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## **Attachment 1**

### Air Quality and Greenhouse Gas Emissions Analysis



March 16, 2022

Dudek  
38 North Marengo Avenue  
Pasadena, CA 91101

**Subject: Ventura Compressor Station Alternatives Analysis Methodology Writeup**

Dear Dudek:

Due to changes to the operating environment of Southern California Gas Company's (SoCalGas's) natural gas transmission system, SoCalGas has proposed to modernize the Ventura Compressor Station (VCS), by replacing three existing natural gas compressors with four new natural gas compressors within a new compressor building and other associated improvements (planned project).

In response to letters from the California Public Utilities Commission (CPUC), SoCalGas is evaluating four alternative site locations in addition to the existing VCS site for the project. For each of the four alternative site locations, two equipment configurations were reviewed, one with all four or five compressor engines fueled with only natural gas (NG), as well as a hybrid option of two or three NG compressors and two electric driven compressors (EDCs). Yorke Engineering, LLC (Yorke) was retained by Dudek to assist in the preparation of an environmental evaluation for SoCalGas as part of this study of potential alternative site locations and equipment configurations. Yorke's analysis evaluated air quality and greenhouse gas (GHG) impacts from construction (on-site and off-site) as well as operational impacts of each equipment configuration.

## SITE DESCRIPTIONS

Five sites were evaluated including the proposed project located at the existing VCS site, and four alternative site locations. These are briefly described below.

### *Option 1: VCS Existing Site*

The existing VCS location is flat and will require a minimal amount of grading. No new pipelines or electrical interconnection will be required, and no road improvements will be necessary. The Hybrid option will require a new substation.

### *Option 2: Avocado Site*

The Avocado site is a hillside location on private land. It will require a large amount of elevated grading as well as some flat grading. Development of this site will require widening, regrading, and paving of an existing access road. New pipelines through open space land use areas will be required to connect to existing main lines. The Hybrid option (2B) will require a new electrical interconnect and a substation.

### *Option 3: Ventura Steel*

The Ventura Steel option is located on an industrial site within the County of Ventura. This site is flat and will require some flat grading. New pipelines will be required to tie in to three existing main lines. A pipeline system will pass under a major roadway (Ventura Avenue), impacting non-industrial land use areas for most of its length and requiring closure of one side of the road at a

time. The other new pipelines will largely impact open space land use areas. The Ventura Steel site has also been estimated to require 3,600 additional linear feet of roads to access the new pipeline route. The Hybrid option (3B) will require aboveground electrical utility extensions and a substation.

#### ***Option 4: Devil's Canyon Road***

The Devil's Canyon Road option is located on a previously developed, largely flat site, and will require some flat grading. An existing access road will require some upgrades to accommodate the project. New pipelines are required to connect to existing main lines. Pipeline work will also include road reconstruction along the pipeline path to stabilize the pipeline location. The Hybrid option (4B) will require a new electrical interconnect and a substation.

#### ***Option 5: County Line***

The County Line site is located within a vacant parcel of land designated and zoned for agricultural use, within the County of Ventura on the border of Santa Barbara County. The site is hilly and will require a large amount of elevated grading as well as some flat grading. New pipelines and a depressurization line will be required to connect to existing main lines. Access road improvements will also be required. To overcome a greater pressure differential due to the location being farther north in the SoCalGas distribution system than the other four sites, an additional NG compressor is required at this location, i.e., five NG compressors rather than four for the NG-Only options and two NG compressors along with three EDCs rather than two of each for the Hybrid options at the other four sites. The Hybrid option (5B) will require a new electrical interconnect and a substation.

For each alternative site, expected areas and distances were identified based on the construction assumptions provided, estimates based on previous project data, and analysis of the GIS data. These values were used to scale the emission factors and estimate the emissions associated with each activity at each site.

## **CONSTRUCTION EMISSIONS**

For each alternative site Yorke generated activity-based emission factors to evaluate construction of project components given various site conditions. The activities used are construction actions that the alternatives hold in common for a project to construct a natural gas compressor station such as has been proposed at the existing VCS. To standardize across variations, common phases of a construction project were grouped into activity categories.

### **Activity Categories**

Rankings of sites within the rubric are based on construction activities expected at each site:

- Grading – Flat: grading on a relatively flat surface, without any major elevation changes needed;
- Grading – Elevated: grading where large amounts of earthworks may be involved, including excavation of hillsides, and typically involves more equipment than Grading – Flat;
- Powerline: linear construction for new or upgraded electrical transmission lines; includes trenching and power pole erection as well as pulling and reconductoring of lines;

- Pipeline – Street: linear construction for new gas pipeline under existing roadway to connect into existing main lines, and includes equipment used for trenching, backfilling, and paving;
- Pipeline – Open Space: linear construction for new gas pipeline in undeveloped land to connect into existing main lines, and includes trenching and backfill;
- Compressor Station: construction of the footprint of the new facility and structures housing the new compressor station equipment; and
- Substation: construction of a new substation at the compressor facility.

## Representative Data

Representative construction equipment and schedule data from other recent, similar pipeline and compressor station modernization projects were extracted for input into the California Emissions Estimator Model® (CalEEMod) to estimate construction emissions. Equipment inventories were developed based on representative project phases and consolidated to correlate to the activity categories above.

## Emission Factors

To generate emission factors for the various construction activities, the CalEEMod version 2020.4.0 was used. CalEEMod is the official statewide land use computer model designed to provide a uniform platform for estimating potential criteria pollutant and GHG emissions associated with construction and operation of projects. The model quantifies direct emissions from construction and vehicle use, as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The mobile source emission factors used in the model, published by the California Air Resources Board (CARB), include the Pavley standards and Low Carbon Fuel Standards. The emissions model also identifies project design features, regulatory measures, and selectable mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from the selected measures. CalEEMod was developed by the California Air Pollution Control Officers Association (CAPCOA) in collaboration with California air districts. Default land use data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) were provided by the various California air districts such as the Ventura County Air Pollution Control District (VCAPCD) to account for local requirements and conditions.

Each representative equipment inventory was entered into CalEEMod, along with an average duration in days and a unit measurement appropriate to the construction activity involved. For example, per acre was used for grading, and per mile was used for pipeline construction. The CalEEMod simulations were run to determine the amount of pollutants and GHGs that would be emitted for construction during each activity. For air quality, the focus of the on-site construction analysis is on oxides of nitrogen ( $\text{NO}_x$ ) and respirable particulate matter ( $\text{PM}_{10}$ ) because construction activities generally cause substantial emissions of these pollutants and Ventura County is non-attainment for the California Ambient Air Quality Standards for ozone (and  $\text{NO}_x$  is an ozone precursor) and  $\text{PM}_{10}$ . The GHG emissions were obtained from CalEEMod in the form of metric tons (MT) of carbon dioxide equivalents ( $\text{CO}_2\text{e}$ ) for the total construction activity. After the selected scenarios were run, the emissions were normalized to produce the emission factors that can be applied to scale for each location based on the types and amount of that activity.

required. Emission factors were identified as associated with either an on-site or an off-site construction activity.

### ***On-Site Construction Activity-Based Emission Factors***

On-site construction emissions include site preparation, grading, and construction within the footprint of the future compressor station. Activity-based emission factors used for this evaluation are Grading – Flat, Grading – Elevated, Compressor Station, and Substation (where applicable). Emission factors for these activities are shown in Table 1. These factors represent the maximum emissions per unit of measure to provide a conservative estimate.

**Table 1: On-Site Construction Activity-Based Emission Factors**

Construction Activity	NO <sub>x</sub> (pound [lb]/acre)	PM <sub>10</sub> (lb/acre)	CO <sub>2e</sub> (MT/acre)
Grading – Flat	1,855	495	224
Grading – Elevated	5,186	675	822
Compressor Station	2,678	512	395
Substation	2,081	118	466

### ***Off-Site Construction Activity-Based Emissions Factors***

Off-site construction emissions include those from equipment used for pipeline, powerline, and road work. Activity-based emission factors used for this evaluation are Pipeline-Street, Pipeline-Open Space, and Powerline. Since linear component construction is spread over miles, the air quality ranking is based on total length of the components and only GHG emissions were calculated for off-site construction. GHG emission factors for these activities are shown in Table 2. These factors represent the maximum emissions per unit of measure to provide a conservative estimate.

**Table 2: Off-Site Construction Activity-Based Emission Factors**

Construction Activity	CO <sub>2e</sub> (MT/mile)
Powerline	166
Pipeline – Street	186
Pipeline – Open Space	78

### **Construction Air Quality and GHG Results**

For each site alternatives analysis, the site options have been assigned a number and a letter (A or B) for use in the rubric to correspond to the two equipment configuration options, Option A designated the NG-Only option and Option B designated the Hybrid option. Results of the emissions analysis for on-site and off-site construction activities are presented for each alternative by equipment configuration option.

#### ***On-Site Construction Emissions***

Estimated acreages for the Compressor Station and Substation activities are based on the acreages from the example projects used for developing equipment inventories for input into CalEEMod. Acreages for grading are based on the “new disturbance” areas from the construction assumptions, as well as analysis of the GIS data to determine the amount of

flat versus elevated grading. Elevated area is assumed as any area that has a greater than 20 percent slope. The scaling values for the NG-Only options are shown in Table 3 and the Hybrid options in Table 4.

**Table 3: On-Site Construction Scaling Values (Acres) – NG-Only Option**

Activity	Units	Option 1A: Existing Site – NG	Option 2A: Avocado Site – NG	Option 3A: Ventura Steel – NG	Option 4A: Devil's Canyon Road - NG	Option 5A: County Line – NG
Grading – Flat	Acres	0.47	0.62	0.47	0.47	4.43
Grading – Elevated	Acres	0	14.44	0	0	7.91
Compressor Station	Acres	3.95	3.95	3.95	3.95	3.95
Substation	Acres	0	0	0	0	0

**Table 4: On-Site Construction Scaling Values (Acres) – Hybrid Option**

Activity	Units	Option 1B: Existing Site – Hybrid	Option 2B: Avocado Site – Hybrid	Option 3B: Ventura Steel – Hybrid	Option 4B: Devil's Canyon Road – Hybrid	Option 5B: County Line – Hybrid
Grading – Flat	Acres	0.47	0.62	0.47	0.47	4.43
Grading – Elevated	Acres	0	14.44	0	0	7.91
Compressor Station	Acres	3.95	3.95	3.95	3.95	3.95
Substation	Acres	0.63	0.63	0.63	0.63	0.63

Estimated emissions from on-site construction are calculated by multiplying the emission factor by the corresponding area for that activity. The results are shown in Table 5 for the NG-Only options and in Table 6 for the Hybrid options.

**Table 5: On-Site Construction Emissions – NG-Only Options**

Pollutant	Units	Option 1A: Existing Site – NG	Option 2A: Avocado Site – NG	Option 3A: Ventura Steel – NG	Option 4A: Devil's Canyon Road – NG	Option 5A: County Line – NG
NO <sub>x</sub>	Pounds	11,450	86,614	11,450	11,450	59,817
PM <sub>10</sub>	Pounds	2,255	12,076	2,255	2,255	9,555
CO <sub>2e</sub>	MT	1,666	13,569	1,666	1,666	9,055

**Table 6: On-Site Construction Emissions – Hybrid Options**

Pollutant	Units	Option 1B: Existing Site – Hybrid	Option 2B: Avocado Site – Hybrid	Option 3B: Ventura Steel – Hybrid	Option 4B: Devil's Canyon Road – Hybrid	Option 5B: County Line – Hybrid
NO <sub>x</sub>	Pounds	12,761	87,925	12,761	12,761	61,128
PM <sub>10</sub>	Pounds	2,329	12,151	2,329	2,329	9,629
CO <sub>2e</sub>	MT	1,959	13,862	1,959	1,959	9,348

### ***Ranking for On-Site Construction***

In the ranking rubric, air quality for the on-site construction activities is rated according to the amount of off-road construction equipment on site and duration of activity.

- For NO<sub>x</sub> emissions, the ranking levels are: 0, greater than 80,000 pounds (40 tons); 1 to 3, less than 80,000 pounds and greater than 40,000 pounds; 4 to 6, less than 40,000 pounds and greater than 8,000 pounds; 7 to 9, less than 8,000 pounds (4 tons).
- For PM<sub>10</sub> emissions, the ranking levels are: 0, greater than 10,000 pounds; 1 to 3, less than 10,000 and greater than 6,000 pounds; 4 to 6, less than 6,000 and greater than 2,000 pounds; 7 to 9, less than 2,000 pounds.

The GHG impact is rated according to the metric tons of CO<sub>2e</sub> that are directly produced from construction equipment on-site and indirectly produced, i.e., resulting from activities related to construction but not immediately on site.

- The ranking ranges for construction are: 0, greater than or equal to 20,000 MT CO<sub>2e</sub>; 1 to 3, greater than or equal to 10,000 MT CO<sub>2e</sub> but less than 20,000 MT CO<sub>2e</sub>; 4 to 6, greater than or equal to 5,000 MT CO<sub>2e</sub> but less than 10,000 MT CO<sub>2e</sub>; 7 to 9, less than 5,000 MT CO<sub>2e</sub>.

### ***Option 1A: Existing NG-Only***

The existing site is flat, with a minimal amount of new disturbance area requiring grading. As a result, the NO<sub>x</sub> and PM<sub>10</sub> emissions are in the low end of the 4 to 6 ranking range. The expected GHG emissions are under 2,000 MT.

Ranking:

- Air quality (NO<sub>x</sub>/PM<sub>10</sub>): 6
- GHG: 8

### ***Option 1B: Existing Hybrid***

The existing site is flat, with a minimal amount of new disturbance area requiring grading. A new on-site substation is not needed for the Hybrid option. As a result, both NO<sub>x</sub> and PM<sub>10</sub> emissions are also within the 4 to 6 ranking range for air quality. The expected GHG emissions are under 2,000 MT, within the lowest range of less than 5,000 MT.

Ranking:

- Air quality (NO<sub>x</sub>/PM<sub>10</sub>): 6
- GHG: 8

*Option 2A: Avocado NG-Only*

The Avocado site is very hilly (over 14 acres with a slope greater than 20%) and will require a large amount of grading and excavation; the existing site has no industrial development. As a result, both the NO<sub>x</sub> and PM<sub>10</sub> emissions are in the highest range for air quality. The increased amount of off-road equipment usage increases the GHG emissions above 10,000 MT, into the lower ranking range.

Ranking:

- Air quality (NO<sub>x</sub>/PM<sub>10</sub>): 0
- GHG: 2

*Option 2B: Avocado Hybrid*

The Avocado site is very hilly (over 14 acres with a slope greater than 20%) and will require a large amount of grading and excavation; the existing site has no industrial development. The Hybrid option will also require additional on-site construction activity for a substation. As a result, both the NO<sub>x</sub> and PM<sub>10</sub> emissions are somewhat higher than Option 2A so are also in the highest range for air quality. The increased amount of off-road equipment usage increases the GHG emissions above 10,000 MT, into the 4 to 6 range.

