblVehicleEF	SBUS	7.82	3.40
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.53	1.09
tblVehicleEF	SBUS	1,137.52	372.28
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.95
tblVehicleEF	SBUS	9.42	3.42
tblVehicleEF	SBUS	4.31	4.61
tblVehicleEF	SBUS	9.5680e-003	3.6140e-003
tblVehicleEF	SBUS	0.01	0.01

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	9.1540e-003	3.4580e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.36	0.05
tblVehicleEF	SBUS	0.01	3.5600e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5900e-004	6.9000e-005
tblVehicleEF	SBUS	4.8460e-003	1.4760e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	2.2980e-003	7.3900e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.39	0.05
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.9520e-003
tblVehicleEF	SBUS	0.05	6.7100e-003
tblVehicleEF	SBUS	7.71	3.36

## Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.61	0.58
tblVehicleEF	SBUS	4.73	0.78
tblVehicleEF	SBUS	1,189.12	382.15
tblVehicleEF	SBUS	1,098.11	1,106.72
tblVehicleEF	SBUS	54.55	6.44
tblVehicleEF	SBUS	9.72	3.51
tblVehicleEF	SBUS	4.05	4.33
tblVehicleEF	SBUS	8.0660e-003	3.0540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	7.7170e-003	2.9220e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.92	0.41
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.30	0.04
tblVehicleEF	SBUS	0.01	3.6540e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2900e-004	6.4000e-005
tblVehicleEF	SBUS	8.7430e-003	2.5870e-003
tblVehicleEF	SBUS	0.03	0.01

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tblVehicleEF	SBUS	1.33	0.59
tblVehicleEF	SBUS	4.2770e-003	1.3760e-003
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.82	0.09
tblVehicleEF	SBUS	0.01	6.8630e-003
tblVehicleEF	SBUS	0.06	8.1930e-003
tblVehicleEF	SBUS	7.98	3.46
tblVehicleEF	SBUS	0.60	0.57
tblVehicleEF	SBUS	6.89	1.11
tblVehicleEF	SBUS	1,066.27	358.65
tblVehicleEF	SBUS	1,098.11	1,106.71
tblVehicleEF	SBUS	54.55	6.99
tblVehicleEF	SBUS	9.00	3.31
tblVehicleEF	SBUS	4.26	4.54
tblVehicleEF	SBUS	0.01	4.3890e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.7600e-004	4.6000e-005
tblVehicleEF	SBUS	0.01	4.1990e-003
tblVehicleEF	SBUS	2.6910e-003	2.6470e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.3700e-004	4.2000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41

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tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.10	0.10
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.4320e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6500e-004	6.9000e-005
tblVehicleEF	SBUS	4.2260e-003	1.3980e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.34	0.59
tblVehicleEF	SBUS	2.2070e-003	7.6500e-004
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.89	23.58
tblVehicleEF	UBUS	14.42	1.90
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.35
tblVehicleEF	UBUS	4.15	0.30
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003



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tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8000e-003	2.3100e-004
tblVehicleEF	UBUS	9.4280e-003	2.7000e-003
tblVehicleEF	UBUS	0.11	0.02
tblVehicleEF	UBUS	4.6810e-003	1.0930e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.23	0.11
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	7.95	23.58
tblVehicleEF	UBUS	12.35	1.62
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	22.87
tblVehicleEF	UBUS	3.87	0.30
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004

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tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	0.47	0.05
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.03	0.09
tblVehicleEF	UBUS	9.6710e-003	6.3860e-003
tblVehicleEF	UBUS	1.7640e-003	2.2600e-004
tblVehicleEF	UBUS	0.02	4.7970e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	9.3920e-003	2.1760e-003
tblVehicleEF	UBUS	1.95	3.11
tblVehicleEF	UBUS	0.02	0.07
tblVehicleEF	UBUS	1.12	0.10
tblVehicleEF	UBUS	1.44	3.04
tblVehicleEF	UBUS	0.08	0.03
tblVehicleEF	UBUS	7.88	23.58
tblVehicleEF	UBUS	14.60	1.89
tblVehicleEF	UBUS	1,799.80	1,641.14
tblVehicleEF	UBUS	153.89	23.33
tblVehicleEF	UBUS	4.12	0.30
tblVehicleEF	UBUS	0.49	0.09
tblVehicleEF	UBUS	0.01	0.02

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tblVehicleEF	UBUS	0.04	2.1620e-003
tblVehicleEF	UBUS	1.4590e-003	2.1000e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0570e-003
tblVehicleEF	UBUS	0.04	2.0490e-003
tblVehicleEF	UBUS	1.3420e-003	1.9300e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	0.46	0.05
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.13	0.10
tblVehicleEF	UBUS	9.6700e-003	6.3860e-003
tblVehicleEF	UBUS	1.8030e-003	2.3100e-004
tblVehicleEF	UBUS	8.6090e-003	2.7590e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	4.2750e-003	1.1470e-003
tblVehicleEF	UBUS	1.94	3.11
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	1.24	0.11

## 2.0 Emissions Summary

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Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**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					
2020	0.0198	0.2037	0.1364	3.5000e-004	0.0225	8.2200e-003	0.0307	2.6200e-003	7.5700e-003	0.0102	0.0000	30.6168	30.6168	9.5400e-003	0.0000	30.8555
2021	0.4646	4.0357	3.6115	0.0144	0.7523	0.0873	0.8396	0.1978	0.0805	0.2783	0.0000	1,318.3155	1,318.3155	0.1574	0.0000	1,322.2496
2022	0.1682	1.1644	1.0275	3.9300e-003	0.2085	0.0290	0.2374	0.0525	0.0267	0.0792	0.0000	358.6354	358.6354	0.0480	0.0000	359.8349
<b>Maximum</b>	<b>0.4646</b>	<b>4.0357</b>	<b>3.6115</b>	<b>0.0144</b>	<b>0.7523</b>	<b>0.0873</b>	<b>0.8396</b>	<b>0.1978</b>	<b>0.0805</b>	<b>0.2783</b>	<b>0.0000</b>	<b>1,318.3155</b>	<b>1,318.3155</b>	<b>0.1574</b>	<b>0.0000</b>	<b>1,322.2496</b>

**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					
2020	9.0100e-003	0.1608	0.2039	3.5000e-004	9.5100e-003	6.5500e-003	0.0161	1.2200e-003	6.5500e-003	7.7700e-003	0.0000	30.6168	30.6168	9.5400e-003	0.0000	30.8554
2021	0.3894	3.9516	4.3478	0.0144	0.7329	0.0850	0.8180	0.1957	0.0836	0.2793	0.0000	1,318.3151	1,318.3151	0.1574	0.0000	1,322.2492
2022	0.1444	1.1134	1.2277	3.9300e-003	0.1942	0.0270	0.2212	0.0509	0.0264	0.0773	0.0000	358.6353	358.6353	0.0480	0.0000	359.8348
<b>Maximum</b>	<b>0.3894</b>	<b>3.9516</b>	<b>4.3478</b>	<b>0.0144</b>	<b>0.7329</b>	<b>0.0850</b>	<b>0.8180</b>	<b>0.1957</b>	<b>0.0836</b>	<b>0.2793</b>	<b>0.0000</b>	<b>1,318.3151</b>	<b>1,318.3151</b>	<b>0.1574</b>	<b>0.0000</b>	<b>1,322.2492</b>

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	16.83	3.30	-21.02	0.00	4.74	4.76	4.74	1.99	-1.52	0.89	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-1-2020	2-28-2021	0.7304	0.6367
2	3-1-2021	5-31-2021	1.2541	1.2309
3	6-1-2021	8-31-2021	1.0397	0.9775
4	9-1-2021	11-30-2021	1.2356	1.2118
5	12-1-2021	2-28-2022	1.1416	1.1590
6	3-1-2022	5-31-2022	0.6236	0.5233
		Highest	1.2541	1.2309

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	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
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	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>

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**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	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
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	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>

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

**3.0 Construction Detail**

**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Implementing Traffic Controls	Site Preparation	12/1/2020	12/7/2020	5	5	
2	Grubbing/LandClearing	Site Preparation	12/8/2020	12/21/2020	5	10	
3	Stage 1: Grading/Excavation/Removing Existing Bridge	Grading	12/22/2020	2/1/2021	5	30	
4	Stage 1: Bridge Construction	Building Construction	2/15/2021	7/15/2021	5	109	
5	Implementing Traffic Controls (Shifting Traffic)	Site Preparation	7/16/2021	7/21/2021	5	4	
6	Stage 2: Grading/Excavation/Removing Existing Bridge	Grading	7/22/2021	9/1/2021	5	30	
7	Stage 2: Bridge Construction	Building Construction	9/2/2021	3/12/2022	5	137	
8	Drainage/Utilities/Sub-Grade	Grading	3/13/2022	4/12/2022	5	22	
9	Paving	Paving	4/12/2022	5/2/2022	5	15	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 29.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Implementing Traffic Controls	Rubber Tired Dozers	0	8.00	247	0.40
Implementing Traffic Controls	Signal Boards	2	8.00	6	0.82
Implementing Traffic Controls	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grubbing/LandClearing	Crawler Tractors	1	8.00	212	0.43
Grubbing/LandClearing	Excavators	1	8.00	158	0.38
Grubbing/LandClearing	Off-Highway Trucks	1	8.00	402	0.38

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Grubbing/LandClearing	Rubber Tired Dozers	0	8.00	247	0.40
Grubbing/LandClearing	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Stage 1: Grading/Excavation/Removing Existing Bridge	Crawler Tractors	1	8.00	212	0.43
Stage 1: Grading/Excavation/Removing Existing Bridge	Excavators	2	8.00	158	0.38
Stage 1: Grading/Excavation/Removing Existing Bridge	Graders	0	8.00	187	0.41
Stage 1: Grading/Excavation/Removing Existing Bridge	Off-Highway Trucks	2	8.00	402	0.38
Stage 1: Grading/Excavation/Removing Existing Bridge	Other Construction Equipment	1	8.00	172	0.42
Stage 1: Grading/Excavation/Removing Existing Bridge	Rubber Tired Dozers	0	8.00	247	0.40
Stage 1: Grading/Excavation/Removing Existing Bridge	Scrapers	0	8.00	367	0.48
Stage 1: Grading/Excavation/Removing Existing Bridge	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Stage 1: Bridge Construction	Bore/Drill Rigs	1	8.00	221	0.50
Stage 1: Bridge Construction	Cranes	1	8.00	231	0.29
Stage 1: Bridge Construction	Excavators	1	8.00	158	0.38
Stage 1: Bridge Construction	Forklifts	0	8.00	89	0.20
Stage 1: Bridge Construction	Generator Sets	0	8.00	84	0.74
Stage 1: Bridge Construction	Pavers	1	8.00	130	0.42
Stage 1: Bridge Construction	Plate Compactors	1	8.00	8	0.43
Stage 1: Bridge Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Stage 1: Bridge Construction	Welders	0	8.00	46	0.45
Implementing Traffic Controls (Shifting Traffic)	Rubber Tired Dozers	0	8.00	247	0.40
Implementing Traffic Controls (Shifting Traffic)	Signal Boards	2	8.00	6	0.82
Implementing Traffic Controls (Shifting Traffic)	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Stage 2: Grading/Excavation/Removing Existing Bridge	Crawler Tractors	1	8.00	212	0.43
Stage 2: Grading/Excavation/Removing Existing Bridge	Excavators	2	8.00	158	0.38



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Stage 2: Grading/Excavation/Removing Existing Bridge	Graders	0	8.00	187	0.41
Stage 2: Grading/Excavation/Removing Existing Bridge	Off-Highway Trucks	2	8.00	402	0.38
Stage 2: Grading/Excavation/Removing Existing Bridge	Other Construction Equipment	1	8.00	172	0.42
Stage 2: Grading/Excavation/Removing Existing Bridge	Rubber Tired Dozers	0	8.00	247	0.40
Stage 2: Grading/Excavation/Removing Existing Bridge	Scrapers	0	8.00	367	0.48
Stage 2: Grading/Excavation/Removing Existing Bridge	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Stage 2: Bridge Construction	Bore/Drill Rigs	1	8.00	221	0.50
Stage 2: Bridge Construction	Cranes	1	8.00	231	0.29
Stage 2: Bridge Construction	Excavators	1	8.00	158	0.38
Stage 2: Bridge Construction	Forklifts	0	8.00	89	0.20
Stage 2: Bridge Construction	Generator Sets	0	8.00	84	0.74
Stage 2: Bridge Construction	Pavers	1	8.00	130	0.42
Stage 2: Bridge Construction	Plate Compactors	1	8.00	8	0.43
Stage 2: Bridge Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Stage 2: Bridge Construction	Welders	0	8.00	46	0.45
Drainage/Utilities/Sub-Grade	Crawler Tractors	2	8.00	212	0.43
Drainage/Utilities/Sub-Grade	Excavators	0	8.00	158	0.38
Drainage/Utilities/Sub-Grade	Graders	0	8.00	187	0.41
Drainage/Utilities/Sub-Grade	Rubber Tired Dozers	0	8.00	247	0.40
Drainage/Utilities/Sub-Grade	Scrapers	2	8.00	367	0.48
Drainage/Utilities/Sub-Grade	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Signal Boards	1	8.00	6	0.82
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

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**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
Implementing Traffic Controls	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grubbing/LandClearing	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Stage 1: Grading/Excavation/Pre-Construction	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Stage 1: Bridge Construction	5	543.00	212.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Implementing Traffic Controls (Shifting Traffic)	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Stage 2: Grading/Excavation/Pre-Construction	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Stage 2: Bridge Construction	5	543.00	212.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Drainage/Utilities/Sub-Grade	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

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**3.2 Implementing Traffic Controls - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	1.8000e-003	1.5100e-003	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.2237	0.2237	2.0000e-005	0.0000	0.2243
<b>Total</b>	<b>2.9000e-004</b>	<b>1.8000e-003</b>	<b>1.5100e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.2237</b>	<b>0.2237</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.2243</b>

**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	6.0000e-005	4.0000e-005	4.3000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1150	0.1150	0.0000	0.0000	0.1150
<b>Total</b>	<b>6.0000e-005</b>	<b>4.0000e-005</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1150</b>	<b>0.1150</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1150</b>

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**3.2 Implementing Traffic Controls - 2020**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	1.8000e-003	1.5100e-003	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.2237	0.2237	2.0000e-005	0.0000	0.2243
<b>Total</b>	<b>2.9000e-004</b>	<b>1.8000e-003</b>	<b>1.5100e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.2237</b>	<b>0.2237</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.2243</b>

**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	6.0000e-005	4.0000e-005	4.3000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1150	0.1150	0.0000	0.0000	0.1150
<b>Total</b>	<b>6.0000e-005</b>	<b>4.0000e-005</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1150</b>	<b>0.1150</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1150</b>

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**3.3 Grubbing/LandClearing - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3000e-003	0.0000	5.3000e-003	5.7000e-004	0.0000	5.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4300e-003	0.0809	0.0479	1.3000e-004		3.1400e-003	3.1400e-003		2.8900e-003	2.8900e-003	0.0000	11.5173	11.5173	3.7200e-003	0.0000	11.6104
<b>Total</b>	<b>7.4300e-003</b>	<b>0.0809</b>	<b>0.0479</b>	<b>1.3000e-004</b>	<b>5.3000e-003</b>	<b>3.1400e-003</b>	<b>8.4400e-003</b>	<b>5.7000e-004</b>	<b>2.8900e-003</b>	<b>3.4600e-003</b>	<b>0.0000</b>	<b>11.5173</b>	<b>11.5173</b>	<b>3.7200e-003</b>	<b>0.0000</b>	<b>11.6104</b>

**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	1.8000e-004	1.3000e-004	1.3800e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3678	0.3678	1.0000e-005	0.0000	0.3681
<b>Total</b>	<b>1.8000e-004</b>	<b>1.3000e-004</b>	<b>1.3800e-003</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3678</b>	<b>0.3678</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3681</b>

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**3.3 Grubbing/LandClearing - 2020**

**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					2.0700e-003	0.0000	2.0700e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2200e-003	0.0622	0.0755	1.3000e-004		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003	0.0000	11.5173	11.5173	3.7200e-003	0.0000	11.6104
<b>Total</b>	<b>3.2200e-003</b>	<b>0.0622</b>	<b>0.0755</b>	<b>1.3000e-004</b>	<b>2.0700e-003</b>	<b>2.4900e-003</b>	<b>4.5600e-003</b>	<b>2.2000e-004</b>	<b>2.4900e-003</b>	<b>2.7100e-003</b>	<b>0.0000</b>	<b>11.5173</b>	<b>11.5173</b>	<b>3.7200e-003</b>	<b>0.0000</b>	<b>11.6104</b>