Ranking:

- Air quality (NO<sub>x</sub>/PM<sub>10</sub>): 0
- GHG: 2

*Option 3A: Ventura Steel NG-Only*

The Ventura Steel site is flat, with a minimal amount of new disturbance area requiring grading. As a result, the NO<sub>x</sub> and PM<sub>10</sub> emissions are in the low end of the 4 to 6 ranking range. The expected GHG emissions are under 2,000 MT, within the range of less than 5,000 MT.

Ranking:

- Air quality (NO<sub>x</sub>/PM<sub>10</sub>): 6
- GHG: 8

*Option 3B: Ventura Steel Hybrid*

The Ventura Steel site is flat, with a minimal amount of new disturbance area requiring grading. The hybrid site also requires construction of a substation, increasing the NO<sub>x</sub> and PM<sub>10</sub> emissions by less than 10% from Option 3A. As a result, both NO<sub>x</sub> and PM<sub>10</sub> emissions are within the 4 to 6 ranking range for air quality. The expected GHG emissions are under 2,000 MT, within the range of less than 5,000 MT.

Ranking:

- Air quality (NO<sub>x</sub>/PM<sub>10</sub>): 6
- GHG: 8

*Option 4A: Devil's Canyon NG-Only*

The Devil's Canyon site has minimal elevated areas, with a minimal amount of new disturbance area requiring grading. As a result, the NO<sub>x</sub> and PM<sub>10</sub> emissions are in the low end of the ranking range. The expected GHG emissions are under 2,000 MT, within the range of less than 5,000 MT.

Ranking:

- Air quality (NO<sub>x</sub>/PM<sub>10</sub>): 6
- GHG: 8

*Option 4B: Devil's Canyon Hybrid*

The Devil's Canyon site has minimal elevated areas, with a minimal amount of new disturbance area requiring grading. The hybrid site also requires construction of a substation, increasing the NO<sub>x</sub> and PM<sub>10</sub> emissions by less than 10% over Option 4A. As a result, both NO<sub>x</sub> and PM<sub>10</sub> emissions are within the 4 to 6 ranking range for air quality. The expected GHG emissions are under 2,000 MT, within the range of less than 5,000 MT.

Ranking:

- Air quality (NO<sub>x</sub>/ PM<sub>10</sub>): 6
- GHG: 8

*Option 5A: County Line NG-Only*

The County Line site is hilly (over 7.5 acres with a slope greater than 20%) and will require a large amount of grading and excavation; the existing site has no industrial development. As a result, the NO<sub>x</sub> and PM<sub>10</sub> emissions are in the 1 to 3 ranking range for air quality. The increased amount of off-road equipment usage increases the GHG emissions over the relatively flat options (1, 3, and 4), but the emissions are slightly under 10,000 MT, in the 4 to 6 range.

Ranking:

- Air quality (NO<sub>x</sub>/PM<sub>10</sub>): 2
- GHG: 4

*Option 5B: County Line Hybrid*

The County Line site is hilly (over 7.5 acres with a slope greater than 20%) and will require a large amount of grading and excavation; the existing site has no industrial development. The Hybrid option will also require additional construction activity for a substation. As a result, the NO<sub>x</sub> and PM<sub>10</sub> emissions are in the 1 to 3 ranking range for air quality. The increased amount of off-road equipment usage increases the GHG emissions over Option 5A, but the emissions are also slightly under 10,000 MT.

Ranking:

- Air quality (NO<sub>x</sub>/PM<sub>10</sub>): 2
- GHG: 4

#### ***Off-Site Construction Emissions***

Estimated distances for linear, off-site construction are provided in Table 7. These values are based on the construction assumptions provided, as well as analysis of the GIS data and land use data.

**Table 7: Length of New Linear Construction Associated with Each Site and Configuration Option**

Site	New Linear Components	Length (feet)	
		NG-Only (Option A)	Hybrid (Option B)
1. Existing	None	0	0
2. Avocado	Access Road	12,315	12,315
	Electrical Interconnect	0	4,359
	Pipeline System	982	982
	<b>Total (feet)</b>	<b>13,297</b>	<b>17,656</b>
	Total (miles)	2.52	3.34
3. Ventura Steel	Access Road	3,600	3,600
	Electrical Interconnect	0	122
	Pipeline System	26,786*	26,786*
	<b>Total (feet)</b>	<b>30,386*</b>	<b>30,508*</b>
	Total (miles)	5.75	5.78
4. Devil's Canyon	Access Road	1,892	1,892
	Electrical Interconnect	0	4,507
	Pipeline System	5,135	5,135
	<b>Total (feet)</b>	<b>7,027</b>	<b>11,534</b>
	Total (miles)	1.33	2.18
5. County Line	Access Road	2,499	2,499
	Electrical Interconnect	0	1,405
	Pipeline System	5,650	5,650
	<b>Total (feet)</b>	<b>8,149</b>	<b>9,554</b>
	Total (miles)	1.54	1.81

\* Distance totals reflect that the pipeline length for Ventura Steel is doubled for the 1.61 miles along Ventura Avenue because trenching on both sides of the street is required.

The scaling values for the NG options are shown in Table 7 and for the Hybrid options in Table 8.

**Table 8: Off-Site Construction Scaling Values – NG-Only Options**

Activity	Units	Option 1A: Existing Site – NG	Option 2A: Avocado Site – NG	Option 3A: Ventura Steel – NG	Option 4A: Devil’s Canyon Road – NG	Option 5A: County Line – NG
Powerline	Miles	0	0	0	0	0
Pipeline – Street	Miles	0	0	3.22	0.97	0
Pipeline – Open Space	Miles	0	0.19	1.85	0	1.07
Road Construction	Miles	0	2.33	0.68	0.36	0.47

**Table 9: Off-Site Construction Scaling Values – Hybrid Options**

Activity	Units	Option 1B: Existing Site – Hybrid	Option 2B: Avocado Site – Hybrid	Option 3B: Ventura Steel – Hybrid	Option 4B: Devil’s Canyon Road – Hybrid	Option 5B: County Line – Hybrid
Powerline	Miles	0	0.83	0.02	0.85	0.27
Pipeline – Street	Miles	0	0	3.22	0.97	0
Pipeline – Open Space	Miles	0	0.19	1.85	0	1.07
Road Construction	Miles	0	2.33	0.68	0.36	0.47

Estimated GHG emissions from linear, off-site construction are calculated by multiplying the emission factor by the corresponding length for each component, with the GHG emissions adjusted to reflect the complexity of the activity. Pipeline-Street emission factors are used to estimate emissions from road construction. The results are shown in Table 10 for the NG-Only options and in Table 11 for the Hybrid options.

**Table 10: Off-Site Construction Emissions – NG-Only Options**

Pollutant	Units	Option 1A: Existing Site – NG	Option 2A: Avocado Site – NG	Option 3A: Ventura Steel – NG	Option 4A: Devil’s Canyon Road – NG	Option 5A: County Line – NG
CO <sub>2</sub> e	MT	0	448	870	248	171

**Table 11: Off-Site Construction Emissions – Hybrid Options**

Pollutant	Units	Option 1B: Existing Site – Hybrid	Option 2B: Avocado Site – Hybrid	Option 3B: Ventura Steel – Hybrid	Option 4B: Devil’s Canyon Road – Hybrid	Option 5B: County Line – Hybrid
CO <sub>2</sub> e	MT	0	585	874	389	216

***Ranking for Off-Site Construction***

In the ranking rubric, scoring for air quality impact from off-site construction is based on the total length of the linear construction associated with each site. Ranking levels were set to best differentiate the potential impacts for each site.

- Based on linear feet of off-site components, the ranking levels are: 0, greater than 15,000 feet; 1 to 3, greater than 10,000 and less than 15,000 feet; 4 to 6, greater than 500 feet and less than 5,000 feet; and 7 to 9, less than 500 feet.

The GHG impact is rated according to the metric tons of CO<sub>2</sub>e that are directly produced from the types of construction equipment expected for the linear components and indirectly produced, i.e., resulting from activities related to construction but directly from the equipment used.

- The ranking ranges for off-site construction are: 0, greater than or equal to 2,000 MT CO<sub>2</sub>e; 1 to 3, greater than or equal to 1,000 MT CO<sub>2</sub>e but less than 2,000 MT CO<sub>2</sub>e; 4 to 6, greater than or equal to 500 MT CO<sub>2</sub>e but less than 1,000 MT CO<sub>2</sub>e; 7 to 9, less than 500 MT CO<sub>2</sub>e.

***Option 1A: Existing NG-Only***

The existing site for the NG-only option will not require any new off-site linear construction, so it is given the highest score of 9. Since it will require no off-site linear construction, the GHG contribution is zero, and it is given the highest score of 9.

Ranking:

- Air quality: 9
- GHG: 9

***Option 1B: Existing Hybrid***

The existing site for the Hybrid option will not require any new off-site linear construction, so it is given the highest score of 9. Since it will require no off-site linear construction, the GHG contribution is zero, and it is given the highest score of 9.

Ranking:

- Air quality: 9
- GHG: 9

*Option 2A: Avocado NG-Only*

The Avocado site will require construction of two pipelines to connect to the existing main lines. It will also require grading, widening, and paving of an existing road to accommodate plant traffic to the new site. All this linear construction is adjacent to open space land and is estimated to be a total of 13,297 feet, which is in the 1 to 3 ranking range.

GHG emissions from off-site construction are close to the less than 500 MT threshold so it is given a score of 7.

Ranking:

- Air quality: 2
- GHG: 7

*Option 2B: Avocado Hybrid*

The Avocado site for the Hybrid option will require construction of two pipelines to connect to the existing main lines. It will also require grading, widening, and paving of an existing road to accommodate plant traffic to the new site. In addition, it will require an electrical interconnect to accommodate the increased demand from the EDCs. All linear construction is adjacent to open space land and totals an estimated 17,656 feet, which is in the highest range.

GHG emissions from off-site construction are in the range just above 500 MT, so it is given a score of 6.

Ranking:

- Air quality: 0
- GHG: 6

*Option 3A: Ventura Steel NG-Only*

For the NG-Only option, the Ventura Steel site will require extensive pipeline work to connect to existing main lines. Two pipelines will be located under Ventura Avenue to connect to the main pipelines at the existing Ventura Compressor Station location. The 1.61-mile length of the two pipelines along Ventura Avenue have been doubled since trenching along both sides of this street will be required. Additional pipelines will be constructed southeastward adjacent to open space and residential areas. New access roads will be needed to reach the pipeline routes. In all, an estimated 30,386 feet of linear components will be constructed, placing this option far above the highest level value.

GHG emissions from off-site construction are in the range between 500 and 1,000 MT.

Ranking:

- Air quality: 0
- GHG: 4

*Option 3B: Ventura Steel Hybrid*

For the Hybrid option, the Ventura Steel site will require extensive pipeline work to connect to existing main lines. Two pipelines will be located under Ventura Avenue to connect to the main pipelines at the existing Ventura Compressor Station location. The 1.61-mile length of the two pipelines along Ventura Avenue have been doubled since trenching along both sides of this street will be required. Additional pipelines will be constructed southeastward adjacent to open space and residential areas. New access roads will be needed to reach the pipeline routes. The Hybrid option will also require a new powerline due to increased power demand. In all, an estimated 30,508 feet of linear components will be constructed, placing this option far above the highest level value.

GHG emissions from off-site construction are slightly higher for the Hybrid option than the NG-Only option, but still within the 4 to 6 range.

Ranking:

- Air quality: 0
- GHG: 4

*Option 4A: Devil's Canyon NG-Only*

For the NG-Only option, Devil's Canyon will require a new pipeline beneath an upgraded roadway, as well as additional access road work to the northeast. All linear construction is through open space and is estimated to be a total of 7,027 feet, which is in the middle of the ranking range.

GHG emissions from off-site construction are in the range below 500 MT.

Ranking:

- Air quality: 5
- GHG: 8

*Option 4B: Devil's Canyon Hybrid*

For the Hybrid option, Devil's Canyon will require a new pipeline beneath an upgraded roadway, as well as additional access road work to the northeast. The Hybrid option will require almost a mile of new electrical interconnect and a substation. All this linear construction is through open space, and totals an estimated 11,534 feet, which raises this site's Hybrid option to the 4 to 6 ranking range.

GHG emissions from off-site construction are in the lowest range but slightly higher than the NG-Only option.

Ranking:

- Air quality: 3
- GHG: 7

*Option 5A: County Line NG-Only*

For the NG-Only option, County Line will require a new pipeline to connect to an existing main line, as well as a depressurization line. Access road improvements are also required. All this linear construction is through open space, and totals an estimated 8,149 feet, which is in the middle of the ranking range.

GHG emissions from off-site construction are well below the less than 500 MT threshold.

Ranking:

- Air quality: 5
- GHG: 9

*Option 5B: County Line Hybrid*

For the Hybrid option, County Line will require a new pipeline to connect to an existing main line, as well as a depressurization line. Access road improvements are also required. In addition, 1,405 feet of electrical interconnect and a new substation is required to accommodate the increased power requirements for the EDCs. All this linear construction is through open space, and totals an estimated 9,554 feet, which is near the top of the ranking range.

GHG emissions from off-site construction are well below the less than 500 MT threshold.

Ranking:

- Air quality: 4
- GHG: 9

## OPERATIONAL EMISSIONS

As proposed, the operational emissions will be the same as proposed for the existing VCS site with four engine-driven NG compressors for four of the sites and only vary for the County Line site (Options 5A and 5B), which requires an additional compressor over the others due to its location. There will also be variation in emissions associated with the compressor drivers in the NG-only option as compared to the Hybrid option since the Hybrid option has fewer NG compressors and thus fewer direct emissions than the NG-Only option.

The Hybrid option replaces two of the NG compressors with two EDCs of equivalent horsepower (and also includes an additional NG compressor replacement with an EDC in the case of Option 5), essentially cutting the expected direct emissions in half. However, the Hybrid option will require electricity to operate the EDCs, and indirect GHG may be emitted associated with additional electrical generation, whereas the NG-only option has negligible indirect GHG emissions.

### Representative Data

For operational emissions, calculations for the new proposed engine-driven NG compressors were taken from the Authority to Construct (ATC) application that was submitted to the VCAPCD for the VCS Modernization Project at the existing site, which is based on potential to emit (PTE). Specifically, each of the four (or five) engine compressors were assumed to operate up to 24 hours

per day, 7 days per week and associated PTE emissions were calculated. For the Hybrid option, it was assumed that each of the two (or three) natural gas engine compressors and each of the two EDCs would operate up to 24 hours per day, 7 days per week, for the direct criteria and GHG emissions calculations, and for the indirect GHG emission calculations. Operational emissions for the Hybrid option were based on contributions from the reduced number of NG compressors, plus additional GHG emissions associated with the indirect electricity needed to operate the EDCs. Operational emissions for both equipment configurations were assumed to be roughly the same for Options 1-4, so was not a differentiator of those sites for this analysis; Option 5 requires an additional NG compressor for a total of five units, resulting in higher emissions. PM<sub>10</sub> from this equipment are expected to be low during operation since either NG or electricity will be used for fuel, and only NO<sub>x</sub> emissions are ranked.