**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	1.8000e-004	1.3000e-004	1.3800e-003	0.0000	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3678	0.3678	1.0000e-005	0.0000	0.3681
<b>Total</b>	<b>1.8000e-004</b>	<b>1.3000e-004</b>	<b>1.3800e-003</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>4.4000e-004</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>0.3678</b>	<b>0.3678</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3681</b>

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**3.4 Stage 1: Grading/Excavation/Removing Existing Bridge - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0159	0.0000	0.0159	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0116	0.1206	0.0831	2.0000e-004		5.0100e-003	5.0100e-003		4.6100e-003	4.6100e-003	0.0000	17.8413	17.8413	5.7700e-003	0.0000	17.9856
<b>Total</b>	<b>0.0116</b>	<b>0.1206</b>	<b>0.0831</b>	<b>2.0000e-004</b>	<b>0.0159</b>	<b>5.0100e-003</b>	<b>0.0209</b>	<b>1.7200e-003</b>	<b>4.6100e-003</b>	<b>6.3300e-003</b>	<b>0.0000</b>	<b>17.8413</b>	<b>17.8413</b>	<b>5.7700e-003</b>	<b>0.0000</b>	<b>17.9856</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.0600e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5518	0.5518	1.0000e-005	0.0000	0.5521
<b>Total</b>	<b>2.8000e-004</b>	<b>1.9000e-004</b>	<b>2.0600e-003</b>	<b>1.0000e-005</b>	<b>6.6000e-004</b>	<b>0.0000</b>	<b>6.6000e-004</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>0.5518</b>	<b>0.5518</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.5521</b>

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**3.4 Stage 1: Grading/Excavation/Removing Existing Bridge - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2000e-003	0.0000	6.2000e-003	6.7000e-004	0.0000	6.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9900e-003	0.0964	0.1230	2.0000e-004		3.9800e-003	3.9800e-003		3.9800e-003	3.9800e-003	0.0000	17.8413	17.8413	5.7700e-003	0.0000	17.9856
<b>Total</b>	<b>4.9900e-003</b>	<b>0.0964</b>	<b>0.1230</b>	<b>2.0000e-004</b>	<b>6.2000e-003</b>	<b>3.9800e-003</b>	<b>0.0102</b>	<b>6.7000e-004</b>	<b>3.9800e-003</b>	<b>4.6500e-003</b>	<b>0.0000</b>	<b>17.8413</b>	<b>17.8413</b>	<b>5.7700e-003</b>	<b>0.0000</b>	<b>17.9856</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.0600e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5518	0.5518	1.0000e-005	0.0000	0.5521
<b>Total</b>	<b>2.8000e-004</b>	<b>1.9000e-004</b>	<b>2.0600e-003</b>	<b>1.0000e-005</b>	<b>6.6000e-004</b>	<b>0.0000</b>	<b>6.6000e-004</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>0.5518</b>	<b>0.5518</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.5521</b>



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**3.4 Stage 1: Grading/Excavation/Removing Existing Bridge - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0159	0.0000	0.0159	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0291	0.2880	0.2227	5.6000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	49.0601	49.0601	0.0159	0.0000	49.4568
<b>Total</b>	<b>0.0291</b>	<b>0.2880</b>	<b>0.2227</b>	<b>5.6000e-004</b>	<b>0.0159</b>	<b>0.0120</b>	<b>0.0279</b>	<b>1.7200e-003</b>	<b>0.0110</b>	<b>0.0127</b>	<b>0.0000</b>	<b>49.0601</b>	<b>49.0601</b>	<b>0.0159</b>	<b>0.0000</b>	<b>49.4568</b>

**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	7.1000e-004	4.8000e-004	5.1900e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4666	1.4666	3.0000e-005	0.0000	1.4675
<b>Total</b>	<b>7.1000e-004</b>	<b>4.8000e-004</b>	<b>5.1900e-003</b>	<b>2.0000e-005</b>	<b>1.8100e-003</b>	<b>1.0000e-005</b>	<b>1.8200e-003</b>	<b>4.8000e-004</b>	<b>1.0000e-005</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.4666</b>	<b>1.4666</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.4675</b>

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**3.4 Stage 1: Grading/Excavation/Removing Existing Bridge - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2000e-003	0.0000	6.2000e-003	6.7000e-004	0.0000	6.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0137	0.2651	0.3381	5.6000e-004		0.0110	0.0110		0.0110	0.0110	0.0000	49.0600	49.0600	0.0159	0.0000	49.4567
<b>Total</b>	<b>0.0137</b>	<b>0.2651</b>	<b>0.3381</b>	<b>5.6000e-004</b>	<b>6.2000e-003</b>	<b>0.0110</b>	<b>0.0172</b>	<b>6.7000e-004</b>	<b>0.0110</b>	<b>0.0116</b>	<b>0.0000</b>	<b>49.0600</b>	<b>49.0600</b>	<b>0.0159</b>	<b>0.0000</b>	<b>49.4567</b>

**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	7.1000e-004	4.8000e-004	5.1900e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4666	1.4666	3.0000e-005	0.0000	1.4675
<b>Total</b>	<b>7.1000e-004</b>	<b>4.8000e-004</b>	<b>5.1900e-003</b>	<b>2.0000e-005</b>	<b>1.8100e-003</b>	<b>1.0000e-005</b>	<b>1.8200e-003</b>	<b>4.8000e-004</b>	<b>1.0000e-005</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.4666</b>	<b>1.4666</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.4675</b>

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**3.5 Stage 1: Bridge Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0647	0.7015	0.5692	1.3900e-003		0.0288	0.0288		0.0265	0.0265	0.0000	121.6526	121.6526	0.0390	0.0000	122.6269
<b>Total</b>	<b>0.0647</b>	<b>0.7015</b>	<b>0.5692</b>	<b>1.3900e-003</b>		<b>0.0288</b>	<b>0.0288</b>		<b>0.0265</b>	<b>0.0265</b>	<b>0.0000</b>	<b>121.6526</b>	<b>121.6526</b>	<b>0.0390</b>	<b>0.0000</b>	<b>122.6269</b>

**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	0.0276	1.0773	0.2073	2.9500e-003	0.0730	2.0600e-003	0.0750	0.0211	1.9700e-003	0.0230	0.0000	281.8866	281.8866	0.0215	0.0000	282.4242
Worker	0.1269	0.0855	0.9316	2.9100e-003	0.3253	1.9500e-003	0.3272	0.0864	1.7900e-003	0.0882	0.0000	263.0408	263.0408	6.1300e-003	0.0000	263.1939
<b>Total</b>	<b>0.1545</b>	<b>1.1628</b>	<b>1.1389</b>	<b>5.8600e-003</b>	<b>0.3982</b>	<b>4.0100e-003</b>	<b>0.4023</b>	<b>0.1074</b>	<b>3.7600e-003</b>	<b>0.1112</b>	<b>0.0000</b>	<b>544.9274</b>	<b>544.9274</b>	<b>0.0276</b>	<b>0.0000</b>	<b>545.6182</b>

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**3.5 Stage 1: Bridge Construction - 2021**

**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	0.0430	0.6848	0.8269	1.3900e-003		0.0288	0.0288		0.0283	0.0283	0.0000	121.6525	121.6525	0.0390	0.0000	122.6268
<b>Total</b>	<b>0.0430</b>	<b>0.6848</b>	<b>0.8269</b>	<b>1.3900e-003</b>		<b>0.0288</b>	<b>0.0288</b>		<b>0.0283</b>	<b>0.0283</b>	<b>0.0000</b>	<b>121.6525</b>	<b>121.6525</b>	<b>0.0390</b>	<b>0.0000</b>	<b>122.6268</b>

**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	0.0276	1.0773	0.2073	2.9500e-003	0.0730	2.0600e-003	0.0750	0.0211	1.9700e-003	0.0230	0.0000	281.8866	281.8866	0.0215	0.0000	282.4242
Worker	0.1269	0.0855	0.9316	2.9100e-003	0.3253	1.9500e-003	0.3272	0.0864	1.7900e-003	0.0882	0.0000	263.0408	263.0408	6.1300e-003	0.0000	263.1939
<b>Total</b>	<b>0.1545</b>	<b>1.1628</b>	<b>1.1389</b>	<b>5.8600e-003</b>	<b>0.3982</b>	<b>4.0100e-003</b>	<b>0.4023</b>	<b>0.1074</b>	<b>3.7600e-003</b>	<b>0.1112</b>	<b>0.0000</b>	<b>544.9274</b>	<b>544.9274</b>	<b>0.0276</b>	<b>0.0000</b>	<b>545.6182</b>

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**3.6 Implementing Traffic Controls (Shifting Traffic) - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3000e-004	1.4400e-003	1.2000e-003	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.1790	0.1790	2.0000e-005	0.0000	0.1794
<b>Total</b>	<b>2.3000e-004</b>	<b>1.4400e-003</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.1790</b>	<b>0.1790</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.1794</b>

**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	3.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0889	0.0889	0.0000	0.0000	0.0889
<b>Total</b>	<b>4.0000e-005</b>	<b>3.0000e-005</b>	<b>3.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0889</b>	<b>0.0889</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0889</b>

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**3.6 Implementing Traffic Controls (Shifting Traffic) - 2021**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3000e-004	1.4400e-003	1.2000e-003	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.1790	0.1790	2.0000e-005	0.0000	0.1794
<b>Total</b>	<b>2.3000e-004</b>	<b>1.4400e-003</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.1790</b>	<b>0.1790</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.1794</b>

**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	3.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0889	0.0889	0.0000	0.0000	0.0889
<b>Total</b>	<b>4.0000e-005</b>	<b>3.0000e-005</b>	<b>3.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0889</b>	<b>0.0889</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0889</b>

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**3.7 Stage 2: Grading/Excavation/Removing Existing Bridge - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0159	0.0000	0.0159	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0396	0.3927	0.3036	7.6000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	66.9001	66.9001	0.0216	0.0000	67.4410
<b>Total</b>	<b>0.0396</b>	<b>0.3927</b>	<b>0.3036</b>	<b>7.6000e-004</b>	<b>0.0159</b>	<b>0.0163</b>	<b>0.0322</b>	<b>1.7200e-003</b>	<b>0.0150</b>	<b>0.0167</b>	<b>0.0000</b>	<b>66.9001</b>	<b>66.9001</b>	<b>0.0216</b>	<b>0.0000</b>	<b>67.4410</b>

**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	9.6000e-004	6.5000e-004	7.0800e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9999	1.9999	5.0000e-005	0.0000	2.0011
<b>Total</b>	<b>9.6000e-004</b>	<b>6.5000e-004</b>	<b>7.0800e-003</b>	<b>2.0000e-005</b>	<b>2.4700e-003</b>	<b>1.0000e-005</b>	<b>2.4900e-003</b>	<b>6.6000e-004</b>	<b>1.0000e-005</b>	<b>6.7000e-004</b>	<b>0.0000</b>	<b>1.9999</b>	<b>1.9999</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>2.0011</b>

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**3.7 Stage 2: Grading/Excavation/Removing Existing Bridge - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2000e-003	0.0000	6.2000e-003	6.7000e-004	0.0000	6.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0187	0.3615	0.4611	7.6000e-004		0.0149	0.0149		0.0149	0.0149	0.0000	66.9000	66.9000	0.0216	0.0000	67.4410
<b>Total</b>	<b>0.0187</b>	<b>0.3615</b>	<b>0.4611</b>	<b>7.6000e-004</b>	<b>6.2000e-003</b>	<b>0.0149</b>	<b>0.0211</b>	<b>6.7000e-004</b>	<b>0.0149</b>	<b>0.0156</b>	<b>0.0000</b>	<b>66.9000</b>	<b>66.9000</b>	<b>0.0216</b>	<b>0.0000</b>	<b>67.4410</b>

**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	9.6000e-004	6.5000e-004	7.0800e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9999	1.9999	5.0000e-005	0.0000	2.0011
<b>Total</b>	<b>9.6000e-004</b>	<b>6.5000e-004</b>	<b>7.0800e-003</b>	<b>2.0000e-005</b>	<b>2.4700e-003</b>	<b>1.0000e-005</b>	<b>2.4900e-003</b>	<b>6.6000e-004</b>	<b>1.0000e-005</b>	<b>6.7000e-004</b>	<b>0.0000</b>	<b>1.9999</b>	<b>1.9999</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>2.0011</b>



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**3.8 Stage 2: Bridge Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0516	0.5599	0.4543	1.1100e-003		0.0230	0.0230		0.0212	0.0212	0.0000	97.0989	97.0989	0.0311	0.0000	97.8765
<b>Total</b>	<b>0.0516</b>	<b>0.5599</b>	<b>0.4543</b>	<b>1.1100e-003</b>		<b>0.0230</b>	<b>0.0230</b>		<b>0.0212</b>	<b>0.0212</b>	<b>0.0000</b>	<b>97.0989</b>	<b>97.0989</b>	<b>0.0311</b>	<b>0.0000</b>	<b>97.8765</b>

**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	0.0220	0.8599	0.1654	2.3500e-003	0.0582	1.6400e-003	0.0599	0.0168	1.5700e-003	0.0184	0.0000	224.9921	224.9921	0.0172	0.0000	225.4212
Worker	0.1013	0.0682	0.7436	2.3200e-003	0.2596	1.5600e-003	0.2612	0.0689	1.4300e-003	0.0704	0.0000	209.9500	209.9500	4.8900e-003	0.0000	210.0722
<b>Total</b>	<b>0.1233</b>	<b>0.9281</b>	<b>0.9090</b>	<b>4.6700e-003</b>	<b>0.3179</b>	<b>3.2000e-003</b>	<b>0.3211</b>	<b>0.0857</b>	<b>3.0000e-003</b>	<b>0.0888</b>	<b>0.0000</b>	<b>434.9420</b>	<b>434.9420</b>	<b>0.0221</b>	<b>0.0000</b>	<b>435.4934</b>

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**3.8 Stage 2: Bridge Construction - 2021**

**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	0.0343	0.5466	0.6600	1.1100e-003		0.0230	0.0230		0.0226	0.0226	0.0000	97.0988	97.0988	0.0311	0.0000	97.8764
<b>Total</b>	<b>0.0343</b>	<b>0.5466</b>	<b>0.6600</b>	<b>1.1100e-003</b>		<b>0.0230</b>	<b>0.0230</b>		<b>0.0226</b>	<b>0.0226</b>	<b>0.0000</b>	<b>97.0988</b>	<b>97.0988</b>	<b>0.0311</b>	<b>0.0000</b>	<b>97.8764</b>

**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	0.0220	0.8599	0.1654	2.3500e-003	0.0582	1.6400e-003	0.0599	0.0168	1.5700e-003	0.0184	0.0000	224.9921	224.9921	0.0172	0.0000	225.4212
Worker	0.1013	0.0682	0.7436	2.3200e-003	0.2596	1.5600e-003	0.2612	0.0689	1.4300e-003	0.0704	0.0000	209.9500	209.9500	4.8900e-003	0.0000	210.0722
<b>Total</b>	<b>0.1233</b>	<b>0.9281</b>	<b>0.9090</b>	<b>4.6700e-003</b>	<b>0.3179</b>	<b>3.2000e-003</b>	<b>0.3211</b>	<b>0.0857</b>	<b>3.0000e-003</b>	<b>0.0888</b>	<b>0.0000</b>	<b>434.9420</b>	<b>434.9420</b>	<b>0.0221</b>	<b>0.0000</b>	<b>435.4934</b>

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**3.8 Stage 2: Bridge 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	0.0262	0.2645	0.2571	6.4000e-004		0.0111	0.0111		0.0102	0.0102	0.0000	55.8405	55.8405	0.0179	0.0000	56.2877
<b>Total</b>	<b>0.0262</b>	<b>0.2645</b>	<b>0.2571</b>	<b>6.4000e-004</b>		<b>0.0111</b>	<b>0.0111</b>		<b>0.0102</b>	<b>0.0102</b>	<b>0.0000</b>	<b>55.8405</b>	<b>55.8405</b>	<b>0.0179</b>	<b>0.0000</b>	<b>56.2877</b>

**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	0.0118	0.4656	0.0886	1.3400e-003	0.0335	7.9000e-004	0.0343	9.6600e-003	7.6000e-004	0.0104	0.0000	128.1935	128.1935	9.3500e-003	0.0000	128.4271
Worker	0.0545	0.0353	0.3937	1.2900e-003	0.1492	8.7000e-004	0.1501	0.0396	8.0000e-004	0.0404	0.0000	116.2578	116.2578	2.5300e-003	0.0000	116.3210
<b>Total</b>	<b>0.0663</b>	<b>0.5009</b>	<b>0.4822</b>	<b>2.6300e-003</b>	<b>0.1827</b>	<b>1.6600e-003</b>	<b>0.1844</b>	<b>0.0493</b>	<b>1.5600e-003</b>	<b>0.0508</b>	<b>0.0000</b>	<b>244.4513</b>	<b>244.4513</b>	<b>0.0119</b>	<b>0.0000</b>	<b>244.7481</b>

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**3.8 Stage 2: Bridge 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	0.0187	0.3017	0.3788	6.4000e-004		0.0126	0.0126		0.0124	0.0124	0.0000	55.8404	55.8404	0.0179	0.0000	56.2876
<b>Total</b>	<b>0.0187</b>	<b>0.3017</b>	<b>0.3788</b>	<b>6.4000e-004</b>		<b>0.0126</b>	<b>0.0126</b>		<b>0.0124</b>	<b>0.0124</b>	<b>0.0000</b>	<b>55.8404</b>	<b>55.8404</b>	<b>0.0179</b>	<b>0.0000</b>	<b>56.2876</b>

**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	0.0118	0.4656	0.0886	1.3400e-003	0.0335	7.9000e-004	0.0343	9.6600e-003	7.6000e-004	0.0104	0.0000	128.1935	128.1935	9.3500e-003	0.0000	128.4271
Worker	0.0545	0.0353	0.3937	1.2900e-003	0.1492	8.7000e-004	0.1501	0.0396	8.0000e-004	0.0404	0.0000	116.2578	116.2578	2.5300e-003	0.0000	116.3210
<b>Total</b>	<b>0.0663</b>	<b>0.5009</b>	<b>0.4822</b>	<b>2.6300e-003</b>	<b>0.1827</b>	<b>1.6600e-003</b>	<b>0.1844</b>	<b>0.0493</b>	<b>1.5600e-003</b>	<b>0.0508</b>	<b>0.0000</b>	<b>244.4513</b>	<b>244.4513</b>	<b>0.0119</b>	<b>0.0000</b>	<b>244.7481</b>

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**3.9 Drainage/Utilities/Sub-Grade - 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					0.0233	0.0000	0.0233	2.5200e-003	0.0000	2.5200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0289	0.3289	0.1912	5.1000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	44.4930	44.4930	0.0144	0.0000	44.8528
<b>Total</b>	<b>0.0289</b>	<b>0.3289</b>	<b>0.1912</b>	<b>5.1000e-004</b>	<b>0.0233</b>	<b>0.0127</b>	<b>0.0360</b>	<b>2.5200e-003</b>	<b>0.0117</b>	<b>0.0142</b>	<b>0.0000</b>	<b>44.4930</b>	<b>44.4930</b>	<b>0.0144</b>	<b>0.0000</b>	<b>44.8528</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.1900e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9421	0.9421	2.0000e-005	0.0000	0.9426
<b>Total</b>	<b>4.4000e-004</b>	<b>2.9000e-004</b>	<b>3.1900e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>1.0000e-005</b>	<b>1.2200e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.9421</b>	<b>0.9421</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.9426</b>

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**3.9 Drainage/Utilities/Sub-Grade - 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					9.1000e-003	0.0000	9.1000e-003	9.8000e-004	0.0000	9.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0125	0.2406	0.2697	5.1000e-004		9.1300e-003	9.1300e-003		9.1300e-003	9.1300e-003	0.0000	44.4930	44.4930	0.0144	0.0000	44.8527
<b>Total</b>	<b>0.0125</b>	<b>0.2406</b>	<b>0.2697</b>	<b>5.1000e-004</b>	<b>9.1000e-003</b>	<b>9.1300e-003</b>	<b>0.0182</b>	<b>9.8000e-004</b>	<b>9.1300e-003</b>	<b>0.0101</b>	<b>0.0000</b>	<b>44.4930</b>	<b>44.4930</b>	<b>0.0144</b>	<b>0.0000</b>	<b>44.8527</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.1900e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9421	0.9421	2.0000e-005	0.0000	0.9426
<b>Total</b>	<b>4.4000e-004</b>	<b>2.9000e-004</b>	<b>3.1900e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>1.0000e-005</b>	<b>1.2200e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.9421</b>	<b>0.9421</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.9426</b>

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**3.10 Paving - 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	7.0400e-003	0.0696	0.0905	1.4000e-004		3.5900e-003	3.5900e-003		3.3100e-003	3.3100e-003	0.0000	11.9451	11.9451	3.7900e-003	0.0000	12.0398
Paving	0.0389					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0460</b>	<b>0.0696</b>	<b>0.0905</b>	<b>1.4000e-004</b>		<b>3.5900e-003</b>	<b>3.5900e-003</b>		<b>3.3100e-003</b>	<b>3.3100e-003</b>	<b>0.0000</b>	<b>11.9451</b>	<b>11.9451</b>	<b>3.7900e-003</b>	<b>0.0000</b>	<b>12.0398</b>

**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	4.5000e-004	2.9000e-004	3.2600e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9635	0.9635	2.0000e-005	0.0000	0.9640
<b>Total</b>	<b>4.5000e-004</b>	<b>2.9000e-004</b>	<b>3.2600e-003</b>	<b>1.0000e-005</b>	<b>1.2400e-003</b>	<b>1.0000e-005</b>	<b>1.2400e-003</b>	<b>3.3000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.9635</b>	<b>0.9635</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.9640</b>

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**3.10 Paving - 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	7.0400e-003	0.0696	0.0905	1.4000e-004		3.5900e-003	3.5900e-003		3.3100e-003	3.3100e-003	0.0000	11.9450	11.9450	3.7900e-003	0.0000	12.0398
Paving	0.0389					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0460</b>	<b>0.0696</b>	<b>0.0905</b>	<b>1.4000e-004</b>		<b>3.5900e-003</b>	<b>3.5900e-003</b>		<b>3.3100e-003</b>	<b>3.3100e-003</b>	<b>0.0000</b>	<b>11.9450</b>	<b>11.9450</b>	<b>3.7900e-003</b>	<b>0.0000</b>	<b>12.0398</b>

**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	4.5000e-004	2.9000e-004	3.2600e-003	1.0000e-005	1.2400e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9635	0.9635	2.0000e-005	0.0000	0.9640
<b>Total</b>	<b>4.5000e-004</b>	<b>2.9000e-004</b>	<b>3.2600e-003</b>	<b>1.0000e-005</b>	<b>1.2400e-003</b>	<b>1.0000e-005</b>	<b>1.2400e-003</b>	<b>3.3000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.9635</b>	<b>0.9635</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.9640</b>

**4.0 Operational Detail - Mobile**

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Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	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
Other Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965





Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
Unmitigated	0.1017	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**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	0.0180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.4000e-004	7.4000e-004	0.0000	0.0000	7.9000e-004
<b>Total</b>	<b>0.1017</b>	<b>0.0000</b>	<b>3.8000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.9000e-004</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000



Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Perris Valley Storm Drain (Construction - Mitigated) - Riverside-South Coast County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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## **APPENDIX 3.3:**

### **CALEEMOD RIDER 2 AND 4 WAREHOUSE CONSTRUCTION ANNUAL EMISSIONS MODEL OUTPUTS**

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

**IDI Rider 2 & 4 (Construction - Mitigated)**  
**Riverside-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,373.45	1000sqft	31.53	1,373,449.00	0
Other Asphalt Surfaces	874.22	1000sqft	20.07	874,218.00	0
Other Non-Asphalt Surfaces	368.62	1000sqft	8.46	368,616.00	0
Parking Lot	514.00	Space	4.72	205,600.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Total Project Area is 64.8 ac.

Construction Phase - Construction schedule adjusted per information provided by the Project applicant.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment -

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Grading - For purposes of analysis, total acres graded per day is based on the equipment specific grading rates (CalEEMod Appendix A) and the equipment list.

Architectural Coating - 10 g/L Voc Paint

Vehicle Trips - Construction Run Only.

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Area Coating -

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation - MM Air 3 and MM Air 6

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	100.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	40.00	20.00
tblConstructionPhase	NumDays	110.00	40.00
tblConstructionPhase	NumDays	1,110.00	155.00
tblConstructionPhase	NumDays	75.00	65.00

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblConstructionPhase	NumDays	75.00	40.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	2.00	0.00
tblGrading	AcresOfGrading	140.00	160.00
tblGrading	AcresOfGrading	40.00	70.00
tblLandUse	LandUseSquareFeet	1,373,450.00	1,373,449.00
tblLandUse	LotAcreage	4.63	4.72
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	1,291.04	0.00
tblVehicleEF	HHD	1.43	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	2.1311e-007
tblVehicleEF	HHD	3.28	5.70
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.46	5.1287e-003
tblVehicleEF	HHD	6,485.38	1,098.23
tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04



IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	26.41	5.91
tblVehicleEF	HHD	2.69	3.40
tblVehicleEF	HHD	0.01	8.1205e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.01	7.7692e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8102e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	8.4000e-005	3.9431e-006
tblVehicleEF	HHD	2.5800e-003	1.4075e-004
tblVehicleEF	HHD	0.85	0.44
tblVehicleEF	HHD	4.8000e-005	2.4154e-006
tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8000e-004	7.3333e-004
tblVehicleEF	HHD	0.05	1.0921e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	4.3455e-007
tblVehicleEF	HHD	8.4000e-005	3.9431e-006
tblVehicleEF	HHD	2.5800e-003	1.4075e-004
tblVehicleEF	HHD	0.97	0.51
tblVehicleEF	HHD	4.8000e-005	2.4154e-006
tblVehicleEF	HHD	0.11	0.12

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tblVehicleEF	HHD	1.8000e-004	7.3333e-004
tblVehicleEF	HHD	0.05	1.1957e-006
tblVehicleEF	HHD	1.35	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	2.0331e-007
tblVehicleEF	HHD	2.39	5.56
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.39	4.8401e-003
tblVehicleEF	HHD	6,867.98	1,095.85
tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	27.25	5.75
tblVehicleEF	HHD	2.54	3.21
tblVehicleEF	HHD	0.01	7.5760e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.01	7.2482e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8102e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	1.6300e-004	7.4470e-006
tblVehicleEF	HHD	2.9560e-003	1.5586e-004
tblVehicleEF	HHD	0.80	0.46
tblVehicleEF	HHD	9.2000e-005	5.0918e-006

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8400e-004	7.4800e-004
tblVehicleEF	HHD	0.04	1.0449e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	4.3003e-007
tblVehicleEF	HHD	1.6300e-004	7.4470e-006
tblVehicleEF	HHD	2.9560e-003	1.5586e-004
tblVehicleEF	HHD	0.92	0.53
tblVehicleEF	HHD	9.2000e-005	5.0918e-006
tblVehicleEF	HHD	0.11	0.12
tblVehicleEF	HHD	1.8400e-004	7.4800e-004
tblVehicleEF	HHD	0.05	1.1441e-006
tblVehicleEF	HHD	1.54	0.02
tblVehicleEF	HHD	0.03	3.9264e-003
tblVehicleEF	HHD	0.10	2.1145e-007
tblVehicleEF	HHD	4.51	5.86
tblVehicleEF	HHD	0.45	0.36
tblVehicleEF	HHD	1.47	5.0740e-003
tblVehicleEF	HHD	5,957.03	1,095.99
tblVehicleEF	HHD	1,461.92	1,363.80
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	25.25	6.10
tblVehicleEF	HHD	2.67	3.34
tblVehicleEF	HHD	0.02	8.8013e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04

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tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.02	8.4206e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.7660e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	6.7000e-005	4.1581e-006
tblVehicleEF	HHD	2.7490e-003	1.5944e-004
tblVehicleEF	HHD	0.91	0.42
tblVehicleEF	HHD	4.1000e-005	2.6509e-006
tblVehicleEF	HHD	0.07	0.08
tblVehicleEF	HHD	1.9200e-004	7.7684e-004
tblVehicleEF	HHD	0.05	1.0839e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	4.3370e-007
tblVehicleEF	HHD	6.7000e-005	4.1581e-006
tblVehicleEF	HHD	2.7490e-003	1.5944e-004
tblVehicleEF	HHD	1.05	0.48
tblVehicleEF	HHD	4.1000e-005	2.6509e-006
tblVehicleEF	HHD	0.11	0.10
tblVehicleEF	HHD	1.9200e-004	7.7684e-004
tblVehicleEF	HHD	0.05	1.1867e-006
tblVehicleEF	LDA	4.0430e-003	2.4275e-003
tblVehicleEF	LDA	5.4670e-003	0.05
tblVehicleEF	LDA	0.58	0.65

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tblVehicleEF	LDA	1.16	2.15
tblVehicleEF	LDA	255.91	264.02
tblVehicleEF	LDA	58.81	54.78
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	9.3165e-003
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	2.5630e-003	2.6119e-003
tblVehicleEF	LDA	6.0800e-004	5.4212e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.08	0.25
tblVehicleEF	LDA	4.5900e-003	2.7357e-003

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tblVehicleEF	LDA	4.7470e-003	0.05
tblVehicleEF	LDA	0.71	0.77
tblVehicleEF	LDA	1.02	1.80
tblVehicleEF	LDA	278.73	285.50
tblVehicleEF	LDA	58.81	54.12
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.12	0.11
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	2.7930e-003	2.8244e-003
tblVehicleEF	LDA	6.0500e-004	5.3561e-004
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.12	0.11
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.20

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.07	0.22
tblVehicleEF	LDA	3.8980e-003	2.3855e-003
tblVehicleEF	LDA	5.6140e-003	0.05
tblVehicleEF	LDA	0.54	0.62
tblVehicleEF	LDA	1.19	2.13
tblVehicleEF	LDA	249.57	260.40
tblVehicleEF	LDA	58.81	54.76
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	9.8140e-003	9.1467e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.23
tblVehicleEF	LDA	2.4990e-003	2.5760e-003
tblVehicleEF	LDA	6.0800e-004	5.4186e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.25
tblVehicleEF	LDT1	0.01	7.6986e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.46	1.55
tblVehicleEF	LDT1	3.40	2.46
tblVehicleEF	LDT1	315.98	313.01
tblVehicleEF	LDT1	72.28	66.81
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.21	0.19
tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.24	0.46
tblVehicleEF	LDT1	3.1780e-003	3.0974e-003
tblVehicleEF	LDT1	7.8300e-004	6.6113e-004
tblVehicleEF	LDT1	0.21	0.19



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tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.26	0.50
tblVehicleEF	LDT1	0.01	8.5808e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.76	1.83
tblVehicleEF	LDT1	2.99	2.05
tblVehicleEF	LDT1	343.19	335.41
tblVehicleEF	LDT1	72.28	65.94
tblVehicleEF	LDT1	0.13	0.13
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.41	0.36
tblVehicleEF	LDT1	0.43	0.32
tblVehicleEF	LDT1	0.27	0.26
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.20	0.85
tblVehicleEF	LDT1	0.21	0.39
tblVehicleEF	LDT1	3.4550e-003	3.3191e-003

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tblVehicleEF	LDT1	7.7500e-004	6.5255e-004
tblVehicleEF	LDT1	0.41	0.36
tblVehicleEF	LDT1	0.43	0.32
tblVehicleEF	LDT1	0.27	0.26
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.20	0.85
tblVehicleEF	LDT1	0.23	0.43
tblVehicleEF	LDT1	0.01	7.5727e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.37	1.50
tblVehicleEF	LDT1	3.46	2.44
tblVehicleEF	LDT1	307.88	309.22
tblVehicleEF	LDT1	72.28	66.78
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.23	1.01

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tblVehicleEF	LDT1	0.25	0.46
tblVehicleEF	LDT1	3.0960e-003	3.0600e-003
tblVehicleEF	LDT1	7.8400e-004	6.6081e-004
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.23	1.02
tblVehicleEF	LDT1	0.27	0.50
tblVehicleEF	LDT2	5.6080e-003	4.0030e-003
tblVehicleEF	LDT2	7.2840e-003	0.07
tblVehicleEF	LDT2	0.76	0.93
tblVehicleEF	LDT2	1.53	2.77
tblVehicleEF	LDT2	355.02	334.40
tblVehicleEF	LDT2	81.24	71.60
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.06	0.08