### Emission Factors and Calculations

As noted above, operational emissions for the proposed Waukesha 1,900 brake horsepower engines that drive the NG compressors were based on the ATC application submitted to the VCAPCD for modernization of the existing VCS site. These emissions calculations relied on the engine manufacturer's data as well as standard natural gas fired combustion for the proposed engines and accounted for VCAPCD best available control technology (BACT) requirements.

Operational NO<sub>x</sub> emissions for the Hybrid option are based on two NG-fired engines. It is assumed that the Hybrid option will operate all compressors (both natural gas and electric) 24 hours a day, seven days a week.

For this analysis, the Western Electricity Coordinating Council (WECC) California and Mexico subregion (CAMX) emission factor was used to estimate indirect GHG emissions for electricity use for the EDCs. This factor is an average of the regional power mix, accounting for renewable energy generation as well as fossil-fueled generation to determine an average emission factor for pounds of CO<sub>2</sub>e per megawatt-hour produced. It is assumed that the Hybrid option will operate all compressors (both natural gas and electric) 24 hours a day, seven days a week (8,760 hours/year).

### Results

The shift from the NG-Only option to a Hybrid option reduces the localized emissions of criteria pollutants and direct GHG emissions, but increased power demand from the electric compressors will increase indirect GHG emissions depending on how the power that is used is generated.

Estimated operational NO<sub>x</sub> emissions are presented in Table 12. The ranking ranges for operational NO<sub>x</sub> emissions are: 0, greater than or equal to 12 tons/yr (0); 1 to 3, greater than or equal to 8 tons/yr but less than 12 tons/yr (1-3); 4 to 6, greater than or equal to 4 tons/yr but less 8 tons/yr (4-6); and 7 to 9, less than 4 tons/yr (7-9).

**Table 12: Operational NO<sub>x</sub> Emissions**

	<b>Options 1A-4A NG-Only</b>	<b>Options 1B-4B Hybrid</b>	<b>Option 5A NG-Only</b>	<b>Option 5B Hybrid</b>
NO <sub>x</sub> (tons/yr/engine)	2.8	2.8	2.8	2.8
Number of engines	4	2	5	2
Total NO <sub>x</sub> (tons/yr)	11	5.6	14	5.6

The GHG impact is rated according to the MT/year of CO<sub>2</sub>e that are directly produced from equipment and indirectly produced, indirectly produced, e.g., as a result of electricity generated elsewhere that is used on site. The results of the GHG calculations are presented in Table 13. The ranking ranges for GHG emissions are: 0, greater than or equal to 50,000 MT/yr CO<sub>2</sub>e; 1 to 3, greater than or equal to 25,000 MT/yr CO<sub>2</sub>e but less than 50,000 MT/yr CO<sub>2</sub>e; 4 to 6, greater than or equal to 10,000 MT/yr CO<sub>2</sub>e but less than 25,000 MT/yr CO<sub>2</sub>e; and 7 to 9, less than 10,000 MT/yr CO<sub>2</sub>e.

**Table 13: Operational Greenhouse Gas Emissions**

	Options 1A-4A NG-Only	Options 1B-4B Hybrid	Option 5A NG-Only	Option 5B Hybrid
Direct GHG (MT CO <sub>2</sub> e/yr/engine)	6,959	6,959	6,959	6,959
Indirect GHG (MT CO <sub>2</sub> e/yr/EDC)	2,750	2,750	2,750	2,750
Number of engines	4	2	5	2
Number of EDCs	0	2	0	3
Total MT CO <sub>2</sub> e/yr	27,836	19,418	34,795	22,168

***Ranking for Operations Emissions***

***Option 1A-4A: NG-Only***

Options 1 through 4 have the same ranking for Option A.

- Air Quality: 1
- GHG: 3

For air quality, the estimated emissions of NO<sub>x</sub> for the NG-Only option fall in the 8 to 12 tons/yr category. Since 11 tons/yr is closer to the upper end of the emission range, Option A was scored a 1.

For GHG, the estimated emissions for the NG-Only option fall in the 25,000 to 50,000 MT/yr category. Since 27,836 MT/yr is closer to the lower end of the range, Option A was scored a 3.

***Option 1B-4B: Hybrid***

Options 1 through 4 have the same ranking for Option B.

- Air Quality: 5
- GHG: 5

For air quality, the estimated emissions of NO<sub>x</sub> for the Hybrid option fall in the 4 to 8 tons/yr category. The estimated emissions of 5.5 tons/yr are in the middle of the range, so Option B was scored a 5.

For GHG, the estimated emissions for the Hybrid option fall in the 10,000 to 25,000 MT/yr category. Since 19,418 MT/yr is closer to the middle of this emissions range, Option B was scored a 5.

*Option 5A: NG-Only*

- Air Quality: 0
- GHG: 2

For air quality, the estimated emissions of NO<sub>x</sub> for the NG-Only option at County Line are in the greater than 12 tons/yr category due to the additional engine.

For GHG, the estimated emissions for the NG-Only option still fall in the 25,000 to 50,000 MT/yr category even with an additional engine, but closer to the middle of the range, so it is scored a 2.

*Option 5B: Hybrid*

- Air Quality: 5
- GHG: 5

For air quality, the estimated emissions of NO<sub>x</sub> for the Hybrid option fall in the 4 to 8 tons/yr category. The estimated emissions of 5.5 tons/yr are in the middle of the range, so Option 5B was scored a 5.

For GHG, the estimated emissions for the Hybrid option fall in the 10,000 to 25,000 MT/yr category, but closer to the high end of the range with the additional EDC, so Option B was scored a 4.

## SUMMARY AND CONCLUSION

Using objective activity-based emission factors and expected operational data, along with construction mobile source emissions estimates using CalEEMod and basic assumptions, Yorke quantitatively evaluated the various alternative site locations and equipment configurations for the air quality and GHG impact areas. These rankings are summarized in Table 14. Based on Yorke's calculations and rankings for air quality and GHG emissions for compressor station operation, on-site construction, and off-site construction support, the highest scoring option was Option 1B, the existing VCS site with the Hybrid option, which resulted in a combined score of 42. The next highest score was for the originally proposed all natural-gas option at the existing VCS site (Option 1A), with a score of 36. The highest-ranking alternative site option was Devil's Canyon Road with Hybrid option (4B), with a score of 34.

Should you have any questions or concerns, please contact Yorke Engineering at (949) 248-8490.

Sincerely,

Yorke Engineering, LLC

Enclosures:

1. Attachment 1 – Supplemental Data

**Table 14: Rubric Ranking Summary**

Topic Areas	Option 1: Ventura – Existing Site North Olive Street		Option 2: Avocado Site		Option 3: Ventura Steel		Option 4: Devil's Canyon Road		Option 5: County Line	
	NG-Only (A)	Hybrid (B)	NG-Only (A)	Hybrid (B)	NG-Only (A)	Hybrid (B)	NG-Only (A)	Hybrid (B)	NG-Only (A)	Hybrid (B)
<b>Environmental Considerations: Operational</b>	4	10	4	10	4	10	4	10	2	9
Air Quality	1	5	1	5	1	5	1	5	0	5
GHGs (Direct and Indirect)	3	5	3	5	3	5	3	5	2	4
<b>Environmental Considerations: On-Site Construction</b>	14	14	2	2	14	14	14	14	6	6
Air Quality	6	6	0	0	6	6	6	6	2	2
GHGs (Direct and Indirect)	8	8	2	2	8	8	8	8	4	4
<b>Environmental Considerations: Off-Site Construction for New Utilities</b>	18	18	9	6	4	4	13	10	14	13
Air Quality	9	9	2	0	0	0	5	3	5	4
GHGs (Direct and Indirect)	9	9	7	6	4	4	8	7	9	9
<b>Total Air Quality and GHG Score</b>	36	42	15	18	22	28	31	34	22	28

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## **ATTACHMENT 1 – SUPPLEMENTAL DATA**

### CalEEMod Emission Factors

#### Maximum Emissions per mile or per acre by Construction Activity

Construction Activity	Emission Factor Units	NOX	PM10 Total	CO2e (MT)*
Powerline	lb/mile	1308	102	166
Grading - Flat	lb/acre	1855	495	224
Grading - Elevated	lb/acre	5186	675	822
Compressor Station	lb/acre	2678	512	395
Pipeline - Street	lb/mile	1815	94	186
Pipeline - Open Space	lb/mile	725	85	78
Substation	lb/acre	2081	118	466

Source: CalEEMod version 2020.4.0

Notes:

Lbs/day are computed from total emissions and number of working days (weekdays) for each phase.

\*CO2e is in Metric Tons per mile or Metric Tons per acre

### Ventura Compressor Station Alternative Sites - Scaling Values

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road - Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
<b>Powerline</b>	Miles	0	0	0	0.83	0	0.02	0	0.85	0	0.27
<b>Pipeline - Street</b>	Miles	0	0	0	0	3.22	3.22	0.97	0.97	0	0
<b>Pipeline - Open Space</b>	Miles	0	0	0.19	0.19	1.85	1.85	0	0	1.07	1.07
<b>Grading - Flat</b>	Acres	0.47	0.47	0.62	0.62	0.47	0.47	0.47	0.47	4.43	4.43
<b>Grading - Elevated/Hill</b>	Acres	0	0	14.44	14.44	0	0	0	0	7.91	7.91
<b>Compressor Station</b>	Acres	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95
<b>Substation</b>	Acres	0	0.63	0	0.63	0	0.63	0	0.63	0	0.63
<b>Road Construction</b>	Miles	0	0	2.33	2.33	0.68	0.68	0.36	0.36	0.47	0.47

Note:

Grading - Flat and Grading - Elevated values from "New disturbance" data from SoCalGas and GIS analysis of slopes

Compressor Station footprint based on Moreno data for building construction plus paving area

Powerline - data from Dudek or estimated 100 feet of line per "new pole" as indicated on data from SoCalGas

Ventura Steel - "Pipeline - Street" length (1.78 miles) is doubled for Ventura Ave due to work on one side at a time

Ventura Compressor Station Alternative Sites - Total On-Site Construction Estimated Emissions

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road - Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
<b>NOx</b>	Pounds	11,450	12,761	86,614	87,925	11,450	12,761	11,450	12,761	59,817	61,128
<b>PM10 Total</b>	Pounds	2,255	2,329	12,076	12,150	2,255	2,329	2,255	2,329	9,555	9,629
<b>CO2e</b>	Metric Tons	1,666	1,959	13,569	13,862	1,666	1,959	1,666	1,959	9,055	9,348

From On-Site tab

Ventura Compressor Station Alternative Sites - Total Off-Site Construction Estimated Emissions

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road - Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
<b>NOx</b>	Pounds	0	0	4,368	5,448	8,425	8,455	2,416	3,532	1,635	1,983
<b>PM10 Total</b>	Pounds	0	0	235	319	524	527	125	212	135	163
<b>CO2e</b>	Metric Tons	0	0	448	585	870	874	248	389	171	216

From off-site tab

### CalEEMod Emission Factors

#### Maximum Emissions per mile or per acre by Construction Activity

Construction Activity	Emission Factor Units	NOX	PM10 Total	CO2e (MT)*
Powerline	lb/mile	1308	102	166
Grading - Flat	lb/acre	1855	495	224
Grading - Elevated	lb/acre	5186	675	822
Compressor Station	lb/acre	2678	512	395
Pipeline - Street	lb/mile	1815	94	186
Pipeline - Open Space	lb/mile	725	85	78
Substation	lb/mile	2081	118	466

Source: CalEEMod version 2020.4.0

#### Notes:

Lbs/day are computed from total emissions and number of working days (weekdays) for each phase.

\*CO2e is in Metric Tons per mile or Metric Tons per acre

### Ventura Compressor Station Alternative Sites - Scaling Values

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
<b>Powerline</b>	Miles	0.00	0.00	0.00	0.83	0.00	0.02	0.00	0.85	0.00	0.27
<b>Pipeline - Street</b>	Miles	0.00	0.00	0.00	0.00	3.22	3.22	0.97	0.97	0.00	0.00
<b>Pipeline - Open Space</b>	Miles	0.00	0.00	0.19	0.19	1.85	1.85	0.00	0.00	1.07	1.07
<b>Grading - Flat</b>	Acres	0.47	0.47	0.62	0.62	0.47	0.47	0.47	0.47	4.43	4.43
<b>Grading - Elevated/Hill</b>	Acres	0.00	0.00	14.44	14.44	0.00	0.00	0.00	0.00	7.91	7.91
<b>Compressor Station</b>	Acres	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95
<b>Substation</b>	Acres	0.00	0.63	0.00	0.63	0.00	0.63	0.00	0.63	0.00	0.63
<b>Road Construction</b>	Miles	0.00	0.00	2.33	2.33	0.68	0.68	0.36	0.36	0.47	0.47

Source: SoCalGas and Dudek

Ventura Compressor Station Alternative Sites - Grading - Flat Emissions

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
NOx	Pounds	872	872	1150	1150	872	872	872	872	8218	8218
PM10 Total	Pounds	233	233	307	307	233	233	233	233	2193	2193
CO2e	Metric Tons	105	105	139	139	105	105	105	105	992	992

Note: Scaling Value \* Emission Factor = emissions

Ventura Compressor Station Alternative Sites - Grading - Elevated Emissions

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
NOx	Pounds	0.0	0.0	74885.8	74885.8	0.0	0.0	0.0	0.0	41021.3	41021.3
PM10 Total	Pounds	0.0	0.0	9747.0	9747.0	0.0	0.0	0.0	0.0	5339.3	5339.3
CO2e	Metric Tons	0.0	0.0	11869.7	11869.7	0.0	0.0	0.0	0.0	6502.0	6502.0

Ventura Compressor Station Alternative Sites - Compressor Station Construction Emissions

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
NOx	Pounds	10578.1	10578.1	10578.1	10578.1	10578.1	10578.1	10578.1	10578.1	10578.1	10578.1
PM10 Total	Pounds	2022.4	2022.4	2022.4	2022.4	2022.4	2022.4	2022.4	2022.4	2022.4	2022.4
CO2e	Metric Tons	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3	1560.3

**Ventura Compressor Station Alternative Sites - Substation Construction Emissions**

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road - Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
<b>NOx</b>	Pounds	0	1311	0	1311	0	1311	0	1311	0	1311
<b>PM10 Total</b>	Pounds	0	74	0	74	0	74	0	74	0	74
<b>CO2e</b>	Metric Tons	0	294	0	294	0	294	0	294	0	294

**Ventura Compressor Station Alternative Sites - On-Site Construction Emissions**

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road - Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
<b>NOx</b>	Pounds	11450	12761	86614	87925	11450	12761	11450	12761	59817	61128
<b>PM10 Total</b>	Pounds	2255	2329	12076	12150	2255	2329	2255	2329	9555	9629
<b>CO2e</b>	Metric Tons	1666	1959	13569	13862	1666	1959	1666	1959	9055	9348

Note: On-site emissions = Grading-Flat + Grading-Elevated + Compressor Station

### CalEEMod Emission Factors

#### Maximum Emissions per mile or per acre by Construction Activity

Construction Activity	Emission Factor Units	NOX	PM10 Total	CO2e (MT)*
Powerline	lb/mile	1308	102	166
Grading - Flat	lb/acre	1855	495	224
Grading - Elevated	lb/acre	5186	675	822
Compressor Station	lb/acre	2678	512	395
Pipeline - Street	lb/mile	1815	94	186
Pipeline - Open Space	lb/mile	725	85	78
Substation	lb/mile	2081	118	466

Source: CalEEMod version 2020.4.0

Notes:

Lbs/day are computed from total emissions and number of working days (weekdays) for each phase.

\*CO2e is in Metric Tons per mile or Metric Tons per acre

### Ventura Compressor Station Alternative Sites - Scaling Values

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road - Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
<b>Powerline</b>	Miles	0.00	0.00	0.00	0.83	0.00	0.02	0.00	0.85	0.00	0.27
<b>Pipeline - Street</b>	Miles	0.00	0.00	0.00	0.00	3.22	3.22	0.97	0.97	0.00	0.00
<b>Pipeline - Open Space</b>	Miles	0.00	0.00	0.19	0.19	1.85	1.85	0.00	0.00	1.07	1.07
<b>Grading - Flat</b>	Acres	0.47	0.47	0.62	0.62	0.47	0.47	0.47	0.47	4.43	4.43
<b>Grading - Elevated/Hill</b>	Acres	0.00	0.00	14.44	14.44	0.00	0.00	0.00	0.00	7.91	7.91
<b>Compressor Station</b>	Acres	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95
<b>Substation</b>	Acres	0.00	0.63	0.00	0.63	0.00	0.63	0.00	0.63	0.00	0.63
<b>Road Construction</b>	Miles	0.00	0.00	2.33	2.33	0.68	0.68	0.36	0.36	0.47	0.47

Source: SoCalGas and Dudek

#### Ventura Compressor Station Alternative Sites - Powerline Emissions

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road - Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
NOx	Pounds	0	0	0	1080	0	30	0	1117	0	348
Exhaust PM10	Pounds	0	0	0	84	0	2	0	87	0	27
CO2e	Metric Tons	0	0	0	137	0	4	0	142	0	44

Note: Scaling Value \* Emission Factor = emissions

#### Ventura Compressor Station Alternative Sites - Pipeline - Street Emissions

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road - Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
NOx	Pounds	0.0	0.0	0.0	0.0	5844.1	5844.1	1765.2	1765.2	0.0	0.0
Exhaust PM10	Pounds	0.0	0.0	0.0	0.0	302.7	302.7	91.4	91.4	0.0	0.0
CO2e	Metric Tons	0.0	0.0	0.0	0.0	598.9	598.9	180.9	180.9	0.0	0.0

#### Ventura Compressor Station Alternative Sites - Pipeline-Open Space Emissions

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road - Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
NOx	Pounds	0.0	0.0	134.8	134.8	1343.6	1343.6	0.0	0.0	775.8	775.8
Exhaust PM10	Pounds	0.0	0.0	15.8	15.8	157.5	157.5	0.0	0.0	91.0	91.0
CO2e	Metric Tons	0.0	0.0	14.5	14.5	144.6	144.6	0.0	0.0	83.5	83.5

#### Ventura Compressor Station Alternative Sites - Road Construction Emissions

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road - Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
<b>NOx</b>	Pounds	0.0	0.0	4233.3	4233.3	1237.5	1237.5	650.4	650.4	859.0	859.0
<b>Exhaust PM10</b>	Pounds	0.0	0.0	219.2	219.2	64.1	64.1	33.7	33.7	44.5	44.5
<b>CO2e</b>	Metric Tons	0.0	0.0	433.8	433.8	126.8	126.8	66.7	66.7	88.0	88.0

\*Road construction uses Pipeline-street activity emission factor for calculations

#### Ventura Compressor Station Alternative Sites - Off-Site Construction Emissions

Activity	Units	Option 1A: Existing Site - Natural Gas	Option 1B: Existing Site - Hybrid	Option 2A: Avocado Site - Natural Gas	Option 2B: Avocado Site - Hybrid	Option 3A: Ventura Steel - Natural Gas	Option 3B: Ventura Steel - Hybrid	Option 4A: Devil's Canyon Road - Natural Gas	Option 4B: Devil's Canyon Road - Hybrid	Option 5A: County Line - Natural Gas	Option 5B: County Line - Hybrid
<b>NOx</b>	Pounds	0.0	0.0	4368.1	5448.0	8425.2	8455.4	2415.5	3532.0	1634.8	1982.8
<b>Exhaust PM10</b>	Pounds	0.0	0.0	235.1	319.3	524.3	526.6	125.1	212.2	135.4	162.6
<b>CO2e</b>	Metric Tons	0.0	0.0	448.3	585.4	870.3	874.1	247.5	389.2	171.5	215.7

Note: Off-site emissions = Powerline + Pipeline-Street + Pipeline-Open Space + Road Construction

\*Pipeline-street activity emission factor for calculations

**Ventura Compressor Station - GHG Emissions**

	Options 1-4 All-NG	Options 1-4 Hybrid	Option 5 All-NG	Option 5 Hybrid
<b>Hours of operation using NG</b>	8,760	8,760	8,760	8,760
<b>Hours of operation using Electric</b>	0	8,760	0	8,760
<b>Direct GHG (MT CO2e/yr/engine)</b>	6,959	6,959	6,959	6,959
<b>Indirect GHG (MT CO2e/yr/EDC)</b>	2,750	2,750	2,750	2,750
<b>Number of Engines</b>	4	2	5	2
<b>Number of EDCs</b>	0	2	0	3
<b>Total MT CO2e/yr</b>	27,836	19,418	34,795	22,168

Indirect GHG - emissions from electricity produced off-site to power compressors

**Ventura Compressor Station - NOx Emissions**

	Options 1-4 All-NG	Options 1-4 Hybrid	Option 5 All-NG	Option 5 Hybrid
<b>Hours of operation using NG</b>	8,760	8,760	8,760	8,760
<b>Hours of operation using Electric</b>	0	8,760	0	8,760
<b>NOx (ton/yr/engine)</b>	2.8	2.8	2.8	2.8
<b>Number of Engines</b>	4	2	5	2
<b>Total Nox (ton/yr)</b>	11	5.6	14	5.6

**Four Waukesha Compressors - Criteria & GHG Emissions - PTE (8,760 hrs/yr)**

Source	Engine Rating (BHP)*	HHV Heat Rate (BTU/BHP-hr)	Heat Input (mmBTU/hr)	Default HHV (BTU/cf)	Hourly Process Rate (cf/hr)	Annual Hours (PTE)	Annual Process Rate (mmcf/yr)	Process Description	Annual Capacity Factor**
Waukesha #1	1,900	7,880	14.97	1,050	14,257	8,760	124.89	4SRB w/NSCR	100.0%
Waukesha #2	0	7,880	0.00	1,050	0	0	0.00	4SRB w/NSCR	
Waukesha #3	0	7,880	0.00	1,050	0	0	0.00	4SRB w/NSCR	
Waukesha #4	0	7,880	0.00	1,050	0	0	0.00	4SRB w/NSCR	
<b>Totals</b>	<b>1,900</b>	—	<b>14.97</b>	—	<b>14,257</b>	—	<b>124.89</b>	—	—

\* Per HRA: 7,879 BTU/bhp-hr (HHV) and 1,900 BHP at 100% load. Client indicates engine rating is 1,680 BHP

\*\* Variable that limits annual fuel consumption (via permit condition) to reduce offsets needed (Rule 26.6.D.2)

Pollutant	BACT EF (lb/mmcf)	Waukesha Compressor 1		Waukesha Compressor 2		Waukesha Compressor 3		Waukesha Compressor 4	
		Annual Emissions (tons/yr)	Hourly Emissions (lb/hr)						
ROC	44.1	2.75	0.63	0.00	0.00	0.00	0.00	0.00	0.00
NO <sub>x</sub>	44.1	2.75	0.63	0.00	0.00	0.00	0.00	0.00	0.00
PM <sub>10</sub>	10.0	0.62	0.14	0.00	0.00	0.00	0.00	0.00	0.00
SO <sub>x</sub>	0.6	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00
CO	176.3	11.01	2.51	0.00	0.00	0.00	0.00	0.00	0.00
CO <sub>2</sub> e (MT/yr)	122,850	6,959	—	0	—	0	—	0	—

Pollutant	BACT EF (g/BHP-hr)	BACT EF (lb/mmcf)	BACT Conc. (ppmv @15% O <sub>2</sub> ) [gr/dscf PM <sub>10</sub> ]	New Annual PTE (tons/yr)	New Hourly PTE (lb/hr)	BACT Reference
ROC	0.15	44.1	32.8	2.75	0.63	BAAQMD AIP (96.3.2)
NO <sub>x</sub>	0.15	44.1	11.4	2.75	0.63	BAAQMD AIP (96.3.2)
PM <sub>10</sub>	0.034	10.0	0.0022	0.62	0.14	AP-42 Table 3.2-3 4SRB
SO <sub>x</sub>	0.002	0.6	0.10	0.04	0.01	AP-42 Table 3.2-3 4SRB
CO	0.6	176.3	74.9	11.01	2.51	BAAQMD AIP (96.3.2)
CO <sub>2</sub> e (MT/yr)	418.0	122,850	—	6,959	—	Climate Registry; IPCC AR5

**CAMX WECC California 2018****1,900 BHP electric compressors****Projected Actuals per compressor**

1,900 BHP  
87.5% capacity factor  
1,663 BHP  
1.341 BHP/kW  
95% motor efficiency (power factor)  
94% variable speed drive efficiency (variable frequency)  
1,388 kW  
8,760 hrs/yr  
12,161 MWh/yr  
498.45 CO<sub>2</sub>e lbs/MWh (IPCC AR2, CARB Reporting GWPs)  
2204.6 lbs/MT

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**2,750 MT CO<sub>2</sub>e/yr**

**Potential to Emit per compressor**

1,900 BHP  
87.5% capacity factor  
1,663 BHP  
1.341 BHP/kW  
95% motor efficiency (power factor)  
94% variable speed drive efficiency (variable frequency)  
1,388 kW  
8,760 hrs/yr  
12,161 MWh/yr  
498.45 CO<sub>2</sub>e lbs/MWh (IPCC AR2, CARB Reporting GWPs)  
2204.6 lbs/MT

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**2,750 MT CO<sub>2</sub>e/yr**

<b>VCS Alternative Sites - Site Elevations</b>				
<b>Avocado</b>	<b>15.06ac total</b>		Flat	Elevated
0 - 10 percent slopes	0.08		0.62	14.44
10 - 20 percent slopes	0.54			
20 - 30 percent slopes	1.7			
30 - 40 percent slopes	6.52			
40 - 50 percent slopes	3.75			
50 - 60 percent slopes	2.13			
60 - 70 percent slopes	0.34			
<b>County Line</b>	<b>12.33ac total</b>			
0 - 10 percent slopes	1.48		4.43	7.91
10 - 20 percent slopes	2.95			
20 - 30 percent slopes	3.39			
30 - 40 percent slopes	2.35			
40 - 50 percent slopes	1.8			
50 - 60 percent slopes	0.3			
60 - 70 percent slopes	0.07			
<b>Devil's Cyn Rd</b>	<b>12.88ac total</b>			
0 - 10 percent slopes	11.98		12.69	0.19
10 - 20 percent slopes	0.71			
20 - 30 percent slopes	0.19			
<b>Ventura Compressor Station</b>	<b>8.42ac total</b>			
0 - 10 percent slopes	8.42		8.42	
<b>Ventura Steel</b>	<b>10.00ac total</b>			
0 - 10 percent slopes	8.97		9.95	0.05
10 - 20 percent slopes	0.98			
20 - 30 percent slopes	0.05			
30 - 40 percent slopes	0			
40 - 50 percent slopes	0			

Elevated = any grade >20% slope

Source: Dudek

<b>VCS Alternative Sites - Non-Industrial Linear Construction</b>	
<b>Avocado</b>	<b>18,680.06ft</b>
Access Road	12,517.64ft
Electrical Interconnect	4,408.65ft
Pipeline	1,753.77ft
<b>County Line</b>	<b>11,211.11ft</b>
Access Road	2,498.95ft
Electrical Interconnect	1,410.46ft
Pipeline	7,301.70ft
<b>Devil's Cyn Rd</b>	<b>11,884.80ft</b>
Access Road	1,964.14ft
Electrical Interconnect	4,538.70ft
Pipeline	5,381.96ft
<b>Ventura Steel</b>	<b>14,617.24ft</b>
Depressurization Line	23.44ft
Pipeline	14,593.80ft

Source: Dudek

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## **ATTACHMENT 2 – CalEEMod DATA**

## SCG-VCS Project - Phase 9 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 9**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	43.56	1000sqft	1.00	43,560.00	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics -

Land Use -

Construction Phase - Honor Rancho

Off-road Equipment - Honor Rancho

Grading - Honor Rancho

Trips and VMT - Honor Rancho

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	60.00
tblGrading	AcresOfGrading	240.00	1.00
tblGrading	MaterialExported	0.00	59,701.00
tblOffRoadEquipment	HorsePower	78.00	45.00

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

tblOffRoadEquipment	HorsePower	212.00	605.00
tblOffRoadEquipment	HorsePower	85.00	385.00
tblOffRoadEquipment	HorsePower	16.00	450.00
tblOffRoadEquipment	HorsePower	158.00	728.00
tblOffRoadEquipment	HorsePower	84.00	67.00
tblOffRoadEquipment	HorsePower	187.00	139.00
tblOffRoadEquipment	HorsePower	84.00	2.00
tblOffRoadEquipment	HorsePower	203.00	97.00
tblOffRoadEquipment	HorsePower	367.00	407.00
tblOffRoadEquipment	HorsePower	65.00	73.50
tblOffRoadEquipment	HorsePower	402.00	475.00
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripLength	6.60	7.90
tblTripsAndVMT	VendorTripNumber	0.00	62.00
tblTripsAndVMT	WorkerTripLength	16.80	19.80
tblTripsAndVMT	WorkerTripNumber	58.00	405.00

**2.0 Emissions Summary****2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.3040	2.5931	2.4179	8.7300e-003	0.2442	0.0933	0.3374	0.0655	0.0869	0.1524	0.0000	808.2259	808.2259	0.1391	0.0357	822.3393
Maximum	0.3040	2.5931	2.4179	8.7300e-003	0.2442	0.0933	0.3374	0.0655	0.0869	0.1524	0.0000	808.2259	808.2259	0.1391	0.0357	822.3393