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tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	3.5560e-003	3.3085e-003
tblVehicleEF	LDT2	8.3800e-004	7.0852e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	6.3630e-003	4.4905e-003
tblVehicleEF	LDT2	6.3270e-003	0.06
tblVehicleEF	LDT2	0.93	1.11
tblVehicleEF	LDT2	1.35	2.31
tblVehicleEF	LDT2	386.34	356.10
tblVehicleEF	LDT2	81.24	70.71
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.14	0.17

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tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.09	0.29
tblVehicleEF	LDT2	3.8710e-003	3.5232e-003
tblVehicleEF	LDT2	8.3500e-004	6.9977e-004
tblVehicleEF	LDT2	0.14	0.17
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.09	0.32
tblVehicleEF	LDT2	5.3900e-003	3.9361e-003
tblVehicleEF	LDT2	7.4940e-003	0.07
tblVehicleEF	LDT2	0.71	0.90
tblVehicleEF	LDT2	1.57	2.75
tblVehicleEF	LDT2	345.65	330.74
tblVehicleEF	LDT2	81.24	71.57
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003

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tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	3.4620e-003	3.2722e-003
tblVehicleEF	LDT2	8.3900e-004	7.0821e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LHD1	5.4460e-003	4.7711e-003
tblVehicleEF	LHD1	0.01	5.3525e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.96	0.72
tblVehicleEF	LHD1	2.41	0.95
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.36
tblVehicleEF	LHD1	30.36	10.31
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.21	1.68
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004

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tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	3.8710e-003	2.6459e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9010e-003	1.3629e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.48
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
tblVehicleEF	LHD1	5.9620e-003	6.1767e-003
tblVehicleEF	LHD1	3.4900e-004	1.0205e-004
tblVehicleEF	LHD1	3.8710e-003	2.6459e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9010e-003	1.3629e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.48
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	5.4460e-003	4.7847e-003

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.01	5.4445e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.97	0.74
tblVehicleEF	LHD1	2.29	0.90
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.38
tblVehicleEF	LHD1	30.36	10.22
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.08	1.58
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	7.2450e-003	4.7126e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6380e-003	2.6331e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.32	0.48
tblVehicleEF	LHD1	0.25	0.07



## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
tblVehicleEF	LHD1	5.9620e-003	6.1769e-003
tblVehicleEF	LHD1	3.4700e-004	1.0116e-004
tblVehicleEF	LHD1	7.2450e-003	4.7126e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6380e-003	2.6331e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.32	0.48
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.4460e-003	4.7735e-003
tblVehicleEF	LHD1	0.01	5.3625e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.96	0.73
tblVehicleEF	LHD1	2.41	0.94
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.36
tblVehicleEF	LHD1	30.36	10.30
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.18	1.65
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	3.4570e-003	2.8041e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7350e-003	1.4343e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.52
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
tblVehicleEF	LHD1	5.9620e-003	6.1767e-003
tblVehicleEF	LHD1	3.4900e-004	1.0189e-004
tblVehicleEF	LHD1	3.4570e-003	2.8041e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7350e-003	1.4343e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.33	0.52
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD2	3.6660e-003	2.9071e-003
tblVehicleEF	LHD2	4.5290e-003	3.7987e-003
tblVehicleEF	LHD2	8.3110e-003	8.1462e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.15	0.51

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.61
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.71	1.83
tblVehicleEF	LHD2	1.3360e-003	1.5018e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0545e-004
tblVehicleEF	LHD2	1.2780e-003	1.4369e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.6959e-005
tblVehicleEF	LHD2	1.4980e-003	1.2263e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.7800e-004	6.4826e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4445e-004
tblVehicleEF	LHD2	5.8740e-003	6.0523e-003
tblVehicleEF	LHD2	2.5700e-004	6.5406e-005
tblVehicleEF	LHD2	1.4980e-003	1.2263e-003
tblVehicleEF	LHD2	0.04	0.04

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.7800e-004	6.4826e-004
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	LHD2	3.6660e-003	2.9149e-003
tblVehicleEF	LHD2	4.5800e-003	3.8275e-003
tblVehicleEF	LHD2	8.0210e-003	7.8341e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.51	0.52
tblVehicleEF	LHD2	1.10	0.48
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.56
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.62	1.73
tblVehicleEF	LHD2	1.3360e-003	1.5018e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0545e-004
tblVehicleEF	LHD2	1.2780e-003	1.4369e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.6959e-005
tblVehicleEF	LHD2	2.8320e-003	2.1864e-003

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.4720e-003	1.2508e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4445e-004
tblVehicleEF	LHD2	5.8740e-003	6.0524e-003
tblVehicleEF	LHD2	2.5600e-004	6.4938e-005
tblVehicleEF	LHD2	2.8320e-003	2.1864e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4720e-003	1.2508e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	LHD2	3.6660e-003	2.9085e-003
tblVehicleEF	LHD2	4.5170e-003	3.8023e-003
tblVehicleEF	LHD2	8.3600e-003	8.0900e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.16	0.50
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.60
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.70	1.81

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	1.3360e-003	1.5018e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0545e-004
tblVehicleEF	LHD2	1.2780e-003	1.4369e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.6959e-005
tblVehicleEF	LHD2	1.1910e-003	1.2710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7445e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.24
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4445e-004
tblVehicleEF	LHD2	5.8740e-003	6.0523e-003
tblVehicleEF	LHD2	2.5700e-004	6.5323e-005
tblVehicleEF	LHD2	1.1910e-003	1.2710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7445e-004
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.24
tblVehicleEF	LHD2	0.12	0.04

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	0.42	0.32
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.52	19.50
tblVehicleEF	MCY	9.67	8.60
tblVehicleEF	MCY	165.74	207.81
tblVehicleEF	MCY	46.23	60.96
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	1.69	1.42
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.15	2.15
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.0380e-003	2.0565e-003
tblVehicleEF	MCY	6.8100e-004	6.0328e-004
tblVehicleEF	MCY	1.69	1.42
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.65	2.64

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.26	2.01
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.14	0.22
tblVehicleEF	MCY	20.23	19.46
tblVehicleEF	MCY	9.11	7.90
tblVehicleEF	MCY	165.74	207.59
tblVehicleEF	MCY	46.23	59.07
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	3.35	2.73
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.13	2.10
tblVehicleEF	MCY	0.57	1.84
tblVehicleEF	MCY	1.86	1.62
tblVehicleEF	MCY	2.0490e-003	2.0543e-003
tblVehicleEF	MCY	6.6500e-004	5.8457e-004
tblVehicleEF	MCY	3.35	2.73
tblVehicleEF	MCY	1.24	1.09



## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.62	2.59
tblVehicleEF	MCY	0.57	1.84
tblVehicleEF	MCY	2.02	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.04	18.91
tblVehicleEF	MCY	9.62	8.38
tblVehicleEF	MCY	165.74	206.80
tblVehicleEF	MCY	46.23	60.47
tblVehicleEF	MCY	1.12	1.10
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	1.60	1.63
tblVehicleEF	MCY	1.05	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.15	2.13
tblVehicleEF	MCY	0.65	2.13
tblVehicleEF	MCY	2.08	1.81
tblVehicleEF	MCY	2.0310e-003	2.0465e-003
tblVehicleEF	MCY	6.8100e-004	5.9842e-004

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tblVehicleEF	MCY	1.60	1.63
tblVehicleEF	MCY	1.05	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.64	2.62
tblVehicleEF	MCY	0.65	2.13
tblVehicleEF	MCY	2.27	1.97
tblVehicleEF	MDV	0.01	5.5311e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.42	1.15
tblVehicleEF	MDV	3.18	3.31
tblVehicleEF	MDV	488.89	418.28
tblVehicleEF	MDV	110.15	88.92
tblVehicleEF	MDV	0.17	0.12
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.25	0.45

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	4.9000e-003	4.1357e-003
tblVehicleEF	MDV	1.1570e-003	8.7994e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.27	0.50
tblVehicleEF	MDV	0.01	6.1666e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.73	1.36
tblVehicleEF	MDV	2.81	2.77
tblVehicleEF	MDV	530.71	441.48
tblVehicleEF	MDV	110.15	87.84
tblVehicleEF	MDV	0.16	0.11
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.22	0.20
tblVehicleEF	MDV	0.23	0.18
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.04	0.03

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	5.3230e-003	4.3652e-003
tblVehicleEF	MDV	1.1510e-003	8.6926e-004
tblVehicleEF	MDV	0.22	0.20
tblVehicleEF	MDV	0.23	0.18
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.23	0.42
tblVehicleEF	MDV	0.01	5.4334e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.33	1.11
tblVehicleEF	MDV	3.24	3.29
tblVehicleEF	MDV	476.42	414.36
tblVehicleEF	MDV	110.15	88.88
tblVehicleEF	MDV	0.16	0.11
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.18

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.55
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MDV	4.7750e-003	4.0969e-003
tblVehicleEF	MDV	1.1590e-003	8.7956e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.13	0.55
tblVehicleEF	MDV	0.28	0.50
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	2.70	0.35
tblVehicleEF	MH	5.98	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.67	4.53
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
tblVehicleEF	MH	9.9460e-003	8.9094e-003
tblVehicleEF	MH	6.8100e-004	0.00
tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.78	0.35
tblVehicleEF	MH	5.56	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.55	4.28
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	2.87	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	9.9470e-003	8.9094e-003
tblVehicleEF	MH	6.7400e-004	0.00
tblVehicleEF	MH	2.87	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	2.70	0.35
tblVehicleEF	MH	6.02	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.65	4.46
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	1.58	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.53	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
tblVehicleEF	MH	9.9460e-003	8.9094e-003
tblVehicleEF	MH	6.8200e-004	0.00
tblVehicleEF	MH	1.58	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.53	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MHD	0.02	2.7460e-003
tblVehicleEF	MHD	3.7220e-003	5.6867e-003
tblVehicleEF	MHD	0.06	7.1017e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.28	0.52
tblVehicleEF	MHD	6.06	0.85
tblVehicleEF	MHD	151.96	73.08
tblVehicleEF	MHD	1,066.63	977.33
tblVehicleEF	MHD	55.49	7.02



## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.65	0.69
tblVehicleEF	MHD	0.99	2.47
tblVehicleEF	MHD	1.0680e-003	2.4553e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3075e-005
tblVehicleEF	MHD	1.0220e-003	2.3490e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6384e-005
tblVehicleEF	MHD	1.7450e-003	4.7261e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.5800e-004	2.4808e-004
tblVehicleEF	MHD	0.03	0.11
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	MHD	1.4610e-003	6.9264e-004
tblVehicleEF	MHD	0.01	9.2823e-003
tblVehicleEF	MHD	6.6100e-004	6.9447e-005
tblVehicleEF	MHD	1.7450e-003	4.7261e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.5800e-004	2.4808e-004
tblVehicleEF	MHD	0.04	0.13

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.40	0.04
tblVehicleEF	MHD	0.02	2.6082e-003
tblVehicleEF	MHD	3.7740e-003	5.7084e-003
tblVehicleEF	MHD	0.05	6.8222e-003
tblVehicleEF	MHD	0.26	0.26
tblVehicleEF	MHD	0.28	0.52
tblVehicleEF	MHD	5.78	0.80
tblVehicleEF	MHD	160.96	74.59
tblVehicleEF	MHD	1,066.63	977.34
tblVehicleEF	MHD	55.49	6.94
tblVehicleEF	MHD	0.67	0.70
tblVehicleEF	MHD	0.93	2.33
tblVehicleEF	MHD	9.0000e-004	2.0724e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3075e-005
tblVehicleEF	MHD	8.6100e-004	1.9827e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6384e-005
tblVehicleEF	MHD	3.3760e-003	8.5308e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.6840e-003	4.9480e-004

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.03	0.11
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	1.5460e-003	7.0697e-004
tblVehicleEF	MHD	0.01	9.2823e-003
tblVehicleEF	MHD	6.5600e-004	6.8643e-005
tblVehicleEF	MHD	3.3760e-003	8.5308e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	1.6840e-003	4.9480e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.39	0.04
tblVehicleEF	MHD	0.02	2.9480e-003
tblVehicleEF	MHD	3.6890e-003	5.6878e-003
tblVehicleEF	MHD	0.06	7.0368e-003
tblVehicleEF	MHD	0.49	0.40
tblVehicleEF	MHD	0.27	0.52
tblVehicleEF	MHD	6.14	0.84
tblVehicleEF	MHD	139.53	71.00
tblVehicleEF	MHD	1,066.63	977.33
tblVehicleEF	MHD	55.49	7.00
tblVehicleEF	MHD	0.62	0.67
tblVehicleEF	MHD	0.98	2.43
tblVehicleEF	MHD	1.2990e-003	2.9840e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3075e-005
tblVehicleEF	MHD	1.2430e-003	2.8549e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6384e-005
tblVehicleEF	MHD	1.3320e-003	5.0561e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.7900e-004	2.6308e-004
tblVehicleEF	MHD	0.03	0.11
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	MHD	1.3440e-003	6.7281e-004
tblVehicleEF	MHD	0.01	9.2823e-003
tblVehicleEF	MHD	6.6300e-004	6.9296e-005
tblVehicleEF	MHD	1.3320e-003	5.0561e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.7900e-004	2.6308e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.41	0.04
tblVehicleEF	OBUS	0.01	8.8304e-003
tblVehicleEF	OBUS	8.0950e-003	9.8616e-003
tblVehicleEF	OBUS	0.03	0.03

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.54	1.11
tblVehicleEF	OBUS	6.17	2.80
tblVehicleEF	OBUS	75.04	68.90
tblVehicleEF	OBUS	1,098.07	1,401.75
tblVehicleEF	OBUS	70.10	21.77
tblVehicleEF	OBUS	0.35	0.41
tblVehicleEF	OBUS	1.12	1.96
tblVehicleEF	OBUS	1.2100e-004	1.7088e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.0450e-003	0.05
tblVehicleEF	OBUS	8.2300e-004	2.0944e-004
tblVehicleEF	OBUS	1.1600e-004	1.6349e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	5.7680e-003	0.04
tblVehicleEF	OBUS	7.5700e-004	1.9258e-004
tblVehicleEF	OBUS	2.1800e-003	2.6435e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.3000e-004	1.1509e-003
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.13
tblVehicleEF	OBUS	7.2800e-004	6.5786e-004
tblVehicleEF	OBUS	0.01	0.01

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	8.0900e-004	2.1540e-004
tblVehicleEF	OBUS	2.1800e-003	2.6435e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.3000e-004	1.1509e-003
tblVehicleEF	OBUS	0.05	0.13
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.42	0.15
tblVehicleEF	OBUS	0.01	8.8556e-003
tblVehicleEF	OBUS	8.2540e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.46
tblVehicleEF	OBUS	0.55	1.14
tblVehicleEF	OBUS	5.76	2.60
tblVehicleEF	OBUS	78.48	69.40
tblVehicleEF	OBUS	1,098.07	1,401.78
tblVehicleEF	OBUS	70.10	21.43
tblVehicleEF	OBUS	0.36	0.41
tblVehicleEF	OBUS	1.04	1.83
tblVehicleEF	OBUS	1.0200e-004	1.4437e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.0450e-003	0.05
tblVehicleEF	OBUS	8.2300e-004	2.0944e-004
tblVehicleEF	OBUS	9.8000e-005	1.3812e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003

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tblVehicleEF	OBUS	5.7680e-003	0.04
tblVehicleEF	OBUS	7.5700e-004	1.9258e-004
tblVehicleEF	OBUS	4.0690e-003	4.6625e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7890e-003	2.2351e-003
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	7.6100e-004	6.6259e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.0200e-004	2.1210e-004
tblVehicleEF	OBUS	4.0690e-003	4.6625e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7890e-003	2.2351e-003
tblVehicleEF	OBUS	0.05	0.13
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	OBUS	0.01	8.8320e-003
tblVehicleEF	OBUS	8.0660e-003	9.8763e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.28	0.51
tblVehicleEF	OBUS	0.54	1.12
tblVehicleEF	OBUS	6.22	2.79
tblVehicleEF	OBUS	70.30	68.21
tblVehicleEF	OBUS	1,098.07	1,401.75

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	70.10	21.75
tblVehicleEF	OBUS	0.34	0.41
tblVehicleEF	OBUS	1.11	1.93
tblVehicleEF	OBUS	1.4700e-004	2.0750e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.0450e-003	0.05
tblVehicleEF	OBUS	8.2300e-004	2.0944e-004
tblVehicleEF	OBUS	1.4100e-004	1.9852e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	5.7680e-003	0.04
tblVehicleEF	OBUS	7.5700e-004	1.9258e-004
tblVehicleEF	OBUS	1.8870e-003	2.7905e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.5400e-004	1.2289e-003
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.05	0.30
tblVehicleEF	OBUS	0.39	0.13
tblVehicleEF	OBUS	6.8300e-004	6.5131e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.1000e-004	2.1523e-004
tblVehicleEF	OBUS	1.8870e-003	2.7905e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	8.5400e-004	1.2289e-003



## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.05	0.13
tblVehicleEF	OBUS	0.05	0.30
tblVehicleEF	OBUS	0.42	0.15
tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.1350e-003
tblVehicleEF	SBUS	0.06	7.9942e-003
tblVehicleEF	SBUS	7.83	3.38
tblVehicleEF	SBUS	0.64	0.59
tblVehicleEF	SBUS	6.66	1.10
tblVehicleEF	SBUS	1,146.29	374.62
tblVehicleEF	SBUS	1,103.40	1,117.10
tblVehicleEF	SBUS	53.92	6.97
tblVehicleEF	SBUS	10.00	3.53
tblVehicleEF	SBUS	4.65	4.80
tblVehicleEF	SBUS	0.01	3.9568e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4077e-005
tblVehicleEF	SBUS	0.01	3.7856e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6950e-003	2.6443e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.2000e-004	4.0527e-005
tblVehicleEF	SBUS	4.6830e-003	1.3761e-003
tblVehicleEF	SBUS	0.03	9.8813e-003
tblVehicleEF	SBUS	0.94	0.41

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tblVehicleEF	SBUS	2.1770e-003	6.8647e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.5825e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5500e-004	6.8974e-005
tblVehicleEF	SBUS	4.6830e-003	1.3761e-003
tblVehicleEF	SBUS	0.03	9.8813e-003
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	2.1770e-003	6.8647e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.40	0.05
tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.2252e-003
tblVehicleEF	SBUS	0.05	6.6642e-003
tblVehicleEF	SBUS	7.71	3.33
tblVehicleEF	SBUS	0.65	0.60
tblVehicleEF	SBUS	4.83	0.79
tblVehicleEF	SBUS	1,198.60	385.14
tblVehicleEF	SBUS	1,103.40	1,117.12
tblVehicleEF	SBUS	53.92	6.45
tblVehicleEF	SBUS	10.32	3.62
tblVehicleEF	SBUS	4.37	4.52
tblVehicleEF	SBUS	9.1190e-003	3.3421e-003
tblVehicleEF	SBUS	0.74	0.74

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4077e-005
tblVehicleEF	SBUS	8.7240e-003	3.1975e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6950e-003	2.6443e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.2000e-004	4.0527e-005
tblVehicleEF	SBUS	8.4640e-003	2.4143e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	4.0830e-003	1.2843e-003
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.31	0.04
tblVehicleEF	SBUS	0.01	3.6819e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2400e-004	6.3868e-005
tblVehicleEF	SBUS	8.4640e-003	2.4143e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	4.0830e-003	1.2843e-003
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.04
tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.1336e-003

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.07	8.1369e-003
tblVehicleEF	SBUS	8.00	3.43
tblVehicleEF	SBUS	0.63	0.59
tblVehicleEF	SBUS	7.02	1.12
tblVehicleEF	SBUS	1,074.07	360.11
tblVehicleEF	SBUS	1,103.40	1,117.10
tblVehicleEF	SBUS	53.92	7.01
tblVehicleEF	SBUS	9.56	3.40
tblVehicleEF	SBUS	4.60	4.73
tblVehicleEF	SBUS	0.01	4.8056e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4077e-005
tblVehicleEF	SBUS	0.01	4.5978e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6950e-003	2.6443e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.2000e-004	4.0527e-005
tblVehicleEF	SBUS	4.1680e-003	1.3129e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.94	0.41
tblVehicleEF	SBUS	2.1000e-003	7.1176e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.38	0.05
tblVehicleEF	SBUS	0.01	3.4454e-003

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6100e-004	6.9371e-005
tblVehicleEF	SBUS	4.1680e-003	1.3129e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	2.1000e-003	7.1176e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.45	23.57
tblVehicleEF	UBUS	15.26	1.95
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.43
tblVehicleEF	UBUS	4.95	0.30
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	9.7430e-003	2.3414e-003
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2419e-004

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10
tblVehicleEF	UBUS	9.9960e-003	6.3901e-003
tblVehicleEF	UBUS	1.8100e-003	2.3183e-004
tblVehicleEF	UBUS	9.7430e-003	2.3414e-003
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2419e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.28	0.10
tblVehicleEF	UBUS	1.52	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	8.53	23.58
tblVehicleEF	UBUS	13.06	1.66
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	22.94
tblVehicleEF	UBUS	4.62	0.29
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	0.02	4.1836e-003

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.14	0.02
tblVehicleEF	UBUS	9.6600e-003	1.8853e-003
tblVehicleEF	UBUS	0.53	0.05
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.06	0.09
tblVehicleEF	UBUS	9.9970e-003	6.3902e-003
tblVehicleEF	UBUS	1.7720e-003	2.2697e-004
tblVehicleEF	UBUS	0.02	4.1836e-003
tblVehicleEF	UBUS	0.14	0.02
tblVehicleEF	UBUS	9.6600e-003	1.8853e-003
tblVehicleEF	UBUS	2.09	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.44	23.57
tblVehicleEF	UBUS	15.44	1.93
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.40
tblVehicleEF	UBUS	4.92	0.30
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	8.9770e-003	2.4593e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	4.3820e-003	9.7705e-004
tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.18	0.10
tblVehicleEF	UBUS	9.9960e-003	6.3901e-003
tblVehicleEF	UBUS	1.8130e-003	2.3157e-004
tblVehicleEF	UBUS	8.9770e-003	2.4593e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	4.3820e-003	9.7705e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.29	0.10
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00



## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	317,610,312.50	0.00

## 2.0 Emissions Summary

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IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-1-2020	2-28-2021	2.1239	1.2256
2	3-1-2021	5-31-2021	2.9481	2.4617
3	6-1-2021	8-31-2021	2.9514	2.4650
4	9-1-2021	9-30-2021	0.8825	0.7373
		Highest	2.9514	2.4650

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.7171	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828
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	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.7171</b>	<b>3.7000e-004</b>	<b>0.0401</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.0777</b>	<b>0.0777</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0828</b>

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

**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	5.7171	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828
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	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.7171</b>	<b>3.7000e-004</b>	<b>0.0401</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.0777</b>	<b>0.0777</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0828</b>

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

**3.0 Construction Detail**

**Construction Phase**

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2020	12/28/2020	5	20	
2	Grading	Grading	12/29/2020	2/22/2021	5	40	
3	Building Construction	Building Construction	2/23/2021	9/27/2021	5	155	
4	Paving	Paving	9/28/2021	12/27/2021	5	65	
5	Architectural Coating	Architectural Coating	11/2/2021	12/27/2021	5	40	

**Acres of Grading (Site Preparation Phase): 70**

**Acres of Grading (Grading Phase): 160**

**Acres of Paving: 33.25**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,060,174; Non-Residential Outdoor: 686,725; Striped Parking Area: 86,906 (Architectural Coating – sqft)**

**OffRoad Equipment**

## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
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	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Crawler Tractors	3	8.00	212	0.43
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	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	8.00	78	0.48

Trips and VMT

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,185.00	463.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	237.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Site Preparation - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2178	0.0000	0.2178	0.1033	0.0000	0.1033	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0555	0.6379	0.2240	5.7000e-004		0.0279	0.0279		0.0257	0.0257	0.0000	50.1091	50.1091	0.0162	0.0000	50.5142
<b>Total</b>	<b>0.0555</b>	<b>0.6379</b>	<b>0.2240</b>	<b>5.7000e-004</b>	<b>0.2178</b>	<b>0.0279</b>	<b>0.2457</b>	<b>0.1033</b>	<b>0.0257</b>	<b>0.1290</b>	<b>0.0000</b>	<b>50.1091</b>	<b>50.1091</b>	<b>0.0162</b>	<b>0.0000</b>	<b>50.5142</b>

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**3.2 Site Preparation - 2020**

**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	8.3000e-004	5.8000e-004	6.1900e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6553	1.6553	4.0000e-005	0.0000	1.6563
<b>Total</b>	<b>8.3000e-004</b>	<b>5.8000e-004</b>	<b>6.1900e-003</b>	<b>2.0000e-005</b>	<b>1.9800e-003</b>	<b>1.0000e-005</b>	<b>1.9900e-003</b>	<b>5.3000e-004</b>	<b>1.0000e-005</b>	<b>5.4000e-004</b>	<b>0.0000</b>	<b>1.6553</b>	<b>1.6553</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.6563</b>

**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					0.0849	0.0000	0.0849	0.0403	0.0000	0.0403	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0140	0.2705	0.3031	5.7000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	50.1090	50.1090	0.0162	0.0000	50.5142
<b>Total</b>	<b>0.0140</b>	<b>0.2705</b>	<b>0.3031</b>	<b>5.7000e-004</b>	<b>0.0849</b>	<b>0.0103</b>	<b>0.0952</b>	<b>0.0403</b>	<b>0.0103</b>	<b>0.0506</b>	<b>0.0000</b>	<b>50.1090</b>	<b>50.1090</b>	<b>0.0162</b>	<b>0.0000</b>	<b>50.5142</b>



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**3.2 Site Preparation - 2020**

**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	8.3000e-004	5.8000e-004	6.1900e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.3000e-004	1.0000e-005	5.4000e-004	0.0000	1.6553	1.6553	4.0000e-005	0.0000	1.6563
<b>Total</b>	<b>8.3000e-004</b>	<b>5.8000e-004</b>	<b>6.1900e-003</b>	<b>2.0000e-005</b>	<b>1.9800e-003</b>	<b>1.0000e-005</b>	<b>1.9900e-003</b>	<b>5.3000e-004</b>	<b>1.0000e-005</b>	<b>5.4000e-004</b>	<b>0.0000</b>	<b>1.6553</b>	<b>1.6553</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.6563</b>

**3.3 Grading - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0939	0.0000	0.0939	0.0141	0.0000	0.0141	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7800e-003	0.0913	0.0486	1.1000e-004		3.7000e-003	3.7000e-003		3.4100e-003	3.4100e-003	0.0000	9.4235	9.4235	3.0500e-003	0.0000	9.4997
<b>Total</b>	<b>7.7800e-003</b>	<b>0.0913</b>	<b>0.0486</b>	<b>1.1000e-004</b>	<b>0.0939</b>	<b>3.7000e-003</b>	<b>0.0976</b>	<b>0.0141</b>	<b>3.4100e-003</b>	<b>0.0175</b>	<b>0.0000</b>	<b>9.4235</b>	<b>9.4235</b>	<b>3.0500e-003</b>	<b>0.0000</b>	<b>9.4997</b>

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**3.3 Grading - 2020**

**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	1.4000e-004	1.0000e-004	1.0300e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2759	0.2759	1.0000e-005	0.0000	0.2761
<b>Total</b>	<b>1.4000e-004</b>	<b>1.0000e-004</b>	<b>1.0300e-003</b>	<b>0.0000</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>3.3000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.2759</b>	<b>0.2759</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2761</b>

**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					0.0366	0.0000	0.0366	5.5100e-003	0.0000	5.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1100e-003	0.0557	0.0581	1.1000e-004		2.1300e-003	2.1300e-003		2.1100e-003	2.1100e-003	0.0000	9.4235	9.4235	3.0500e-003	0.0000	9.4997
<b>Total</b>	<b>3.1100e-003</b>	<b>0.0557</b>	<b>0.0581</b>	<b>1.1000e-004</b>	<b>0.0366</b>	<b>2.1300e-003</b>	<b>0.0387</b>	<b>5.5100e-003</b>	<b>2.1100e-003</b>	<b>7.6200e-003</b>	<b>0.0000</b>	<b>9.4235</b>	<b>9.4235</b>	<b>3.0500e-003</b>	<b>0.0000</b>	<b>9.4997</b>

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**3.3 Grading - 2020**

**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	1.4000e-004	1.0000e-004	1.0300e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2759	0.2759	1.0000e-005	0.0000	0.2761
<b>Total</b>	<b>1.4000e-004</b>	<b>1.0000e-004</b>	<b>1.0300e-003</b>	<b>0.0000</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>3.3000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.2759</b>	<b>0.2759</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2761</b>

**3.3 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1963	0.0000	0.1963	0.0704	0.0000	0.0704	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0910	1.0461	0.5777	1.3200e-003		0.0423	0.0423		0.0389	0.0389	0.0000	116.2379	116.2379	0.0376	0.0000	117.1778
<b>Total</b>	<b>0.0910</b>	<b>1.0461</b>	<b>0.5777</b>	<b>1.3200e-003</b>	<b>0.1963</b>	<b>0.0423</b>	<b>0.2385</b>	<b>0.0704</b>	<b>0.0389</b>	<b>0.1093</b>	<b>0.0000</b>	<b>116.2379</b>	<b>116.2379</b>	<b>0.0376</b>	<b>0.0000</b>	<b>117.1778</b>

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**3.3 Grading - 2021**

**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	1.5900e-003	1.0700e-003	0.0117	4.0000e-005	4.0700e-003	2.0000e-005	4.0900e-003	1.0800e-003	2.0000e-005	1.1000e-003	0.0000	3.2887	3.2887	8.0000e-005	0.0000	3.2907
<b>Total</b>	<b>1.5900e-003</b>	<b>1.0700e-003</b>	<b>0.0117</b>	<b>4.0000e-005</b>	<b>4.0700e-003</b>	<b>2.0000e-005</b>	<b>4.0900e-003</b>	<b>1.0800e-003</b>	<b>2.0000e-005</b>	<b>1.1000e-003</b>	<b>0.0000</b>	<b>3.2887</b>	<b>3.2887</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>3.2907</b>

**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					0.0765	0.0000	0.0765	0.0275	0.0000	0.0275	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0379	0.6800	0.7150	1.3200e-003		0.0261	0.0261		0.0258	0.0258	0.0000	116.2378	116.2378	0.0376	0.0000	117.1776
<b>Total</b>	<b>0.0379</b>	<b>0.6800</b>	<b>0.7150</b>	<b>1.3200e-003</b>	<b>0.0765</b>	<b>0.0261</b>	<b>0.1026</b>	<b>0.0275</b>	<b>0.0258</b>	<b>0.0532</b>	<b>0.0000</b>	<b>116.2378</b>	<b>116.2378</b>	<b>0.0376</b>	<b>0.0000</b>	<b>117.1776</b>

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**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	1.5900e-003	1.0700e-003	0.0117	4.0000e-005	4.0700e-003	2.0000e-005	4.0900e-003	1.0800e-003	2.0000e-005	1.1000e-003	0.0000	3.2887	3.2887	8.0000e-005	0.0000	3.2907
<b>Total</b>	<b>1.5900e-003</b>	<b>1.0700e-003</b>	<b>0.0117</b>	<b>4.0000e-005</b>	<b>4.0700e-003</b>	<b>2.0000e-005</b>	<b>4.0900e-003</b>	<b>1.0800e-003</b>	<b>2.0000e-005</b>	<b>1.1000e-003</b>	<b>0.0000</b>	<b>3.2887</b>	<b>3.2887</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>3.2907</b>

**3.4 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2413	2.6324	1.4101	3.3400e-003		0.1144	0.1144		0.1068	0.1068	0.0000	289.2725	289.2725	0.0788	0.0000	291.2426
<b>Total</b>	<b>0.2413</b>	<b>2.6324</b>	<b>1.4101</b>	<b>3.3400e-003</b>		<b>0.1144</b>	<b>0.1144</b>		<b>0.1068</b>	<b>0.1068</b>	<b>0.0000</b>	<b>289.2725</b>	<b>289.2725</b>	<b>0.0788</b>	<b>0.0000</b>	<b>291.2426</b>

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**3.4 Building Construction - 2021**

**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	0.0856	3.3458	0.6437	9.1500e-003	0.2266	6.4000e-003	0.2330	0.0654	6.1200e-003	0.0715	0.0000	875.4368	875.4368	0.0668	0.0000	877.1064
Worker	0.3937	0.2653	2.8911	9.0300e-003	1.0094	6.0500e-003	1.0155	0.2680	5.5700e-003	0.2736	0.0000	816.2943	816.2943	0.0190	0.0000	816.7697
<b>Total</b>	<b>0.4794</b>	<b>3.6111</b>	<b>3.5348</b>	<b>0.0182</b>	<b>1.2360</b>	<b>0.0125</b>	<b>1.2485</b>	<b>0.3334</b>	<b>0.0117</b>	<b>0.3451</b>	<b>0.0000</b>	<b>1,691.7311</b>	<b>1,691.7311</b>	<b>0.0858</b>	<b>0.0000</b>	<b>1,693.8760</b>