**Mitigated Construction**

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.3040	2.5931	2.4179	8.7300e-003	0.2442	0.0933	0.3374	0.0655	0.0869	0.1524	0.0000	808.2253	808.2253	0.1391	0.0357	822.3388
Maximum	0.3040	2.5931	2.4179	8.7300e-003	0.2442	0.0933	0.3374	0.0655	0.0869	0.1524	0.0000	808.2253	808.2253	0.1391	0.0357	822.3388

	ROG	NOx	CO	SO2	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	2.5236	2.5236
2	4-2-2023	7-1-2023	0.3764	0.3764
		Highest	2.5236	2.5236

**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	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1444	112.1444	6.3200e-003	1.5400e-003	112.7607
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Waste						0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water						0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926
Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2166	387.3759	0.9995	0.0203	418.4208

**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	0.1904	0.0000	4.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1444	112.1444	6.3200e-003	1.5400e-003	112.7607
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050
Waste						0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water						0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926
Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2166	387.3759	0.9995	0.0203	418.4208

	ROG	NOx	CO	SO2	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**

SCG-VCS Project - Phase 9 - Ventura County, Annual

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

## **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	9	Grading	1/19/2023	4/12/2023	5	60	Grading

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

**Acres of Grading (Grading Phase):** 1

## **Acres of Paving: 0**

**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
9	Air Compressors	1	8.00	45	0.4
9	Crawler Tractors	2	8.00	605	0.4
9	Crushing/Proc. Equipment	1	8.00	385	0.7
9	Dumpers/Tenders	6	8.00	450	0.3
9	Excavators	1	8.00	728	0.3
9	Generator Sets	1	8.00	67	0.7
9	Graders	2	8.00	139	0.4
9	Pumps	2	8.00	2	0.7
9	Rubber Tired Loaders	3	8.00	97	0.3
9	Scrapers	2	8.00	407	0.4
9	Skid Steer Loaders	1	8.00	73.5	0.3
9	Off-Highway Trucks	1	8.00	475	0.3

## 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
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## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

9	23	405.00	62.00	5,903.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
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**3.1 Mitigation Measures Construction****3.2 9 - 2023**Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3000e-004	0.0000	5.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2454	2.1072	1.7923	5.2100e-003		0.0893	0.0893		0.0831	0.0831	0.0000	467.8871	467.8871	0.1230	0.0000	470.9624
Total	<b>0.2454</b>	<b>2.1072</b>	<b>1.7923</b>	<b>5.2100e-003</b>	<b>5.3000e-004</b>	<b>0.0893</b>	<b>0.0898</b>	<b>6.0000e-005</b>	<b>0.0831</b>	<b>0.0831</b>	<b>0.0000</b>	<b>467.8871</b>	<b>467.8871</b>	<b>0.1230</b>	<b>0.0000</b>	<b>470.9624</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	5.8000e-003	0.3691	0.1014	1.6600e-003	0.0507	2.6100e-003	0.0533	0.0139	2.5000e-003	0.0164	0.0000	167.6511	167.6511	0.0114	0.0267	175.8941
Vendor	1.8700e-003	0.0775	0.0262	3.7000e-004	0.0134	4.5000e-004	0.0139	3.8700e-003	4.3000e-004	4.3000e-003	0.0000	36.5072	36.5072	1.5000e-003	5.4600e-003	38.1729
Worker	0.0509	0.0393	0.4981	1.4900e-003	0.1795	9.4000e-004	0.1805	0.0477	8.7000e-004	0.0485	0.0000	136.1805	136.1805	3.2200e-003	3.5200e-003	137.3100

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Total	0.0586	0.4859	0.6256	3.5200e-003	0.2436	4.0000e-003	0.2476	0.0655	3.8000e-003	0.0692	0.0000	340.3388	340.3388	0.0161	0.0357	351.3770
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**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					5.3000e-004	0.0000	5.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2454	2.1072	1.7923	5.2100e-003		0.0893	0.0893		0.0831	0.0831	0.0000	467.8865	467.8865	0.1230	0.0000	470.9618
Total	0.2454	2.1072	1.7923	5.2100e-003	5.3000e-004	0.0893	0.0898	6.0000e-005	0.0831	0.0831	0.0000	467.8865	467.8865	0.1230	0.0000	470.9618

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.8000e-003	0.3691	0.1014	1.6600e-003	0.0507	2.6100e-003	0.0533	0.0139	2.5000e-003	0.0164	0.0000	167.6511	167.6511	0.0114	0.0267	175.8941
Vendor	1.8700e-003	0.0775	0.0262	3.7000e-004	0.0134	4.5000e-004	0.0139	3.8700e-003	4.3000e-004	4.3000e-003	0.0000	36.5072	36.5072	1.5000e-003	5.4600e-003	38.1729
Worker	0.0509	0.0393	0.4981	1.4900e-003	0.1795	9.4000e-004	0.1805	0.0477	8.7000e-004	0.0485	0.0000	136.1805	136.1805	3.2200e-003	3.5200e-003	137.3100

SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Total	0.0586	0.4859	0.6256	3.5200e-003	0.2436	4.0000e-003	0.2476	0.0655	3.8000e-003	0.0692	0.0000	340.3388	340.3388	0.0161	0.0357	351.3770
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## **4.0 Operational Detail - Mobile**

#### **4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050
Unmitigated	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	171.19	279.66	221.72	749,142	749,142
Total	171.19	279.66	221.72	749,142	749,142

### **4.3 Trip Type Information**

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
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**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.0069

**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	63.8872	63.8872	5.3900e-003	6.5000e-004	64.2168
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.8872	63.8872	5.3900e-003	6.5000e-004	64.2168
NaturalGas Mitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2572	48.2572	9.2000e-004	8.8000e-004	48.5440
NaturalGas Unmitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2572	48.2572	9.2000e-004	8.8000e-004	48.5440

**5.2 Energy by Land Use - NaturalGas**Unmitigated

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

	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					
General Heavy Industry	904306	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2572	48.2572	9.2000e-004	8.8000e-004	48.5440	
<b>Total</b>		<b>4.8800e-003</b>	<b>0.0443</b>	<b>0.0372</b>	<b>2.7000e-004</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>48.2572</b>	<b>48.2572</b>	<b>9.2000e-004</b>	<b>8.8000e-004</b>	<b>48.5440</b>	

**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					
General Heavy Industry	904306	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2572	48.2572	9.2000e-004	8.8000e-004	48.5440	
<b>Total</b>		<b>4.8800e-003</b>	<b>0.0443</b>	<b>0.0372</b>	<b>2.7000e-004</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>48.2572</b>	<b>48.2572</b>	<b>9.2000e-004</b>	<b>8.8000e-004</b>	<b>48.5440</b>	

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e

SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Land Use	kWh/yr	MT/yr			
General Heavy Industry	360241	63.8872	5.3900e-003	6.5000e-004	64.2168
<b>Total</b>		<b>63.8872</b>	<b>5.3900e-003</b>	<b>6.5000e-004</b>	<b>64.2168</b>

## Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	360241	63.8872	5.3900e-003	6.5000e-004	64.2168
Total		63.8872	5.3900e-003	6.5000e-004	64.2168

## 6.0 Area Detail

### **6.1 Mitigation Measures Area**

ROG NOx CO SO<sub>2</sub> Fugitive PM10 Exhaust PM10 PM10 Total Fugitive PM2.5 Exhaust PM2.5 PM2.5 Total Bio- CO<sub>2</sub> NBio- CO<sub>2</sub> Total CO<sub>2</sub> CH4 N<sub>2</sub>O CO<sub>2</sub>e

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Category	tons/yr												MT/yr					
	Mitigated	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	0.0000	8.3000e-004
Unmitigated	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	0.0000	8.3000e-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	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					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	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-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					

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Architectural Coating	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	0.0000	8.3000e-004	
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-004</b>	

**7.0 Water Detail****7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	26.4571	0.3302	7.9900e-003	37.0926
Unmitigated	26.4571	0.3302	7.9900e-003	37.0926

**7.2 Water by Land Use****Unmitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Land Use	Mgal	MT/yr			
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003	37.0926
<b>Total</b>		<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

**Mitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr			
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003	37.0926
<b>Total</b>		<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

	MT/yr			
Mitigated	10.9635	0.6479	0.0000	27.1617
Unmitigated	10.9635	0.6479	0.0000	27.1617

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

## 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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## 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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## SCG-VCS Project - Phase 10 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 10**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	264.00	1000sqft	6.06	264,001.06	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics - defaults

Land Use - North-South

Construction Phase - North-South

Off-road Equipment - North-South

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	132001	0
tblAreaCoating	Area_Nonresidential_Interior	396002	0
tblConstructionPhase	NumDays	230.00	19.00
tblLandUse	LandUseSquareFeet	264,000.00	264,001.06
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	231.00	226.00

## SCG-VCS Project - Phase 10 - Ventura County, Annual

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

tblOffRoadEquipment	HorsePower	84.00	49.00
tblOffRoadEquipment	HorsePower	221.00	205.00
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	14.00
tblOffRoadEquipment	UsageHours	7.00	5.00
tblOffRoadEquipment	UsageHours	7.00	5.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblProjectCharacteristics	TotalLotAcreage	0	0.63
tblProjectCharacteristics	UrbanizationLevel		Rural

SCG-VCS Project - Phase 10 - Ventura County, Annual

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

## 2.0 Emissions Summary

## 2.1 Overall Construction

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1168	0.9073	1.1254	2.1400e-003	5.5200e-003	0.0417	0.0472	2.1900e-003	0.0399	0.0421	0.0000	184.4682	184.4682	0.0300	2.0300e-003	185.8236
Maximum	0.1168	0.9073	1.1254	2.1400e-003	5.5200e-003	0.0417	0.0472	2.1900e-003	0.0399	0.0421	0.0000	184.4682	184.4682	0.0300	2.0300e-003	185.8236

## **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1168	0.9073	1.1254	2.1400e-003	5.5200e-003	0.0417	0.0472	2.1900e-003	0.0399	0.0421	0.0000	184.4680	184.4680	0.0300	2.0300e-003	185.8234
Maximum	0.1168	0.9073	1.1254	2.1400e-003	5.5200e-003	0.0417	0.0472	2.1900e-003	0.0399	0.0421	0.0000	184.4680	184.4680	0.0300	2.0300e-003	185.8234

SCG-VCS Project - Phase 10 - Ventura County, Annual

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	0.9522	0.9522
		Highest	0.9522	0.9522

## 2.2 Overall Operational

## Unmitigated Operational

### **Mitigated Operational**

## SCG-VCS Project - Phase 10 - Ventura County, Annual

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

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

**3.0 Construction Detail**Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	10	Building Construction	2/20/2023	3/17/2023	5	19	Roadwork

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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
10	Air Compressors	8	4.00	78	0.48
10	Air Compressors	2	6.00	78	0.48
10	Air Compressors	2	4.00	78	0.48
10	Bore/Drill Rigs	1	4.00	205	0.50
10	Concrete/Industrial Saws	2	4.00	81	0.73
10	Cranes	2	5.00	226	0.29
10	Cranes	4	5.00	226	0.29
10	Excavators	1	5.00	162	0.38
10	Forklifts	2	4.00	89	0.20
10	Generator Sets	6	2.00	49	0.74
10	Generator Sets	3	6.00	84	0.74

## SCG-VCS Project - Phase 10 - Ventura County, Annual

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

10	Other Construction Equipment	2	4.00	171	0.42
10	Other Construction Equipment	3	4.00	171	0.42
10	Other Construction Equipment	2	4.00	171	0.42
10	Other Construction Equipment	1	4.00	171	0.42
10	Other Construction Equipment	1	4.00	171	0.42
10	Pavers	1	4.00	125	0.42
10	Pumps	1	5.00	84	0.74
10	Pumps	1	6.00	84	0.74
10	Pumps	2	4.00	84	0.74
10	Rollers	2	5.00	80	0.38
10	Tractors/Loaders/Backhoes	5	6.00	97	0.37
10	Tractors/Loaders/Backhoes	6	4.00	97	0.37
10	Welders	14	5.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
10		232.00	46.00	2.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction****3.2 10 - 2023****Unmitigated Construction On-Site**

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

## SCG-VCS Project - Phase 10 - Ventura County, Annual

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

Off-Road	0.1066	0.8805	1.0238	1.7600e-003		0.0414	0.0414		0.0397	0.0397	0.0000	149.3766	149.3766	0.0290	0.0000	150.1014
Total	<b>0.1066</b>	<b>0.8805</b>	<b>1.0238</b>	<b>1.7600e-003</b>		<b>0.0414</b>	<b>0.0414</b>		<b>0.0397</b>	<b>0.0397</b>	<b>0.0000</b>	<b>149.3766</b>	<b>149.3766</b>	<b>0.0290</b>	<b>0.0000</b>	<b>150.1014</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	1.3000e-004	4.0000e-005	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0598	0.0598	0.0000	1.0000e-005	0.0627
Vendor	4.6000e-004	0.0192	6.4800e-003	9.0000e-005	9.7000e-004	1.1000e-004	1.0800e-003	3.8000e-004	1.1000e-004	4.9000e-004	0.0000	9.0287	9.0287	3.7000e-004	1.3500e-003	9.4406
Worker	9.7200e-003	7.5100e-003	0.0951	2.8000e-004	4.5500e-003	1.8000e-004	4.7300e-003	1.8100e-003	1.7000e-004	1.9700e-003	0.0000	26.0032	26.0032	6.1000e-004	6.7000e-004	26.2189
Total	<b>0.0102</b>	<b>0.0268</b>	<b>0.1016</b>	<b>3.7000e-004</b>	<b>5.5200e-003</b>	<b>2.9000e-004</b>	<b>5.8200e-003</b>	<b>2.1900e-003</b>	<b>2.8000e-004</b>	<b>2.4600e-003</b>	<b>0.0000</b>	<b>35.0917</b>	<b>35.0917</b>	<b>9.8000e-004</b>	<b>2.0300e-003</b>	<b>35.7222</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	0.1066	0.8805	1.0238	1.7600e-003		0.0414	0.0414		0.0397	0.0397	0.0000	149.3764	149.3764	0.0290	0.0000	150.1012

## SCG-VCS Project - Phase 10 - Ventura County, Annual

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

Total	0.1066	0.8805	1.0238	1.7600e-003		0.0414	0.0414		0.0397	0.0397	0.0000	149.3764	149.3764	0.0290	0.0000	150.1012
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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	1.3000e-004	4.0000e-005	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0598	0.0598	0.0000	1.0000e-005	0.0627
Vendor	4.6000e-004	0.0192	6.4800e-003	9.0000e-005	9.7000e-004	1.1000e-004	1.0800e-003	3.8000e-004	1.1000e-004	4.9000e-004	0.0000	9.0287	9.0287	3.7000e-004	1.3500e-003	9.4406
Worker	9.7200e-003	7.5100e-003	0.0951	2.8000e-004	4.5500e-003	1.8000e-004	4.7300e-003	1.8100e-003	1.7000e-004	1.9700e-003	0.0000	26.0032	26.0032	6.1000e-004	6.7000e-004	26.2189
Total	0.0102	0.0268	0.1016	3.7000e-004	5.5200e-003	2.9000e-004	5.8200e-003	2.1900e-003	2.8000e-004	2.4600e-003	0.0000	35.0917	35.0917	9.8000e-004	2.0300e-003	35.7222

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile****4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Total					

**4.3 Trip Type Information**

SCG-VCS Project - Phase 10 - Ventura County, Annual

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

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

## 4.4 Fleet Mix

Land Use LDA LDT1 LDT2 MDV LHD1 LHD2 MHD HHD OBUS UBUS MCY SBUS MH

## 5.0 Energy Detail

## Historical Energy Use: N

### **5.1 Mitigation Measures Energy**

## 6.0 Area Detail

### **6.1 Mitigation Measures Area**

## SCG-VCS Project - Phase 10 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****6.2 Area by SubCategory****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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0311					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0311</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0311					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0311</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>							

**7.0 Water Detail**

SCG-VCS Project - Phase 10 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

## SCG-VCS Project - Phase 11 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 11**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	43.56	1000sqft	1.00	43,560.17	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics - defaults

Land Use - San Manuel

Construction Phase - San Manuel

Off-road Equipment - San Manuel

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	21780	0
tblAreaCoating	Area_Nonresidential_Interior	65340	0
tblConstructionPhase	NumDays	100.00	80.00
tblLandUse	LandUseSquareFeet	43,560.00	43,560.17
tblOffRoadEquipment	HorsePower	231.00	500.00
tblOffRoadEquipment	HorsePower	231.00	300.00

SCG-VCS Project - Phase 11 - Ventura County, Annual

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

tblOffRoadEquipment	HorsePower	63.00	350.00
tblOffRoadEquipment	HorsePower	158.00	300.00
tblOffRoadEquipment	HorsePower	84.00	350.00
tblOffRoadEquipment	HorsePower	100.00	125.00
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	TotalLotAcreage	0	0.63
tblProjectCharacteristics	UrbanizationLevel		Rural

## 2.0 Emissions Summary

## 2.1 Overall Construction

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1570	1.0407	1.4341	4.9800e-003	0.0249	0.0342	0.0591	9.8800e-003	0.0321	0.0420	0.0000	462.1769	462.1769	0.0701	5.7800e-003	465.6514
Maximum	<b>0.1570</b>	<b>1.0407</b>	<b>1.4341</b>	<b>4.9800e-003</b>	<b>0.0249</b>	<b>0.0342</b>	<b>0.0591</b>	<b>9.8800e-003</b>	<b>0.0321</b>	<b>0.0420</b>	<b>0.0000</b>	<b>462.1769</b>	<b>462.1769</b>	<b>0.0701</b>	<b>5.7800e-003</b>	<b>465.6514</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
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SCG-VCS Project - Phase 11 - Ventura County, Annual

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

Year	tons/yr										MT/yr					
	0.1570	1.0407	1.4341	4.9800e-003	0.0249	0.0342	0.0591	9.8800e-003	0.0321	0.0420	0.0000	462.1765	462.1765	0.0701	5.7800e-003	465.6511
2023	0.1570	1.0407	1.4341	4.9800e-003	0.0249	0.0342	0.0591	9.8800e-003	0.0321	0.0420	0.0000	462.1765	462.1765	0.0701	5.7800e-003	465.6511
Maximum	0.1570	1.0407	1.4341	4.9800e-003	0.0249	0.0342	0.0591	9.8800e-003	0.0321	0.0420	0.0000	462.1765	462.1765	0.0701	5.7800e-003	465.6511

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
2	4-2-2023	7-1-2023	0.4042	0.4042
3	7-2-2023	9-30-2023	0.7871	0.7871
		Highest	0.7871	0.7871

## **2.2 Overall Operational**

### **Unmitigated Operational**

## SCG-VCS Project - Phase 11 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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	0.1701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	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	11	Building Construction	5/25/2023	9/13/2023	5	80	Building Construction

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

## SCG-VCS Project - Phase 11 - Ventura County, Annual

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

11	Generator Sets	1	10.00	350	0.74
11	Cranes	1	10.00	500	0.29
11	Aerial Lifts	2	8.00	350	0.31
11	Cranes	1	8.00	300	0.29
11	Rough Terrain Forklifts	1	8.00	125	0.40
11	Excavators	1	8.00	300	0.38

**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
11		296.00	20.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction****3.2 11 - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1066	0.9690	0.9375	3.3700e-003		0.0330	0.0330		0.0311	0.0311	0.0000	313.7689	313.7689	0.0663	0.0000	315.4263
Total	0.1066	0.9690	0.9375	3.3700e-003		0.0330	0.0330		0.0311	0.0311	0.0000	313.7689	313.7689	0.0663	0.0000	315.4263

**Unmitigated Construction Off-Site**

## SCG-VCS Project - Phase 11 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
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	8.1000e-004	0.0333	0.0113	1.6000e-004	1.6800e-003	1.9000e-004	1.8700e-003	6.6000e-004	1.9000e-004	8.5000e-004	0.0000	15.7020	15.7020	6.5000e-004	2.3500e-003	16.4184
Worker	0.0496	0.0383	0.4854	1.4500e-003	0.0233	9.2000e-004	0.0242	9.2200e-003	8.4000e-004	0.0101	0.0000	132.7060	132.7060	3.1300e-003	3.4300e-003	133.8066
<b>Total</b>	<b>0.0504</b>	<b>0.0716</b>	<b>0.4966</b>	<b>1.6100e-003</b>	<b>0.0249</b>	<b>1.1100e-003</b>	<b>0.0260</b>	<b>9.8800e-003</b>	<b>1.0300e-003</b>	<b>0.0109</b>	<b>0.0000</b>	<b>148.4080</b>	<b>148.4080</b>	<b>3.7800e-003</b>	<b>5.7800e-003</b>	<b>150.2251</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	0.1066	0.9690	0.9375	3.3700e-003		0.0330	0.0330		0.0311	0.0311	0.0000	313.7686	313.7686	0.0663	0.0000	315.4260
<b>Total</b>	<b>0.1066</b>	<b>0.9690</b>	<b>0.9375</b>	<b>3.3700e-003</b>		<b>0.0330</b>	<b>0.0330</b>		<b>0.0311</b>	<b>0.0311</b>	<b>0.0000</b>	<b>313.7686</b>	<b>313.7686</b>	<b>0.0663</b>	<b>0.0000</b>	<b>315.4260</b>

**Mitigated Construction Off-Site**

## SCG-VCS Project - Phase 11 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
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	8.1000e-004	0.0333	0.0113	1.6000e-004	1.6800e-003	1.9000e-004	1.8700e-003	6.6000e-004	1.9000e-004	8.5000e-004	0.0000	15.7020	15.7020	6.5000e-004	2.3500e-003	16.4184	
Worker	0.0496	0.0383	0.4854	1.4500e-003	0.0233	9.2000e-004	0.0242	9.2200e-003	8.4000e-004	0.0101	0.0000	132.7060	132.7060	3.1300e-003	3.4300e-003	133.8066	
Total	0.0504	0.0716	0.4966	1.6100e-003	0.0249	1.1100e-003	0.0260	9.8800e-003	1.0300e-003	0.0109	0.0000	148.4080	148.4080	3.7800e-003	5.7800e-003	150.2251	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile****4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
Total							

**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

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH

**5.0 Energy Detail**

## SCG-VCS Project - Phase 11 - Ventura County, Annual

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

Historical Energy Use: N

**5.1 Mitigation Measures Energy****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	0.1701						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.1701						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

**6.2 Area by SubCategory****Unmitigated**

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

## SCG-VCS Project - Phase 11 - Ventura County, Annual

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

Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					0.0000	0.0000		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>0.1701</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					0.0000	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>0.1701</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>										

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## SCG-VCS Project - Phase 11 - Ventura County, Annual

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

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## 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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## SCG-VCS Project - Phase 1 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 1**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	22.37	1000sqft	0.51	22,370.00	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics -

Land Use - used 1 mile

Construction Phase - Used Moreno project

Off-road Equipment - Moreno project

Off-road Equipment - Moreno project

Grading - used 1 mile

Trips and VMT - Moreno project

Architectural Coating -

Area Coating -

Vehicle Trips -

## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	1.00	6.00
tblOffRoadEquipment	HorsePower	97.00	200.00
tblOffRoadEquipment	HorsePower	221.00	200.00
tblOffRoadEquipment	HorsePower	231.00	300.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripLength	6.60	7.90
tblTripsAndVMT	VendorTripNumber	0.00	30.00
tblTripsAndVMT	WorkerTripLength	16.80	19.80
tblTripsAndVMT	WorkerTripNumber	30.00	40.00

**2.0 Emissions Summary****2.1 Overall Construction**Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr													MT/yr		
2023	0.0426	0.4054	0.4612	1.1700e-003	0.0141	0.0168	0.0309	3.8400e-003	0.0156	0.0194	0.0000	103.8506	103.8506	0.0261	1.7400e-003	105.0223
Maximum	0.0426	0.4054	0.4612	1.1700e-003	0.0141	0.0168	0.0309	3.8400e-003	0.0156	0.0194	0.0000	103.8506	103.8506	0.0261	1.7400e-003	105.0223

## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr															MT/yr	
2023	0.0426	0.4054	0.4612	1.1700e-003	0.0141	0.0168	0.0309	3.8400e-003	0.0156	0.0194	0.0000	103.8505	103.8505	0.0261	1.7400e-003	105.0222	
Maximum	0.0426	0.4054	0.4612	1.1700e-003	0.0141	0.0168	0.0309	3.8400e-003	0.0156	0.0194	0.0000	103.8505	103.8505	0.0261	1.7400e-003	105.0222	

	ROG	NOx	CO	SO2	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	0.4485	0.4485
		Highest	0.4485	0.4485

**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	

## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

Area	0.0978	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004
Energy	2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	57.5911	57.5911	3.2400e-003	7.9000e-004	57.9077
Mobile	0.0622	0.0819	0.6326	1.3500e-003	0.1478	1.0600e-003	0.1489	0.0395	9.9000e-004	0.0405	0.0000	124.5953	124.5953	7.9000e-003	5.6600e-003	126.4787
Waste						0.0000	0.0000		0.0000	0.0000	5.6310	0.0000	5.6310	0.3328	0.0000	13.9505
Water						0.0000	0.0000		0.0000	0.0000	1.6412	11.9457	13.5869	0.1696	4.1000e-003	19.0487
Total	0.1624	0.1046	0.6519	1.4900e-003	0.1478	2.7900e-003	0.1506	0.0395	2.7200e-003	0.0422	7.2721	194.1325	201.4047	0.5135	0.0106	217.3860

**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	0.0978	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004
Energy	2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	57.5911	57.5911	3.2400e-003	7.9000e-004	57.9077
Mobile	0.0622	0.0819	0.6326	1.3500e-003	0.1478	1.0600e-003	0.1489	0.0395	9.9000e-004	0.0405	0.0000	124.5953	124.5953	7.9000e-003	5.6600e-003	126.4787
Waste						0.0000	0.0000		0.0000	0.0000	5.6310	0.0000	5.6310	0.3328	0.0000	13.9505
Water						0.0000	0.0000		0.0000	0.0000	1.6412	11.9457	13.5869	0.1696	4.1000e-003	19.0487
Total	0.1624	0.1046	0.6519	1.4900e-003	0.1478	2.7900e-003	0.1506	0.0395	2.7200e-003	0.0422	7.2721	194.1325	201.4047	0.5135	0.0106	217.3860

## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

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

**3.0 Construction Detail**Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1	Site Preparation	1/2/2023	2/19/2023	5	6	SCE Trenching and Poles

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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
1	Tractors/Loaders/Backhoes	1	7.00	200	0.37
1	Skid Steer Loaders	1	7.00	65	0.37
1	Cranes	2	7.00	300	0.29
1	Rollers	2	7.00	80	0.38
1	Concrete/Industrial Saws	1	7.00	81	0.73
1	Excavators	1	7.00	158	0.38
1	Paving Equipment	1	7.00	132	0.36
1	Rollers	1	7.00	80	0.38
1	Bore/Drill Rigs	2	7.00	200	0.50

SCG-VCS Project - Phase 1 - Ventura County, Annual

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

## 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
1		12	40.00	30.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix

### **3.1 Mitigation Measures Construction**

3.2 1 - 2023

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0391	0.3813	0.4251	9.8000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	85.7003	85.7003	0.0255	0.0000	86.3368	
<b>Total</b>	<b>0.0391</b>	<b>0.3813</b>	<b>0.4251</b>	<b>9.8000e-004</b>	<b>0.0000</b>	<b>0.0166</b>	<b>0.0166</b>	<b>0.0000</b>	<b>0.0154</b>	<b>0.0154</b>	<b>0.0000</b>	<b>85.7003</b>	<b>85.7003</b>	<b>0.0255</b>	<b>0.0000</b>	<b>86.3368</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
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## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

Category	tons/yr										MT/yr					
	Hauling	Vendor	Worker	Total												
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	5.3000e-004	0.0219	7.3900e-003	1.0000e-004	3.7900e-003	1.3000e-004	3.9100e-003	1.0900e-003	1.2000e-004	1.2100e-003	0.0000	10.3045	10.3045	4.2000e-004	1.5400e-003	10.7746
Worker	2.9300e-003	2.2700e-003	0.0287	9.0000e-005	0.0103	5.0000e-005	0.0104	2.7500e-003	5.0000e-005	2.8000e-003	0.0000	7.8458	7.8458	1.9000e-004	2.0000e-004	7.9109
<b>Total</b>	<b>3.4600e-003</b>	<b>0.0241</b>	<b>0.0361</b>	<b>1.9000e-004</b>	<b>0.0141</b>	<b>1.8000e-004</b>	<b>0.0143</b>	<b>3.8400e-003</b>	<b>1.7000e-004</b>	<b>4.0100e-003</b>	<b>0.0000</b>	<b>18.1502</b>	<b>18.1502</b>	<b>6.1000e-004</b>	<b>1.7400e-003</b>	<b>18.6855</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	0.0391	0.3813	0.4251	9.8000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	85.7002	85.7002	0.0255	0.0000	86.3367
<b>Total</b>	<b>0.0391</b>	<b>0.3813</b>	<b>0.4251</b>	<b>9.8000e-004</b>	<b>0.0000</b>	<b>0.0166</b>	<b>0.0166</b>	<b>0.0000</b>	<b>0.0154</b>	<b>0.0154</b>	<b>0.0000</b>	<b>85.7002</b>	<b>85.7002</b>	<b>0.0255</b>	<b>0.0000</b>	<b>86.3367</b>