**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	0.0830	1.6435	1.9104	3.3400e-003		0.0792	0.0792		0.0792	0.0792	0.0000	289.2721	289.2721	0.0788	0.0000	291.2423
<b>Total</b>	<b>0.0830</b>	<b>1.6435</b>	<b>1.9104</b>	<b>3.3400e-003</b>		<b>0.0792</b>	<b>0.0792</b>		<b>0.0792</b>	<b>0.0792</b>	<b>0.0000</b>	<b>289.2721</b>	<b>289.2721</b>	<b>0.0788</b>	<b>0.0000</b>	<b>291.2423</b>

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**3.4 Building Construction - 2021**

**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	0.0856	3.3458	0.6437	9.1500e-003	0.2266	6.4000e-003	0.2330	0.0654	6.1200e-003	0.0715	0.0000	875.4368	875.4368	0.0668	0.0000	877.1064
Worker	0.3937	0.2653	2.8911	9.0300e-003	1.0094	6.0500e-003	1.0155	0.2680	5.5700e-003	0.2736	0.0000	816.2943	816.2943	0.0190	0.0000	816.7697
<b>Total</b>	<b>0.4794</b>	<b>3.6111</b>	<b>3.5348</b>	<b>0.0182</b>	<b>1.2360</b>	<b>0.0125</b>	<b>1.2485</b>	<b>0.3334</b>	<b>0.0117</b>	<b>0.3451</b>	<b>0.0000</b>	<b>1,691.7311</b>	<b>1,691.7311</b>	<b>0.0858</b>	<b>0.0000</b>	<b>1,693.8760</b>

**3.5 Paving - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0408	0.4199	0.4762	7.4000e-004		0.0220	0.0220		0.0203	0.0203	0.0000	65.0763	65.0763	0.0211	0.0000	65.6025
Paving	0.0325					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0733</b>	<b>0.4199</b>	<b>0.4762</b>	<b>7.4000e-004</b>		<b>0.0220</b>	<b>0.0220</b>		<b>0.0203</b>	<b>0.0203</b>	<b>0.0000</b>	<b>65.0763</b>	<b>65.0763</b>	<b>0.0211</b>	<b>0.0000</b>	<b>65.6025</b>

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**3.5 Paving - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0900e-003	1.4100e-003	0.0154	5.0000e-005	5.3600e-003	3.0000e-005	5.3900e-003	1.4200e-003	3.0000e-005	1.4500e-003	0.0000	4.3331	4.3331	1.0000e-004	0.0000	4.3357
<b>Total</b>	<b>2.0900e-003</b>	<b>1.4100e-003</b>	<b>0.0154</b>	<b>5.0000e-005</b>	<b>5.3600e-003</b>	<b>3.0000e-005</b>	<b>5.3900e-003</b>	<b>1.4200e-003</b>	<b>3.0000e-005</b>	<b>1.4500e-003</b>	<b>0.0000</b>	<b>4.3331</b>	<b>4.3331</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>4.3357</b>

**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	0.0182	0.3671	0.5621	7.4000e-004		0.0198	0.0198		0.0198	0.0198	0.0000	65.0762	65.0762	0.0211	0.0000	65.6024
Paving	0.0325					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0507</b>	<b>0.3671</b>	<b>0.5621</b>	<b>7.4000e-004</b>		<b>0.0198</b>	<b>0.0198</b>		<b>0.0198</b>	<b>0.0198</b>	<b>0.0000</b>	<b>65.0762</b>	<b>65.0762</b>	<b>0.0211</b>	<b>0.0000</b>	<b>65.6024</b>



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**3.5 Paving - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0900e-003	1.4100e-003	0.0154	5.0000e-005	5.3600e-003	3.0000e-005	5.3900e-003	1.4200e-003	3.0000e-005	1.4500e-003	0.0000	4.3331	4.3331	1.0000e-004	0.0000	4.3357
<b>Total</b>	<b>2.0900e-003</b>	<b>1.4100e-003</b>	<b>0.0154</b>	<b>5.0000e-005</b>	<b>5.3600e-003</b>	<b>3.0000e-005</b>	<b>5.3900e-003</b>	<b>1.4200e-003</b>	<b>3.0000e-005</b>	<b>1.4500e-003</b>	<b>0.0000</b>	<b>4.3331</b>	<b>4.3331</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>4.3357</b>

**3.6 Architectural Coating - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6567					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8400e-003	0.0407	0.0485	8.0000e-005		2.5100e-003	2.5100e-003		2.5100e-003	2.5100e-003	0.0000	6.8087	6.8087	4.7000e-004	0.0000	6.8204
<b>Total</b>	<b>0.6626</b>	<b>0.0407</b>	<b>0.0485</b>	<b>8.0000e-005</b>		<b>2.5100e-003</b>	<b>2.5100e-003</b>		<b>2.5100e-003</b>	<b>2.5100e-003</b>	<b>0.0000</b>	<b>6.8087</b>	<b>6.8087</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>6.8204</b>

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

**3.6 Architectural Coating - 2021**

**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	0.0203	0.0137	0.1492	4.7000e-004	0.0521	3.1000e-004	0.0524	0.0138	2.9000e-004	0.0141	0.0000	42.1313	42.1313	9.8000e-004	0.0000	42.1559
<b>Total</b>	<b>0.0203</b>	<b>0.0137</b>	<b>0.1492</b>	<b>4.7000e-004</b>	<b>0.0521</b>	<b>3.1000e-004</b>	<b>0.0524</b>	<b>0.0138</b>	<b>2.9000e-004</b>	<b>0.0141</b>	<b>0.0000</b>	<b>42.1313</b>	<b>42.1313</b>	<b>9.8000e-004</b>	<b>0.0000</b>	<b>42.1559</b>

**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	0.6567					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5800e-003	0.0362	0.0489	8.0000e-005		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	6.8087	6.8087	4.7000e-004	0.0000	6.8204
<b>Total</b>	<b>0.6583</b>	<b>0.0362</b>	<b>0.0489</b>	<b>8.0000e-005</b>		<b>2.5400e-003</b>	<b>2.5400e-003</b>		<b>2.5400e-003</b>	<b>2.5400e-003</b>	<b>0.0000</b>	<b>6.8087</b>	<b>6.8087</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>6.8204</b>

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

**3.6 Architectural Coating - 2021**

**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	0.0203	0.0137	0.1492	4.7000e-004	0.0521	3.1000e-004	0.0524	0.0138	2.9000e-004	0.0141	0.0000	42.1313	42.1313	9.8000e-004	0.0000	42.1559
<b>Total</b>	<b>0.0203</b>	<b>0.0137</b>	<b>0.1492</b>	<b>4.7000e-004</b>	<b>0.0521</b>	<b>3.1000e-004</b>	<b>0.0524</b>	<b>0.0138</b>	<b>2.9000e-004</b>	<b>0.0141</b>	<b>0.0000</b>	<b>42.1313</b>	<b>42.1313</b>	<b>9.8000e-004</b>	<b>0.0000</b>	<b>42.1559</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Unrefrigerated Warehouse-No Rail	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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





## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



## IDI Rider 2 &amp; 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.7171	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828
Unmitigated	5.7171	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828

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	0.6567					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.0566					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7500e-003	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828
<b>Total</b>	<b>5.7171</b>	<b>3.7000e-004</b>	<b>0.0401</b>	<b>0.0000</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.0777</b>	<b>0.0777</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0828</b>

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

**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	0.6567					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.0566					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7500e-003	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828
<b>Total</b>	<b>5.7171</b>	<b>3.7000e-004</b>	<b>0.0401</b>	<b>0.0000</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.0777</b>	<b>0.0777</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0828</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

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

IDI Rider 2 & 4 (Construction - Mitigated) - Riverside-South Coast County, Annual

Equipment Type	Number
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## 11.0 Vegetation

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**APPENDIX 3.4:**

**CALEEMOD PROJECT OPERATIONS ANNUAL EMISSIONS MODEL OUTPUTS**

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated)**  
**Riverside-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,373.45	1000sqft	31.53	1,373,449.00	0
Other Asphalt Surfaces	874.22	1000sqft	20.07	874,218.00	0
Other Non-Asphalt Surfaces	368.62	1000sqft	8.46	368,616.00	0
Parking Lot	514.00	Space	4.72	205,600.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Total Project Area is 64.8 ac.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Rates based on ITE 10th Edition (2017)

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Vehicle Emission Factors - EMFAC2017

Energy Use - The project will design building shells and building components to meet 2019 Title 24 Standards which expects 30% less energy for nonresidential uses

Water And Wastewater - Water Demand based on the Generation Rate of 0.75 (Demand/AFY) as per the PVCC SP EIR.

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results (2014)

Fleet Mix - Fleet Mix split between LDA, LDT1, LDT2, MDV, LHDT, MHDT, and HHDT

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	40.00	0.00
tblEnergyUse	LightingElect	1.17	0.82
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.37	0.26
tblEnergyUse	T24NG	2.00	1.40
tblFleetMix	HHDT	0.07	0.20
tblFleetMix	LDA	0.54	0.42
tblFleetMix	LDT1	0.04	0.03
tblFleetMix	LDT2	0.19	0.14
tblFleetMix	LHDT1	0.02	0.05
tblFleetMix	LHDT2	5.1410e-003	0.00
tblFleetMix	MCY	4.5820e-003	0.00

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblFleetMix	MDV	0.12	0.09
tblFleetMix	MH	1.0380e-003	0.00
tblFleetMix	MHD	0.02	0.07
tblFleetMix	OBUS	1.3830e-003	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	UBUS	1.1830e-003	0.00
tblLandUse	LandUseSquareFeet	1,373,450.00	1,373,449.00
tblLandUse	LotAcreage	4.63	4.72
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	5.00
tblVehicleEF	HHD	1.43	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	2.1311e-007
tblVehicleEF	HHD	3.28	5.70
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.46	5.1287e-003
tblVehicleEF	HHD	6,485.38	1,098.23
tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	26.41	5.91
tblVehicleEF	HHD	2.69	3.40
tblVehicleEF	HHD	0.01	8.1205e-003

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.01	7.7692e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8102e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	8.4000e-005	3.9431e-006
tblVehicleEF	HHD	2.5800e-003	1.4075e-004
tblVehicleEF	HHD	0.85	0.44
tblVehicleEF	HHD	4.8000e-005	2.4154e-006
tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8000e-004	7.3333e-004
tblVehicleEF	HHD	0.05	1.0921e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	4.3455e-007
tblVehicleEF	HHD	8.4000e-005	3.9431e-006
tblVehicleEF	HHD	2.5800e-003	1.4075e-004
tblVehicleEF	HHD	0.97	0.51
tblVehicleEF	HHD	4.8000e-005	2.4154e-006
tblVehicleEF	HHD	0.11	0.12
tblVehicleEF	HHD	1.8000e-004	7.3333e-004
tblVehicleEF	HHD	0.05	1.1957e-006
tblVehicleEF	HHD	1.35	0.02

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	2.0331e-007
tblVehicleEF	HHD	2.39	5.56
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.39	4.8401e-003
tblVehicleEF	HHD	6,867.98	1,095.85
tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	27.25	5.75
tblVehicleEF	HHD	2.54	3.21
tblVehicleEF	HHD	0.01	7.5760e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.01	7.2482e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8102e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	1.6300e-004	7.4470e-006
tblVehicleEF	HHD	2.9560e-003	1.5586e-004
tblVehicleEF	HHD	0.80	0.46
tblVehicleEF	HHD	9.2000e-005	5.0918e-006
tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8400e-004	7.4800e-004
tblVehicleEF	HHD	0.04	1.0449e-006

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	4.3003e-007
tblVehicleEF	HHD	1.6300e-004	7.4470e-006
tblVehicleEF	HHD	2.9560e-003	1.5586e-004
tblVehicleEF	HHD	0.92	0.53
tblVehicleEF	HHD	9.2000e-005	5.0918e-006
tblVehicleEF	HHD	0.11	0.12
tblVehicleEF	HHD	1.8400e-004	7.4800e-004
tblVehicleEF	HHD	0.05	1.1441e-006
tblVehicleEF	HHD	1.54	0.02
tblVehicleEF	HHD	0.03	3.9264e-003
tblVehicleEF	HHD	0.10	2.1145e-007
tblVehicleEF	HHD	4.51	5.86
tblVehicleEF	HHD	0.45	0.36
tblVehicleEF	HHD	1.47	5.0740e-003
tblVehicleEF	HHD	5,957.03	1,095.99
tblVehicleEF	HHD	1,461.92	1,363.80
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	25.25	6.10
tblVehicleEF	HHD	2.67	3.34
tblVehicleEF	HHD	0.02	8.8013e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.02	8.4206e-003



IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.7660e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	6.7000e-005	4.1581e-006
tblVehicleEF	HHD	2.7490e-003	1.5944e-004
tblVehicleEF	HHD	0.91	0.42
tblVehicleEF	HHD	4.1000e-005	2.6509e-006
tblVehicleEF	HHD	0.07	0.08
tblVehicleEF	HHD	1.9200e-004	7.7684e-004
tblVehicleEF	HHD	0.05	1.0839e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	4.3370e-007
tblVehicleEF	HHD	6.7000e-005	4.1581e-006
tblVehicleEF	HHD	2.7490e-003	1.5944e-004
tblVehicleEF	HHD	1.05	0.48
tblVehicleEF	HHD	4.1000e-005	2.6509e-006
tblVehicleEF	HHD	0.11	0.10
tblVehicleEF	HHD	1.9200e-004	7.7684e-004
tblVehicleEF	HHD	0.05	1.1867e-006
tblVehicleEF	LDA	4.0430e-003	2.4275e-003
tblVehicleEF	LDA	5.4670e-003	0.05
tblVehicleEF	LDA	0.58	0.65
tblVehicleEF	LDA	1.16	2.15
tblVehicleEF	LDA	255.91	264.02
tblVehicleEF	LDA	58.81	54.78

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	9.3165e-003
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	2.5630e-003	2.6119e-003
tblVehicleEF	LDA	6.0800e-004	5.4212e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.08	0.25
tblVehicleEF	LDA	4.5900e-003	2.7357e-003
tblVehicleEF	LDA	4.7470e-003	0.05
tblVehicleEF	LDA	0.71	0.77
tblVehicleEF	LDA	1.02	1.80

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	278.73	285.50
tblVehicleEF	LDA	58.81	54.12
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.12	0.11
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	2.7930e-003	2.8244e-003
tblVehicleEF	LDA	6.0500e-004	5.3561e-004
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.12	0.11
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	0.07	0.22
tblVehicleEF	LDA	3.8980e-003	2.3855e-003
tblVehicleEF	LDA	5.6140e-003	0.05

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDA	0.54	0.62
tblVehicleEF	LDA	1.19	2.13
tblVehicleEF	LDA	249.57	260.40
tblVehicleEF	LDA	58.81	54.76
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	9.8140e-003	9.1467e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.23
tblVehicleEF	LDA	2.4990e-003	2.5760e-003
tblVehicleEF	LDA	6.0800e-004	5.4186e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.25

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.01	7.6986e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.46	1.55
tblVehicleEF	LDT1	3.40	2.46
tblVehicleEF	LDT1	315.98	313.01
tblVehicleEF	LDT1	72.28	66.81
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.21	0.19
tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.24	0.46
tblVehicleEF	LDT1	3.1780e-003	3.0974e-003
tblVehicleEF	LDT1	7.8300e-004	6.6113e-004
tblVehicleEF	LDT1	0.21	0.19
tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.04	0.05

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.26	0.50
tblVehicleEF	LDT1	0.01	8.5808e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.76	1.83
tblVehicleEF	LDT1	2.99	2.05
tblVehicleEF	LDT1	343.19	335.41
tblVehicleEF	LDT1	72.28	65.94
tblVehicleEF	LDT1	0.13	0.13
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.41	0.36
tblVehicleEF	LDT1	0.43	0.32
tblVehicleEF	LDT1	0.27	0.26
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.20	0.85
tblVehicleEF	LDT1	0.21	0.39
tblVehicleEF	LDT1	3.4550e-003	3.3191e-003
tblVehicleEF	LDT1	7.7500e-004	6.5255e-004
tblVehicleEF	LDT1	0.41	0.36
tblVehicleEF	LDT1	0.43	0.32

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.27	0.26
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.20	0.85
tblVehicleEF	LDT1	0.23	0.43
tblVehicleEF	LDT1	0.01	7.5727e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.37	1.50
tblVehicleEF	LDT1	3.46	2.44
tblVehicleEF	LDT1	307.88	309.22
tblVehicleEF	LDT1	72.28	66.78
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.23	1.01
tblVehicleEF	LDT1	0.25	0.46
tblVehicleEF	LDT1	3.0960e-003	3.0600e-003
tblVehicleEF	LDT1	7.8400e-004	6.6081e-004

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.23	1.02
tblVehicleEF	LDT1	0.27	0.50
tblVehicleEF	LDT2	5.6080e-003	4.0030e-003
tblVehicleEF	LDT2	7.2840e-003	0.07
tblVehicleEF	LDT2	0.76	0.93
tblVehicleEF	LDT2	1.53	2.77
tblVehicleEF	LDT2	355.02	334.40
tblVehicleEF	LDT2	81.24	71.60
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.10	0.34



## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	3.5560e-003	3.3085e-003
tblVehicleEF	LDT2	8.3800e-004	7.0852e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	6.3630e-003	4.4905e-003
tblVehicleEF	LDT2	6.3270e-003	0.06
tblVehicleEF	LDT2	0.93	1.11
tblVehicleEF	LDT2	1.35	2.31
tblVehicleEF	LDT2	386.34	356.10
tblVehicleEF	LDT2	81.24	70.71
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.14	0.17
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.02

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.09	0.29
tblVehicleEF	LDT2	3.8710e-003	3.5232e-003
tblVehicleEF	LDT2	8.3500e-004	6.9977e-004
tblVehicleEF	LDT2	0.14	0.17
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.09	0.32
tblVehicleEF	LDT2	5.3900e-003	3.9361e-003
tblVehicleEF	LDT2	7.4940e-003	0.07
tblVehicleEF	LDT2	0.71	0.90
tblVehicleEF	LDT2	1.57	2.75
tblVehicleEF	LDT2	345.65	330.74
tblVehicleEF	LDT2	81.24	71.57
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	3.4620e-003	3.2722e-003
tblVehicleEF	LDT2	8.3900e-004	7.0821e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LHD1	5.4460e-003	4.7711e-003
tblVehicleEF	LHD1	0.01	5.3525e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.96	0.72
tblVehicleEF	LHD1	2.41	0.95
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.36
tblVehicleEF	LHD1	30.36	10.31
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.21	1.68
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	3.8710e-003	2.6459e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9010e-003	1.3629e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.48
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
tblVehicleEF	LHD1	5.9620e-003	6.1767e-003
tblVehicleEF	LHD1	3.4900e-004	1.0205e-004
tblVehicleEF	LHD1	3.8710e-003	2.6459e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9010e-003	1.3629e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.48
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	5.4460e-003	4.7847e-003
tblVehicleEF	LHD1	0.01	5.4445e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.17

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	0.97	0.74
tblVehicleEF	LHD1	2.29	0.90
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.38
tblVehicleEF	LHD1	30.36	10.22
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.08	1.58
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	7.2450e-003	4.7126e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6380e-003	2.6331e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.32	0.48
tblVehicleEF	LHD1	0.25	0.07
tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
tblVehicleEF	LHD1	5.9620e-003	6.1769e-003
tblVehicleEF	LHD1	3.4700e-004	1.0116e-004

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	7.2450e-003	4.7126e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6380e-003	2.6331e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.32	0.48
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.4460e-003	4.7735e-003
tblVehicleEF	LHD1	0.01	5.3625e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.96	0.73
tblVehicleEF	LHD1	2.41	0.94
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.36
tblVehicleEF	LHD1	30.36	10.30
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.18	1.65
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	3.4570e-003	2.8041e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7350e-003	1.4343e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.52
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
tblVehicleEF	LHD1	5.9620e-003	6.1767e-003
tblVehicleEF	LHD1	3.4900e-004	1.0189e-004
tblVehicleEF	LHD1	3.4570e-003	2.8041e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7350e-003	1.4343e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.33	0.52
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD2	3.6660e-003	2.9071e-003
tblVehicleEF	LHD2	4.5290e-003	3.7987e-003
tblVehicleEF	LHD2	8.3110e-003	8.1462e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.15	0.51
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.61

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.71	1.83
tblVehicleEF	LHD2	1.3360e-003	1.5018e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0545e-004
tblVehicleEF	LHD2	1.2780e-003	1.4369e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.6959e-005
tblVehicleEF	LHD2	1.4980e-003	1.2263e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.7800e-004	6.4826e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4445e-004
tblVehicleEF	LHD2	5.8740e-003	6.0523e-003
tblVehicleEF	LHD2	2.5700e-004	6.5406e-005
tblVehicleEF	LHD2	1.4980e-003	1.2263e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.7800e-004	6.4826e-004
tblVehicleEF	LHD2	0.07	0.07



IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	LHD2	3.6660e-003	2.9149e-003
tblVehicleEF	LHD2	4.5800e-003	3.8275e-003
tblVehicleEF	LHD2	8.0210e-003	7.8341e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.51	0.52
tblVehicleEF	LHD2	1.10	0.48
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.56
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.62	1.73
tblVehicleEF	LHD2	1.3360e-003	1.5018e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0545e-004
tblVehicleEF	LHD2	1.2780e-003	1.4369e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.6959e-005
tblVehicleEF	LHD2	2.8320e-003	2.1864e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.4720e-003	1.2508e-003

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4445e-004
tblVehicleEF	LHD2	5.8740e-003	6.0524e-003
tblVehicleEF	LHD2	2.5600e-004	6.4938e-005
tblVehicleEF	LHD2	2.8320e-003	2.1864e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4720e-003	1.2508e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	LHD2	3.6660e-003	2.9085e-003
tblVehicleEF	LHD2	4.5170e-003	3.8023e-003
tblVehicleEF	LHD2	8.3600e-003	8.0900e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.16	0.50
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.60
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.70	1.81
tblVehicleEF	LHD2	1.3360e-003	1.5018e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0545e-004
tblVehicleEF	LHD2	1.2780e-003	1.4369e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.6959e-005
tblVehicleEF	LHD2	1.1910e-003	1.2710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7445e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.24
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4445e-004
tblVehicleEF	LHD2	5.8740e-003	6.0523e-003
tblVehicleEF	LHD2	2.5700e-004	6.5323e-005
tblVehicleEF	LHD2	1.1910e-003	1.2710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7445e-004
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.24
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	MCY	0.42	0.32
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.52	19.50

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	9.67	8.60
tblVehicleEF	MCY	165.74	207.81
tblVehicleEF	MCY	46.23	60.96
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	1.69	1.42
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.15	2.15
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.0380e-003	2.0565e-003
tblVehicleEF	MCY	6.8100e-004	6.0328e-004
tblVehicleEF	MCY	1.69	1.42
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.65	2.64
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.26	2.01
tblVehicleEF	MCY	0.42	0.31

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	0.14	0.22
tblVehicleEF	MCY	20.23	19.46
tblVehicleEF	MCY	9.11	7.90
tblVehicleEF	MCY	165.74	207.59
tblVehicleEF	MCY	46.23	59.07
tblVehicleEF	MCY	0.98	0.98
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	3.35	2.73
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.13	2.10
tblVehicleEF	MCY	0.57	1.84
tblVehicleEF	MCY	1.86	1.62
tblVehicleEF	MCY	2.0490e-003	2.0543e-003
tblVehicleEF	MCY	6.6500e-004	5.8457e-004
tblVehicleEF	MCY	3.35	2.73
tblVehicleEF	MCY	1.24	1.09
tblVehicleEF	MCY	2.10	1.72
tblVehicleEF	MCY	2.62	2.59
tblVehicleEF	MCY	0.57	1.84

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	2.02	1.76
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.04	18.91
tblVehicleEF	MCY	9.62	8.38
tblVehicleEF	MCY	165.74	206.80
tblVehicleEF	MCY	46.23	60.47
tblVehicleEF	MCY	1.12	1.10
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	1.60	1.63
tblVehicleEF	MCY	1.05	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.15	2.13
tblVehicleEF	MCY	0.65	2.13
tblVehicleEF	MCY	2.08	1.81
tblVehicleEF	MCY	2.0310e-003	2.0465e-003
tblVehicleEF	MCY	6.8100e-004	5.9842e-004
tblVehicleEF	MCY	1.60	1.63
tblVehicleEF	MCY	1.05	1.06
tblVehicleEF	MCY	0.74	0.76

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MCY	2.64	2.62
tblVehicleEF	MCY	0.65	2.13
tblVehicleEF	MCY	2.27	1.97
tblVehicleEF	MDV	0.01	5.5311e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.42	1.15
tblVehicleEF	MDV	3.18	3.31
tblVehicleEF	MDV	488.89	418.28
tblVehicleEF	MDV	110.15	88.92
tblVehicleEF	MDV	0.17	0.12
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MDV	4.9000e-003	4.1357e-003
tblVehicleEF	MDV	1.1570e-003	8.7994e-004
tblVehicleEF	MDV	0.11	0.11

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.27	0.50
tblVehicleEF	MDV	0.01	6.1666e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.73	1.36
tblVehicleEF	MDV	2.81	2.77
tblVehicleEF	MDV	530.71	441.48
tblVehicleEF	MDV	110.15	87.84
tblVehicleEF	MDV	0.16	0.11
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.22	0.20
tblVehicleEF	MDV	0.23	0.18
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	5.3230e-003	4.3652e-003



## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	1.1510e-003	8.6926e-004
tblVehicleEF	MDV	0.22	0.20
tblVehicleEF	MDV	0.23	0.18
tblVehicleEF	MDV	0.17	0.18
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.23	0.42
tblVehicleEF	MDV	0.01	5.4334e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.33	1.11
tblVehicleEF	MDV	3.24	3.29
tblVehicleEF	MDV	476.42	414.36
tblVehicleEF	MDV	110.15	88.88
tblVehicleEF	MDV	0.16	0.11
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.55

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MDV	4.7750e-003	4.0969e-003
tblVehicleEF	MDV	1.1590e-003	8.7956e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.13	0.55
tblVehicleEF	MDV	0.28	0.50
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	2.70	0.35
tblVehicleEF	MH	5.98	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.67	4.53
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
tblVehicleEF	MH	9.9460e-003	8.9094e-003
tblVehicleEF	MH	6.8100e-004	0.00
tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.78	0.35
tblVehicleEF	MH	5.56	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.55	4.28
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	2.87	0.00

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	9.9470e-003	8.9094e-003
tblVehicleEF	MH	6.7400e-004	0.00
tblVehicleEF	MH	2.87	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	2.70	0.35
tblVehicleEF	MH	6.02	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.65	4.46
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	1.58	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.53	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
tblVehicleEF	MH	9.9460e-003	8.9094e-003
tblVehicleEF	MH	6.8200e-004	0.00
tblVehicleEF	MH	1.58	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.53	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MHD	0.02	2.7460e-003
tblVehicleEF	MHD	3.7220e-003	5.6867e-003
tblVehicleEF	MHD	0.06	7.1017e-003
tblVehicleEF	MHD	0.35	0.32
tblVehicleEF	MHD	0.28	0.52
tblVehicleEF	MHD	6.06	0.85
tblVehicleEF	MHD	151.96	73.08
tblVehicleEF	MHD	1,066.63	977.33
tblVehicleEF	MHD	55.49	7.02
tblVehicleEF	MHD	0.65	0.69
tblVehicleEF	MHD	0.99	2.47
tblVehicleEF	MHD	1.0680e-003	2.4553e-003

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3075e-005
tblVehicleEF	MHD	1.0220e-003	2.3490e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6384e-005
tblVehicleEF	MHD	1.7450e-003	4.7261e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	8.5800e-004	2.4808e-004
tblVehicleEF	MHD	0.03	0.11
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	MHD	1.4610e-003	6.9264e-004
tblVehicleEF	MHD	0.01	9.2823e-003
tblVehicleEF	MHD	6.6100e-004	6.9447e-005
tblVehicleEF	MHD	1.7450e-003	4.7261e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.5800e-004	2.4808e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.40	0.04
tblVehicleEF	MHD	0.02	2.6082e-003

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	3.7740e-003	5.7084e-003
tblVehicleEF	MHD	0.05	6.8222e-003
tblVehicleEF	MHD	0.26	0.26
tblVehicleEF	MHD	0.28	0.52
tblVehicleEF	MHD	5.78	0.80
tblVehicleEF	MHD	160.96	74.59
tblVehicleEF	MHD	1,066.63	977.34
tblVehicleEF	MHD	55.49	6.94
tblVehicleEF	MHD	0.67	0.70
tblVehicleEF	MHD	0.93	2.33
tblVehicleEF	MHD	9.0000e-004	2.0724e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3075e-005
tblVehicleEF	MHD	8.6100e-004	1.9827e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6384e-005
tblVehicleEF	MHD	3.3760e-003	8.5308e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.6840e-003	4.9480e-004
tblVehicleEF	MHD	0.03	0.11
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	1.5460e-003	7.0697e-004
tblVehicleEF	MHD	0.01	9.2823e-003
tblVehicleEF	MHD	6.5600e-004	6.8643e-005
tblVehicleEF	MHD	3.3760e-003	8.5308e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	1.6840e-003	4.9480e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.39	0.04
tblVehicleEF	MHD	0.02	2.9480e-003
tblVehicleEF	MHD	3.6890e-003	5.6878e-003
tblVehicleEF	MHD	0.06	7.0368e-003
tblVehicleEF	MHD	0.49	0.40
tblVehicleEF	MHD	0.27	0.52
tblVehicleEF	MHD	6.14	0.84
tblVehicleEF	MHD	139.53	71.00
tblVehicleEF	MHD	1,066.63	977.33
tblVehicleEF	MHD	55.49	7.00
tblVehicleEF	MHD	0.62	0.67
tblVehicleEF	MHD	0.98	2.43
tblVehicleEF	MHD	1.2990e-003	2.9840e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3075e-005
tblVehicleEF	MHD	1.2430e-003	2.8549e-003



IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6384e-005
tblVehicleEF	MHD	1.3320e-003	5.0561e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.7900e-004	2.6308e-004
tblVehicleEF	MHD	0.03	0.11
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	MHD	1.3440e-003	6.7281e-004
tblVehicleEF	MHD	0.01	9.2823e-003
tblVehicleEF	MHD	6.6300e-004	6.9296e-005
tblVehicleEF	MHD	1.3320e-003	5.0561e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.7900e-004	2.6308e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.41	0.04
tblVehicleEF	OBUS	0.01	8.8304e-003
tblVehicleEF	OBUS	8.0950e-003	9.8616e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.54	1.11
tblVehicleEF	OBUS	6.17	2.80

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	75.04	68.90
tblVehicleEF	OBUS	1,098.07	1,401.75
tblVehicleEF	OBUS	70.10	21.77
tblVehicleEF	OBUS	0.35	0.41
tblVehicleEF	OBUS	1.12	1.96
tblVehicleEF	OBUS	1.2100e-004	1.7088e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.0450e-003	0.05
tblVehicleEF	OBUS	8.2300e-004	2.0944e-004
tblVehicleEF	OBUS	1.1600e-004	1.6349e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	5.7680e-003	0.04
tblVehicleEF	OBUS	7.5700e-004	1.9258e-004
tblVehicleEF	OBUS	2.1800e-003	2.6435e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	9.3000e-004	1.1509e-003
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.39	0.13
tblVehicleEF	OBUS	7.2800e-004	6.5786e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.0900e-004	2.1540e-004
tblVehicleEF	OBUS	2.1800e-003	2.6435e-003
tblVehicleEF	OBUS	0.02	0.03

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.3000e-004	1.1509e-003
tblVehicleEF	OBUS	0.05	0.13
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.42	0.15
tblVehicleEF	OBUS	0.01	8.8556e-003
tblVehicleEF	OBUS	8.2540e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.46
tblVehicleEF	OBUS	0.55	1.14
tblVehicleEF	OBUS	5.76	2.60
tblVehicleEF	OBUS	78.48	69.40
tblVehicleEF	OBUS	1,098.07	1,401.78
tblVehicleEF	OBUS	70.10	21.43
tblVehicleEF	OBUS	0.36	0.41
tblVehicleEF	OBUS	1.04	1.83
tblVehicleEF	OBUS	1.0200e-004	1.4437e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.0450e-003	0.05
tblVehicleEF	OBUS	8.2300e-004	2.0944e-004
tblVehicleEF	OBUS	9.8000e-005	1.3812e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	5.7680e-003	0.04
tblVehicleEF	OBUS	7.5700e-004	1.9258e-004
tblVehicleEF	OBUS	4.0690e-003	4.6625e-003