**Mitigated Construction Off-Site**

## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
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	5.3000e-004	0.0219	7.3900e-003	1.0000e-004	3.7900e-003	1.3000e-004	3.9100e-003	1.0900e-003	1.2000e-004	1.2100e-003	0.0000	10.3045	10.3045	4.2000e-004	1.5400e-003	10.7746	
Worker	2.9300e-003	2.2700e-003	0.0287	9.0000e-005	0.0103	5.0000e-005	0.0104	2.7500e-003	5.0000e-005	2.8000e-003	0.0000	7.8458	7.8458	1.9000e-004	2.0000e-004	7.9109	
<b>Total</b>	<b>3.4600e-003</b>	<b>0.0241</b>	<b>0.0361</b>	<b>1.9000e-004</b>	<b>0.0141</b>	<b>1.8000e-004</b>	<b>0.0143</b>	<b>3.8400e-003</b>	<b>1.7000e-004</b>	<b>4.0100e-003</b>	<b>0.0000</b>	<b>18.1502</b>	<b>18.1502</b>	<b>6.1000e-004</b>	<b>1.7400e-003</b>	<b>18.6855</b>	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0622	0.0819	0.6326	1.3500e-003	0.1478	1.0600e-003	0.1489	0.0395	9.9000e-004	0.0405	0.0000	124.5953	124.5953	7.9000e-003	5.6600e-003	126.4787
Unmitigated	0.0622	0.0819	0.6326	1.3500e-003	0.1478	1.0600e-003	0.1489	0.0395	9.9000e-004	0.0405	0.0000	124.5953	124.5953	7.9000e-003	5.6600e-003	126.4787

## SCG-VCS Project - Phase 1 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Light Industry	110.96	44.52	111.85	392,496	392,496	392,496	392,496
Total	110.96	44.52	111.85	392,496	392,496	392,496	392,496

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.0069

**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	32.8089	32.8089	2.7700e-003	3.4000e-004	32.9782

## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	32.8089	32.8089	2.7700e-003	3.4000e-004	32.9782
NaturalGas Mitigated	2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	24.7822	24.7822	4.7000e-004	4.5000e-004	24.9295
NaturalGas Unmitigated	2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	24.7822	24.7822	4.7000e-004	4.5000e-004	24.9295

**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	
General Light Industry	464401	2.5000e-003	0.0228	0.0191	1.4000e-004			1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	24.7822	24.7822	4.7000e-004	4.5000e-004	24.9295
Total		2.5000e-003	0.0228	0.0191	1.4000e-004			1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	24.7822	24.7822	4.7000e-004	4.5000e-004	24.9295

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	
General Light Industry	464401	2.5000e-003	0.0228	0.0191	1.4000e-004			1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	24.7822	24.7822	4.7000e-004	4.5000e-004	24.9295

## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

Total		2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	24.7822	24.7822	4.7000e-004	4.5000e-004	24.9295
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**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	185000	32.8089	2.7700e-003	3.4000e-004	32.9782
<b>Total</b>		<b>32.8089</b>	<b>2.7700e-003</b>	<b>3.4000e-004</b>	<b>32.9782</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	185000	32.8089	2.7700e-003	3.4000e-004	32.9782
<b>Total</b>		<b>32.8089</b>	<b>2.7700e-003</b>	<b>3.4000e-004</b>	<b>32.9782</b>

## SCG-VCS Project - Phase 1 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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	0.0978	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004	
Unmitigated	0.0978	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-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	0.0104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0874					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004

## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

Total	0.0978	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	0.0000	4.3000e-004
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**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												MT/yr				
Architectural Coating	0.0104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0874					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004
Total	0.0978	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004

**7.0 Water Detail****7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
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## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

Category	MT/yr			
	Mitigated	Unmitigated	Total CO2	CH4
Mitigated	13.5869	0.1696	4.1000e-003	19.0487
Unmitigated	13.5869	0.1696	4.1000e-003	19.0487

**7.2 Water by Land Use****Unmitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Light Industry	5.17306 / 0	13.5869	0.1696	4.1000e-003
<b>Total</b>		<b>13.5869</b>	<b>0.1696</b>	<b>4.1000e-003</b>
				<b>19.0487</b>

**Mitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Light Industry	5.17306 / 0	13.5869	0.1696	4.1000e-003
<b>Total</b>		<b>13.5869</b>	<b>0.1696</b>	<b>4.1000e-003</b>
				<b>19.0487</b>

## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

Total	13.5869	0.1696	4.1000e-003	19.0487
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**8.0 Waste Detail****8.1 Mitigation Measures Waste**Category/Year

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	5.6310	0.3328	0.0000	13.9505
Unmitigated	5.6310	0.3328	0.0000	13.9505

**8.2 Waste by Land Use**Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
MT/yr					
General Light Industry	27.74	5.6310	0.3328	0.0000	13.9505

## SCG-VCS Project - Phase 1 - Ventura County, Annual

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

Total		5.6310	0.3328	0.0000	13.9505
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**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons			MT/yr	
General Light Industry	27.74	5.6310	0.3328	0.0000	13.9505
Total		5.6310	0.3328	0.0000	13.9505

**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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SCG-VCS Project - Phase 1 - Ventura County, Annual

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

**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## SCG-VCS Project - Phase 2 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 2**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	22.37	1000sqft	0.51	22,370.00	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics -

Land Use - used 1 mile

Construction Phase - Used Moreno project

Off-road Equipment - Moreno project

Off-road Equipment - Moreno project

Grading - used 1 mile

Trips and VMT - North-South project

Architectural Coating -

Area Coating -

Vehicle Trips -

Fleet Mix -

## SCG-VCS Project - Phase 2 - Ventura County, Annual

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

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	6.00
tblOffRoadEquipment	HorsePower	231.00	300.00
tblOffRoadEquipment	HorsePower	88.00	350.00
tblOffRoadEquipment	HorsePower	88.00	75.00
tblOffRoadEquipment	HorsePower	88.00	75.00
tblOffRoadEquipment	HorsePower	88.00	75.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	7.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripLength	6.60	7.90
tblTripsAndVMT	VendorTripNumber	4.00	32.00
tblTripsAndVMT	WorkerTripLength	16.80	19.80
tblTripsAndVMT	WorkerTripNumber	9.00	53.00

**2.0 Emissions Summary****2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0276	0.2488	0.2780	6.8000e-004	0.0127	0.0107	0.0233	3.4300e-003	0.0100	0.0135	0.0000	60.2600	60.2600	0.0116	1.3700e-003	60.9571
Maximum	0.0276	0.2488	0.2780	6.8000e-004	0.0127	0.0107	0.0233	3.4300e-003	0.0100	0.0135	0.0000	60.2600	60.2600	0.0116	1.3700e-003	60.9571

## SCG-VCS Project - Phase 2 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr												MT/yr			
2023	0.0276	0.2488	0.2780	6.8000e-004	0.0127	0.0107	0.0233	3.4300e-003	0.0100	0.0135	0.0000	60.2600	60.2600	0.0116	1.3700e-003	60.9571
Maximum	0.0276	0.2488	0.2780	6.8000e-004	0.0127	0.0107	0.0233	3.4300e-003	0.0100	0.0135	0.0000	60.2600	60.2600	0.0116	1.3700e-003	60.9571

	ROG	NOx	CO	SO2	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	0.2769	0.2769
		Highest	0.2769	0.2769

**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	0.0978	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004

SCG-VCS Project - Phase 2 - Ventura County, Annual

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

Energy	2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	57.5911	57.5911	3.2400e-003	7.9000e-004	57.9077
Mobile	0.0622	0.0819	0.6326	1.3500e-003	0.1478	1.0600e-003	0.1489	0.0395	9.9000e-004	0.0405	0.0000	124.5953	124.5953	7.9000e-003	5.6600e-003	126.4787
Waste						0.0000	0.0000		0.0000	0.0000	5.6310	0.0000	5.6310	0.3328	0.0000	13.9505
Water						0.0000	0.0000		0.0000	0.0000	1.6412	11.9457	13.5869	0.1696	4.1000e-003	19.0487
Total	0.1624	0.1046	0.6519	1.4900e-003	0.1478	2.7900e-003	0.1506	0.0395	2.7200e-003	0.0422	7.2721	194.1325	201.4047	0.5135	0.0106	217.3860

### **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	0.0978	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004
Energy	2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	57.5911	57.5911	3.2400e-003	7.9000e-004	57.9077
Mobile	0.0622	0.0819	0.6326	1.3500e-003	0.1478	1.0600e-003	0.1489	0.0395	9.9000e-004	0.0405	0.0000	124.5953	124.5953	7.9000e-003	5.6600e-003	126.4787
Waste						0.0000	0.0000		0.0000	0.0000	5.6310	0.0000	5.6310	0.3328	0.0000	13.9505
Water						0.0000	0.0000		0.0000	0.0000	1.6412	11.9457	13.5869	0.1696	4.1000e-003	19.0487
Total	0.1624	0.1046	0.6519	1.4900e-003	0.1478	2.7900e-003	0.1506	0.0395	2.7200e-003	0.0422	7.2721	194.1325	201.4047	0.5135	0.0106	217.3860

## SCG-VCS Project - Phase 2 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	2	Building Construction	2/20/2023	3/26/2023	5	6	SCE Pulling and Reconductoring

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 0****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
2	Other General Industrial Equipment	1	7.00	350	0.34
2	Cranes	2	7.00	300	0.29
2	Generator Sets	2	7.00	84	0.74
2	Other General Industrial Equipment	1	7.00	75	0.34
2	Other General Industrial Equipment	1	7.00	75	0.34
2	Other General Industrial Equipment	2	7.00	75	0.34

**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
2	9	53.00	32.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## SCG-VCS Project - Phase 2 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.2 2 - 2023**Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0244	0.2300	0.2452	5.2000e-004		0.0105	0.0105		9.9000e-003	9.9000e-003	0.0000	44.9835	44.9835	0.0111	0.0000	45.2609
Total	0.0244	0.2300	0.2452	5.2000e-004		0.0105	0.0105		9.9000e-003	9.9000e-003	0.0000	44.9835	44.9835	0.0111	0.0000	45.2609

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	4.0000e-004	0.0167	5.6300e-003	8.0000e-005	2.8800e-003	1.0000e-004	2.9800e-003	8.3000e-004	9.0000e-005	9.3000e-004	0.0000	7.8510	7.8510	3.2000e-004	1.1700e-003	8.2092
Worker	2.7800e-003	2.1400e-003	0.0272	8.0000e-005	9.7900e-003	5.0000e-005	9.8400e-003	2.6000e-003	5.0000e-005	2.6500e-003	0.0000	7.4255	7.4255	1.8000e-004	1.9000e-004	7.4871
Total	3.1800e-003	0.0188	0.0328	1.6000e-004	0.0127	1.5000e-004	0.0128	3.4300e-003	1.4000e-004	3.5800e-003	0.0000	15.2765	15.2765	5.0000e-004	1.3600e-003	15.6963

Mitigated Construction On-Site

## SCG-VCS Project - Phase 2 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0244	0.2300	0.2452	5.2000e-004		0.0105	0.0105		9.9000e-003	9.9000e-003	0.0000	44.9835	44.9835	0.0111	0.0000	45.2608
Total	<b>0.0244</b>	<b>0.2300</b>	<b>0.2452</b>	<b>5.2000e-004</b>		<b>0.0105</b>	<b>0.0105</b>		<b>9.9000e-003</b>	<b>9.9000e-003</b>	<b>0.0000</b>	<b>44.9835</b>	<b>44.9835</b>	<b>0.0111</b>	<b>0.0000</b>	<b>45.2608</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	4.0000e-004	0.0167	5.6300e-003	8.0000e-005	2.8800e-003	1.0000e-004	2.9800e-003	8.3000e-004	9.0000e-005	9.3000e-004	0.0000	7.8510	7.8510	3.2000e-004	1.1700e-003	8.2092
Worker	2.7800e-003	2.1400e-003	0.0272	8.0000e-005	9.7900e-003	5.0000e-005	9.8400e-003	2.6000e-003	5.0000e-005	2.6500e-003	0.0000	7.4255	7.4255	1.8000e-004	1.9000e-004	7.4871
Total	<b>3.1800e-003</b>	<b>0.0188</b>	<b>0.0328</b>	<b>1.6000e-004</b>	<b>0.0127</b>	<b>1.5000e-004</b>	<b>0.0128</b>	<b>3.4300e-003</b>	<b>1.4000e-004</b>	<b>3.5800e-003</b>	<b>0.0000</b>	<b>15.2765</b>	<b>15.2765</b>	<b>5.0000e-004</b>	<b>1.3600e-003</b>	<b>15.6963</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## SCG-VCS Project - Phase 2 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0622	0.0819	0.6326	1.3500e-003	0.1478	1.0600e-003	0.1489	0.0395	9.9000e-004	0.0405	0.0000	124.5953	124.5953	7.9000e-003	5.6600e-003	126.4787
Unmitigated	0.0622	0.0819	0.6326	1.3500e-003	0.1478	1.0600e-003	0.1489	0.0395	9.9000e-004	0.0405	0.0000	124.5953	124.5953	7.9000e-003	5.6600e-003	126.4787

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Light Industry	110.96	44.52	111.85	392,496	392,496	392,496	392,496
Total	110.96	44.52	111.85	392,496	392,496	392,496	392,496

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.0068

**5.0 Energy Detail**

## SCG-VCS Project - Phase 2 - Ventura County, Annual

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

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	32.8089	32.8089	2.7700e-003	3.4000e-004	32.9782
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	32.8089	32.8089	2.7700e-003	3.4000e-004	32.9782
NaturalGas Mitigated	2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	24.7822	24.7822	4.7000e-004	4.5000e-004	24.9295
NaturalGas Unmitigated	2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	24.7822	24.7822	4.7000e-004	4.5000e-004	24.9295

**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					
General Light Industry	464401	2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	24.7822	24.7822	4.7000e-004	4.5000e-004	24.9295
Total		2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	24.7822	24.7822	4.7000e-004	4.5000e-004	24.9295

## SCG-VCS Project - Phase 2 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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			
General Light Industry	464401	2.5000e-003	0.0228	0.0191	1.4000e-004		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	24.7822	24.7822	4.7000e-004	4.5000e-004	24.9295
<b>Total</b>		<b>2.5000e-003</b>	<b>0.0228</b>	<b>0.0191</b>	<b>1.4000e-004</b>		<b>1.7300e-003</b>	<b>1.7300e-003</b>		<b>1.7300e-003</b>	<b>1.7300e-003</b>	<b>0.0000</b>	<b>24.7822</b>	<b>24.7822</b>	<b>4.7000e-004</b>	<b>4.5000e-004</b>	<b>24.9295</b>

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e	
Land Use	kWh/yr	MT/yr				
General Light Industry	185000	32.8089	2.7700e-003	3.4000e-004	32.9782	
<b>Total</b>		<b>32.8089</b>	<b>2.7700e-003</b>	<b>3.4000e-004</b>	<b>32.9782</b>	