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	1.7890e-003	2.2351e-003
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.37	0.13
tblVehicleEF	OBUS	7.6100e-004	6.6259e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.0200e-004	2.1210e-004
tblVehicleEF	OBUS	4.0690e-003	4.6625e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.7890e-003	2.2351e-003
tblVehicleEF	OBUS	0.05	0.13
tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.40	0.14
tblVehicleEF	OBUS	0.01	8.8320e-003
tblVehicleEF	OBUS	8.0660e-003	9.8763e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.28	0.51
tblVehicleEF	OBUS	0.54	1.12
tblVehicleEF	OBUS	6.22	2.79
tblVehicleEF	OBUS	70.30	68.21
tblVehicleEF	OBUS	1,098.07	1,401.75
tblVehicleEF	OBUS	70.10	21.75
tblVehicleEF	OBUS	0.34	0.41
tblVehicleEF	OBUS	1.11	1.93

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	OBUS	1.4700e-004	2.0750e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.0450e-003	0.05
tblVehicleEF	OBUS	8.2300e-004	2.0944e-004
tblVehicleEF	OBUS	1.4100e-004	1.9852e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	5.7680e-003	0.04
tblVehicleEF	OBUS	7.5700e-004	1.9258e-004
tblVehicleEF	OBUS	1.8870e-003	2.7905e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	8.5400e-004	1.2289e-003
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.05	0.30
tblVehicleEF	OBUS	0.39	0.13
tblVehicleEF	OBUS	6.8300e-004	6.5131e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.1000e-004	2.1523e-004
tblVehicleEF	OBUS	1.8870e-003	2.7905e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	8.5400e-004	1.2289e-003
tblVehicleEF	OBUS	0.05	0.13
tblVehicleEF	OBUS	0.05	0.30
tblVehicleEF	OBUS	0.42	0.15

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.1350e-003
tblVehicleEF	SBUS	0.06	7.9942e-003
tblVehicleEF	SBUS	7.83	3.38
tblVehicleEF	SBUS	0.64	0.59
tblVehicleEF	SBUS	6.66	1.10
tblVehicleEF	SBUS	1,146.29	374.62
tblVehicleEF	SBUS	1,103.40	1,117.10
tblVehicleEF	SBUS	53.92	6.97
tblVehicleEF	SBUS	10.00	3.53
tblVehicleEF	SBUS	4.65	4.80
tblVehicleEF	SBUS	0.01	3.9568e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4077e-005
tblVehicleEF	SBUS	0.01	3.7856e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6950e-003	2.6443e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.2000e-004	4.0527e-005
tblVehicleEF	SBUS	4.6830e-003	1.3761e-003
tblVehicleEF	SBUS	0.03	9.8813e-003
tblVehicleEF	SBUS	0.94	0.41
tblVehicleEF	SBUS	2.1770e-003	6.8647e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.06

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.37	0.05
tblVehicleEF	SBUS	0.01	3.5825e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5500e-004	6.8974e-005
tblVehicleEF	SBUS	4.6830e-003	1.3761e-003
tblVehicleEF	SBUS	0.03	9.8813e-003
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	2.1770e-003	6.8647e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.40	0.05
tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.2252e-003
tblVehicleEF	SBUS	0.05	6.6642e-003
tblVehicleEF	SBUS	7.71	3.33
tblVehicleEF	SBUS	0.65	0.60
tblVehicleEF	SBUS	4.83	0.79
tblVehicleEF	SBUS	1,198.60	385.14
tblVehicleEF	SBUS	1,103.40	1,117.12
tblVehicleEF	SBUS	53.92	6.45
tblVehicleEF	SBUS	10.32	3.62
tblVehicleEF	SBUS	4.37	4.52
tblVehicleEF	SBUS	9.1190e-003	3.3421e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4077e-005

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	8.7240e-003	3.1975e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6950e-003	2.6443e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.2000e-004	4.0527e-005
tblVehicleEF	SBUS	8.4640e-003	2.4143e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	4.0830e-003	1.2843e-003
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.31	0.04
tblVehicleEF	SBUS	0.01	3.6819e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2400e-004	6.3868e-005
tblVehicleEF	SBUS	8.4640e-003	2.4143e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	4.0830e-003	1.2843e-003
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.01	0.05
tblVehicleEF	SBUS	0.34	0.04
tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.1336e-003
tblVehicleEF	SBUS	0.07	8.1369e-003
tblVehicleEF	SBUS	8.00	3.43
tblVehicleEF	SBUS	0.63	0.59



## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	7.02	1.12
tblVehicleEF	SBUS	1,074.07	360.11
tblVehicleEF	SBUS	1,103.40	1,117.10
tblVehicleEF	SBUS	53.92	7.01
tblVehicleEF	SBUS	9.56	3.40
tblVehicleEF	SBUS	4.60	4.73
tblVehicleEF	SBUS	0.01	4.8056e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4077e-005
tblVehicleEF	SBUS	0.01	4.5978e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6950e-003	2.6443e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.2000e-004	4.0527e-005
tblVehicleEF	SBUS	4.1680e-003	1.3129e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.94	0.41
tblVehicleEF	SBUS	2.1000e-003	7.1176e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.38	0.05
tblVehicleEF	SBUS	0.01	3.4454e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6100e-004	6.9371e-005
tblVehicleEF	SBUS	4.1680e-003	1.3129e-003

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	2.1000e-003	7.1176e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.45	23.57
tblVehicleEF	UBUS	15.26	1.95
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.43
tblVehicleEF	UBUS	4.95	0.30
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	9.7430e-003	2.3414e-003
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2419e-004
tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	9.9960e-003	6.3901e-003
tblVehicleEF	UBUS	1.8100e-003	2.3183e-004
tblVehicleEF	UBUS	9.7430e-003	2.3414e-003
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2419e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.28	0.10
tblVehicleEF	UBUS	1.52	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	8.53	23.58
tblVehicleEF	UBUS	13.06	1.66
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	22.94
tblVehicleEF	UBUS	4.62	0.29
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	0.02	4.1836e-003
tblVehicleEF	UBUS	0.14	0.02
tblVehicleEF	UBUS	9.6600e-003	1.8853e-003
tblVehicleEF	UBUS	0.53	0.05

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.06	0.09
tblVehicleEF	UBUS	9.9970e-003	6.3902e-003
tblVehicleEF	UBUS	1.7720e-003	2.2697e-004
tblVehicleEF	UBUS	0.02	4.1836e-003
tblVehicleEF	UBUS	0.14	0.02
tblVehicleEF	UBUS	9.6600e-003	1.8853e-003
tblVehicleEF	UBUS	2.09	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.44	23.57
tblVehicleEF	UBUS	15.44	1.93
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.40
tblVehicleEF	UBUS	4.92	0.30
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	8.9770e-003	2.4593e-003
tblVehicleEF	UBUS	0.13	0.01

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tblVehicleEF	UBUS	4.3820e-003	9.7705e-004
tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.18	0.10
tblVehicleEF	UBUS	9.9960e-003	6.3901e-003
tblVehicleEF	UBUS	1.8130e-003	2.3157e-004
tblVehicleEF	UBUS	8.9770e-003	2.4593e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	4.3820e-003	9.7705e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.29	0.10
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	30.58
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.94
tblVehicleTrips	SU_TR	1.68	0.87
tblVehicleTrips	WD_TR	1.68	1.40
tblWater	IndoorWaterUseRate	317,610,312.50	15,885,370.31

**2.0 Emissions Summary**



IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.7171	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828
Energy	0.0104	0.0943	0.0792	5.7000e-004		7.1600e-003	7.1600e-003		7.1600e-003	7.1600e-003	0.0000	956.9970	956.9970	0.0372	9.1800e-003	960.6633
Mobile	1.2919	25.1592	17.0908	0.1198	7.5895	0.4027	7.9923	2.0579	0.3845	2.4424	0.0000	11,355.4052	11,355.4052	0.1932	0.0000	11,360.2351
Offroad	0.1247	1.4108	0.7063	2.8900e-003		0.0476	0.0476		0.0438	0.0438	0.0000	254.2028	254.2028	0.0822	0.0000	256.2582
Waste						0.0000	0.0000		0.0000	0.0000	262.0695	0.0000	262.0695	15.4879	0.0000	649.2660
Water						0.0000	0.0000		0.0000	0.0000	5.0397	65.9047	70.9444	0.5204	0.0128	87.7631
<b>Total</b>	<b>7.1441</b>	<b>26.6646</b>	<b>17.9163</b>	<b>0.1233</b>	<b>7.5895</b>	<b>0.4577</b>	<b>8.0472</b>	<b>2.0579</b>	<b>0.4356</b>	<b>2.4935</b>	<b>267.1092</b>	<b>12,632.5874</b>	<b>12,899.6965</b>	<b>16.3211</b>	<b>0.0220</b>	<b>13,314.2685</b>

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**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	5.7171	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828
Energy	0.0104	0.0943	0.0792	5.7000e-004		7.1600e-003	7.1600e-003		7.1600e-003	7.1600e-003	0.0000	956.9970	956.9970	0.0372	9.1800e-003	960.6633
Mobile	1.2919	25.1592	17.0908	0.1198	7.5895	0.4027	7.9923	2.0579	0.3845	2.4424	0.0000	11,355.4052	11,355.4052	0.1932	0.0000	11,360.2351
Offroad	0.1247	1.4108	0.7063	2.8900e-003		0.0476	0.0476		0.0438	0.0438	0.0000	254.2028	254.2028	0.0822	0.0000	256.2582
Waste						0.0000	0.0000		0.0000	0.0000	262.0695	0.0000	262.0695	15.4879	0.0000	649.2660
Water						0.0000	0.0000		0.0000	0.0000	5.0397	65.9047	70.9444	0.5204	0.0128	87.7631
<b>Total</b>	<b>7.1441</b>	<b>26.6646</b>	<b>17.9163</b>	<b>0.1233</b>	<b>7.5895</b>	<b>0.4577</b>	<b>8.0472</b>	<b>2.0579</b>	<b>0.4356</b>	<b>2.4935</b>	<b>267.1092</b>	<b>12,632.5874</b>	<b>12,899.6965</b>	<b>16.3211</b>	<b>0.0220</b>	<b>13,314.2685</b>

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	12/1/2020	11/30/2020	5	0	



IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 33.25**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**3.2 Site Preparation - 2020**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**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	1.2919	25.1592	17.0908	0.1198	7.5895	0.4027	7.9923	2.0579	0.3845	2.4424	0.0000	11,355.4052	11,355.4052	0.1932	0.0000	11,360.2351
Unmitigated	1.2919	25.1592	17.0908	0.1198	7.5895	0.4027	7.9923	2.0579	0.3845	2.4424	0.0000	11,355.4052	11,355.4052	0.1932	0.0000	11,360.2351

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,922.83	1,291.04	1,194.90	19,241,072	19,241,072
Total	1,922.83	1,291.04	1,194.90	19,241,072	19,241,072

**4.3 Trip Type Information**

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	30.58	8.40	6.90	100.00	0.00	0.00	100	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Unrefrigerated Warehouse-No Rail	0.416000	0.029000	0.142000	0.091000	0.054000	0.000000	0.066000	0.202000	0.000000	0.000000	0.000000	0.000000	0.000000

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	854.3875	854.3875	0.0353	7.3000e-003	857.4441
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	854.3875	854.3875	0.0353	7.3000e-003	857.4441
NaturalGas Mitigated	0.0104	0.0943	0.0792	5.7000e-004		7.1600e-003	7.1600e-003		7.1600e-003	7.1600e-003	0.0000	102.6095	102.6095	1.9700e-003	1.8800e-003	103.2192
NaturalGas Unmitigated	0.0104	0.0943	0.0792	5.7000e-004		7.1600e-003	7.1600e-003		7.1600e-003	7.1600e-003	0.0000	102.6095	102.6095	1.9700e-003	1.8800e-003	103.2192

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Unrefrigerated Warehouse-No Rail	1.92283e+006	0.0104	0.0943	0.0792	5.7000e-004		7.1600e-003	7.1600e-003		7.1600e-003	7.1600e-003	0.0000	102.6095	102.6095	1.9700e-003	1.8800e-003	103.2192
<b>Total</b>		<b>0.0104</b>	<b>0.0943</b>	<b>0.0792</b>	<b>5.7000e-004</b>		<b>7.1600e-003</b>	<b>7.1600e-003</b>		<b>7.1600e-003</b>	<b>7.1600e-003</b>	<b>0.0000</b>	<b>102.6095</b>	<b>102.6095</b>	<b>1.9700e-003</b>	<b>1.8800e-003</b>	<b>103.2192</b>

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Unrefrigerated Warehouse-No Rail	1.92283e+006	0.0104	0.0943	0.0792	5.7000e-004		7.1600e-003	7.1600e-003		7.1600e-003	7.1600e-003	0.0000	102.6095	102.6095	1.9700e-003	1.8800e-003	103.2192
<b>Total</b>		<b>0.0104</b>	<b>0.0943</b>	<b>0.0792</b>	<b>5.7000e-004</b>		<b>7.1600e-003</b>	<b>7.1600e-003</b>		<b>7.1600e-003</b>	<b>7.1600e-003</b>	<b>0.0000</b>	<b>102.6095</b>	<b>102.6095</b>	<b>1.9700e-003</b>	<b>1.8800e-003</b>	<b>103.2192</b>

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	71960	22.9280	9.5000e-004	2.0000e-004	23.0100
Unrefrigerated Warehouse-No Rail	2.60955e+006	831.4595	0.0343	7.1000e-003	834.4341
<b>Total</b>		<b>854.3875</b>	<b>0.0353</b>	<b>7.3000e-003</b>	<b>857.4441</b>



## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	71960	22.9280	9.5000e-004	2.0000e-004	23.0100
Unrefrigerated Warehouse-No Rail	2.60955e+006	831.4595	0.0343	7.1000e-003	834.4341
<b>Total</b>		<b>854.3875</b>	<b>0.0353</b>	<b>7.3000e-003</b>	<b>857.4441</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.7171	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828
Unmitigated	5.7171	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828

**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	0.6567					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.0566					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7500e-003	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828
<b>Total</b>	<b>5.7171</b>	<b>3.7000e-004</b>	<b>0.0401</b>	<b>0.0000</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.0777</b>	<b>0.0777</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0828</b>

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**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	0.6567					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.0566					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7500e-003	3.7000e-004	0.0401	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0777	0.0777	2.1000e-004	0.0000	0.0828
<b>Total</b>	<b>5.7171</b>	<b>3.7000e-004</b>	<b>0.0401</b>	<b>0.0000</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.0777</b>	<b>0.0777</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0828</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	70.9444	0.5204	0.0128	87.7631
Unmitigated	70.9444	0.5204	0.0128	87.7631

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	15.8854 / 0	70.9444	0.5204	0.0128	87.7631
<b>Total</b>		<b>70.9444</b>	<b>0.5204</b>	<b>0.0128</b>	<b>87.7631</b>

## IDI Rider 2 &amp; 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	15.8854 / 0	70.9444	0.5204	0.0128	87.7631
<b>Total</b>		<b>70.9444</b>	<b>0.5204</b>	<b>0.0128</b>	<b>87.7631</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	262.0695	15.4879	0.0000	649.2660
Unmitigated	262.0695	15.4879	0.0000	649.2660

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1291.04	262.0695	15.4879	0.0000	649.2660
<b>Total</b>		<b>262.0695</b>	<b>15.4879</b>	<b>0.0000</b>	<b>649.2660</b>

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1291.04	262.0695	15.4879	0.0000	649.2660
<b>Total</b>		<b>262.0695</b>	<b>15.4879</b>	<b>0.0000</b>	<b>649.2660</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	5	4.00	365	200	0.37	Electrical

IDI Rider 2 & 4 and PVSD Improvement (Operations - Unmitigated) - Riverside-South Coast County, Annual

**UnMitigated/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
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/Backhoes	0.1247	1.4108	0.7063	2.8900e-003		0.0476	0.0476		0.0438	0.0438	0.0000	254.2028	254.2028	0.0822	0.0000	256.2582
<b>Total</b>	<b>0.1247</b>	<b>1.4108</b>	<b>0.7063</b>	<b>2.8900e-003</b>		<b>0.0476</b>	<b>0.0476</b>		<b>0.0438</b>	<b>0.0438</b>	<b>0.0000</b>	<b>254.2028</b>	<b>254.2028</b>	<b>0.0822</b>	<b>0.0000</b>	<b>256.2582</b>

**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**



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