**Mitigated**

## SCG-VCS Project - Phase 2 - Ventura County, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	185000	32.8089	2.7700e-003	3.4000e-004	32.9782
<b>Total</b>		<b>32.8089</b>	<b>2.7700e-003</b>	<b>3.4000e-004</b>	<b>32.9782</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	0.0978	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004
Unmitigated	0.0978	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004

**6.2 Area by SubCategory****Unmitigated**

## SCG-VCS Project - Phase 2 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0874					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004
<b>Total</b>	<b>0.0978</b>	<b>0.0000</b>	<b>2.1000e-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>4.0000e-004</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.3000e-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	0.0104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0874					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-004	4.0000e-004	0.0000	0.0000	4.3000e-004
<b>Total</b>	<b>0.0978</b>	<b>0.0000</b>	<b>2.1000e-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>4.0000e-004</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.3000e-004</b>

**7.0 Water Detail**

## SCG-VCS Project - Phase 2 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.5869	0.1696	4.1000e-003	19.0487
Unmitigated	13.5869	0.1696	4.1000e-003	19.0487

**7.2 Water by Land Use****Unmitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Light Industry	5.17306 / 0	13.5869	0.1696	4.1000e-003
<b>Total</b>	<b>13.5869</b>	<b>0.1696</b>	<b>4.1000e-003</b>	<b>19.0487</b>

**Mitigated**

## SCG-VCS Project - Phase 2 - Ventura County, Annual

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

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Light Industry	5.17306 / 0	13.5869	0.1696	4.1000e-003
<b>Total</b>	<b>13.5869</b>	<b>0.1696</b>	<b>4.1000e-003</b>	<b>19.0487</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5.6310	0.3328	0.0000	13.9505
Unmitigated	5.6310	0.3328	0.0000	13.9505

**8.2 Waste by Land Use****Unmitigated**

## SCG-VCS Project - Phase 2 - Ventura County, Annual

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

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	27.74	5.6310	0.3328	0.0000	13.9505
<b>Total</b>		<b>5.6310</b>	<b>0.3328</b>	<b>0.0000</b>	<b>13.9505</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	27.74	5.6310	0.3328	0.0000	13.9505
<b>Total</b>		<b>5.6310</b>	<b>0.3328</b>	<b>0.0000</b>	<b>13.9505</b>

**9.0 Operational Offroad**

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

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

## SCG-VCS Project - Phase 2 - Ventura County, Annual

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

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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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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## SCG-VCS Project - All Phases - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 3****Ventura County, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	43.56	1000sqft	1.00	43,560.17	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics -

Land Use - used 1 acre

Construction Phase - Used Moreno project

Off-road Equipment - Moreno project

Grading - used 1 acres

Off-road Equipment - Moreno project

Trips and VMT - Moreno project

Architectural Coating -

Area Coating -

Vehicle Trips -

Fleet Mix -

## SCG-VCS Project - All Phases - Ventura County, Annual

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

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	1.00	45.00
tblGrading	AcresOfGrading	45.00	1.00
tblLandUse	LandUseSquareFeet	43,560.20	43,560.17
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripLength	6.60	7.90
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripLength	16.80	19.80
tblTripsAndVMT	WorkerTripNumber	28.00	36.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0603	0.5581	0.4833	1.1500e-003	0.1499	0.0230	0.1729	0.0783	0.0216	0.0999	0.0000	100.8516	100.8516	0.0220	1.0300e-003	101.7084
Maximum	<b>0.0603</b>	<b>0.5581</b>	<b>0.4833</b>	<b>1.1500e-003</b>	<b>0.1499</b>	<b>0.0230</b>	<b>0.1729</b>	<b>0.0783</b>	<b>0.0216</b>	<b>0.0999</b>	<b>0.0000</b>	<b>100.8516</b>	<b>100.8516</b>	<b>0.0220</b>	<b>1.0300e-003</b>	<b>101.7084</b>

#### Mitigated Construction

## SCG-VCS Project - All Phases - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0603	0.5581	0.4833	1.1500e-003	0.1499	0.0230	0.1729	0.0783	0.0216	0.0999	0.0000	100.8515	100.8515	0.0220	1.0300e-003	101.7083
Maximum	0.0603	0.5581	0.4833	1.1500e-003	0.1499	0.0230	0.1729	0.0783	0.0216	0.0999	0.0000	100.8515	100.8515	0.0220	1.0300e-003	101.7083

	ROG	NOx	CO	SO2	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	0.0589	0.0589
2	4-2-2023	7-1-2023	0.5588	0.5588
		Highest	0.5588	0.5588

**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	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1448	112.1448	6.3200e-003	1.5400e-003	112.7612
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8111	237.8111	0.0151	0.0108	241.4059

## SCG-VCS Project - All Phases - Ventura County, Annual

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

Waste						0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water						0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926
Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2180	387.3773	0.9995	0.0203	418.4222

**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	0.1904	0.0000	4.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1448	112.1448	6.3200e-003	1.5400e-003	112.7612
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8111	237.8111	0.0151	0.0108	241.4059
Waste						0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water						0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926
Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2180	387.3773	0.9995	0.0203	418.4222

	ROG	NOx	CO	SO2	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**

## SCG-VCS Project - All Phases - Ventura County, Annual

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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	3	Site Preparation	3/27/2023	5/28/2023	5	45	Site Preparation

**Acres of Grading (Site Preparation Phase): 1****Acres of Grading (Grading Phase): 0****Acres of Paving: 0****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
3	Air Compressors	1	8.00	78	0.48
3	Dumpers/Tenders	3	8.00	16	0.38
3	Excavators	1	8.00	158	0.38
3	Forklifts	1	8.00	89	0.20
3	Generator Sets	1	8.00	84	0.74
3	Graders	1	8.00	187	0.41
3	Rough Terrain Forklifts	1	8.00	100	0.40
3	Rubber Tired Dozers	1	8.00	247	0.40
3	Rubber Tired Loaders	1	8.00	203	0.36

**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
3	11	36.00	12.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## SCG-VCS Project - All Phases - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.2 3 - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1360	0.0000	0.1360	0.0745	0.0000	0.0745	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0566	0.5443	0.4463	1.0000e-003		0.0229	0.0229		0.0215	0.0215	0.0000	86.4735	86.4735	0.0216	0.0000	87.0132
<b>Total</b>	<b>0.0566</b>	<b>0.5443</b>	<b>0.4463</b>	<b>1.0000e-003</b>	<b>0.1360</b>	<b>0.0229</b>	<b>0.1589</b>	<b>0.0745</b>	<b>0.0215</b>	<b>0.0961</b>	<b>0.0000</b>	<b>86.4735</b>	<b>86.4735</b>	<b>0.0216</b>	<b>0.0000</b>	<b>87.0132</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	2.7000e-004	0.0112	3.8000e-003	5.0000e-005	1.9500e-003	7.0000e-005	2.0100e-003	5.6000e-004	6.0000e-005	6.2000e-004	0.0000	5.2994	5.2994	2.2000e-004	7.9000e-004	5.5412
Worker	3.3900e-003	2.6200e-003	0.0332	1.0000e-004	0.0120	6.0000e-005	0.0120	3.1800e-003	6.0000e-005	3.2400e-003	0.0000	9.0787	9.0787	2.1000e-004	2.3000e-004	9.1540
<b>Total</b>	<b>3.6600e-003</b>	<b>0.0139</b>	<b>0.0370</b>	<b>1.5000e-004</b>	<b>0.0139</b>	<b>1.3000e-004</b>	<b>0.0140</b>	<b>3.7400e-003</b>	<b>1.2000e-004</b>	<b>3.8600e-003</b>	<b>0.0000</b>	<b>14.3781</b>	<b>14.3781</b>	<b>4.3000e-004</b>	<b>1.0200e-003</b>	<b>14.6952</b>

## SCG-VCS Project - All Phases - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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					0.1360	0.0000	0.1360	0.0745	0.0000	0.0745	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0566	0.5443	0.4463	1.0000e-003		0.0229	0.0229		0.0215	0.0215	0.0000	86.4734	86.4734	0.0216	0.0000	87.0131
<b>Total</b>	<b>0.0566</b>	<b>0.5443</b>	<b>0.4463</b>	<b>1.0000e-003</b>	<b>0.1360</b>	<b>0.0229</b>	<b>0.1589</b>	<b>0.0745</b>	<b>0.0215</b>	<b>0.0961</b>	<b>0.0000</b>	<b>86.4734</b>	<b>86.4734</b>	<b>0.0216</b>	<b>0.0000</b>	<b>87.0131</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	2.7000e-004	0.0112	3.8000e-003	5.0000e-005	1.9500e-003	7.0000e-005	2.0100e-003	5.6000e-004	6.0000e-005	6.2000e-004	0.0000	5.2994	5.2994	2.2000e-004	7.9000e-004	5.5412
Worker	3.3900e-003	2.6200e-003	0.0332	1.0000e-004	0.0120	6.0000e-005	0.0120	3.1800e-003	6.0000e-005	3.2400e-003	0.0000	9.0787	9.0787	2.1000e-004	2.3000e-004	9.1540
<b>Total</b>	<b>3.6600e-003</b>	<b>0.0139</b>	<b>0.0370</b>	<b>1.5000e-004</b>	<b>0.0139</b>	<b>1.3000e-004</b>	<b>0.0140</b>	<b>3.7400e-003</b>	<b>1.2000e-004</b>	<b>3.8600e-003</b>	<b>0.0000</b>	<b>14.3781</b>	<b>14.3781</b>	<b>4.3000e-004</b>	<b>1.0200e-003</b>	<b>14.6952</b>

## SCG-VCS Project - All Phases - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8111	237.8111	0.0151	0.0108	241.4059
Unmitigated	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8111	237.8111	0.0151	0.0108	241.4059

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
General Heavy Industry	171.19	279.66	221.72	749,145		749,145	
Total	171.19	279.66	221.72	749,145		749,145	

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.0068

## SCG-VCS Project - All Phases - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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	63.8874	63.8874	5.3900e-003	6.5000e-004	64.2170
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.8874	63.8874	5.3900e-003	6.5000e-004	64.2170
NaturalGas Mitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
NaturalGas Unmitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442

**5.2 Energy by Land Use - NaturalGas**Mitigation

	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					
General Heavy Industry	904309	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442

## SCG-VCS Project - All Phases - Ventura County, Annual

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

Total		4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
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**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					
General Heavy Industry	904309	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
Total		4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	360243	63.8874	5.3900e-003	6.5000e-004	64.2170
Total		63.8874	5.3900e-003	6.5000e-004	64.2170

## SCG-VCS Project - All Phases - Ventura County, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	360243	63.8874	5.3900e-003	6.5000e-004	64.2170
<b>Total</b>		<b>63.8874</b>	<b>5.3900e-003</b>	<b>6.5000e-004</b>	<b>64.2170</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	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Unmitigated	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004

**6.2 Area by SubCategory**

## SCG-VCS Project - All Phases - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					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	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	0.0000	8.3000e-004
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-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	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					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	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	0.0000	8.3000e-004
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-004</b>

## SCG-VCS Project - All Phases - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****7.0 Water Detail****7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	26.4571	0.3302	7.9900e-003	37.0926
Unmitigated	26.4571	0.3302	7.9900e-003	37.0926

**7.2 Water by Land Use****Unmitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003
<b>Total</b>	<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

## SCG-VCS Project - All Phases - Ventura County, Annual

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

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003
<b>Total</b>	<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.9635	0.6479	0.0000	27.1617
Unmitigated	10.9635	0.6479	0.0000	27.1617

**8.2 Waste by Land Use****Unmitigated**

## SCG-VCS Project - All Phases - Ventura County, Annual

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

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

**9.0 Operational Offroad**

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

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

## SCG-VCS Project - All Phases - Ventura County, Annual

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

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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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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## SCG-VCS Project - Phase 4 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 4**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	43.56	1000sqft	1.00	43,560.17	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics -

Land Use - used 1 acre

Construction Phase - Used Moreno project

Off-road Equipment - Moreno project

Grading - used 1 acres

Off-road Equipment - Moreno project

Trips and VMT - Moreno project

Architectural Coating -

Area Coating -

Vehicle Trips -

Fleet Mix -

SCG-VCS Project - Phase 4 - Ventura County, Annual

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

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	45.00
tblLandUse	LandUseSquareFeet	43,560.00	43,560.17
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripLength	6.60	7.90
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripLength	16.80	19.80
tblTripsAndVMT	WorkerTripNumber	28.00	173.00

## 2.0 Emissions Summary

## 2.1 Overall Construction

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0534	0.3695	0.5536	1.3700e-003	0.0595	0.0152	0.0746	0.0158	0.0143	0.0301	0.0000	121.2118	121.2118	0.0202	1.9200e-003	122.2885
Maximum	<b>0.0534</b>	<b>0.3695</b>	<b>0.5536</b>	<b>1.3700e-003</b>	<b>0.0595</b>	<b>0.0152</b>	<b>0.0746</b>	<b>0.0158</b>	<b>0.0143</b>	<b>0.0301</b>	<b>0.0000</b>	<b>121.2118</b>	<b>121.2118</b>	<b>0.0202</b>	<b>1.9200e-003</b>	<b>122.2885</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
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## SCG-VCS Project - Phase 4 - Ventura County, Annual

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

Year	tons/yr												MT/yr					
	2023	0.0534	0.3695	0.5536	1.3700e-003	0.0595	0.0152	0.0746	0.0158	0.0143	0.0301	0.0000	121.2118	121.2118	0.0202	1.9200e-003	122.2884	
Maximum	0.0534	0.3695	0.5536	1.3700e-003	0.0595	0.0152	0.0746	0.0158	0.0143	0.0301	0.0000	121.2118	121.2118	0.0202	1.9200e-003	122.2884		

	ROG	NOx	CO	SO2	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)						Maximum Mitigated ROG + NOX (tons/quarter)							
			2	4-2-2023	7-1-2023	0.2271			0.2271							
3	7-2-2023	9-30-2023	0.1937						0.1937							
		Highest	0.2271						0.2271							

**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	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1448	112.1448	6.3200e-003	1.5400e-003	112.7612
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050
Waste						0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water						0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926

## SCG-VCS Project - Phase 4 - Ventura County, Annual

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

Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2170	387.3764	0.9995	0.0203	418.4213
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**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	0.1904	0.0000	4.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004	
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004			3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1448	112.1448	6.3200e-003	1.5400e-003	112.7612
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050	
Waste							0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water							0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926
Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2170	387.3764	0.9995	0.0203	418.4213	

	ROG	NOx	CO	SO2	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
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## SCG-VCS Project - Phase 4 - Ventura County, Annual

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

1	4	Grading	5/29/2023	7/30/2023	5	45	Grading
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**Acres of Grading (Site Preparation Phase): 0**

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

**Acres of Paving: 0**

**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
4	Bore/Drill Rigs	1	8.00	221	0.50
4	Cranes	1	8.00	231	0.29
4	Forklifts	1	8.00	89	0.20
4	Generator Sets	1	8.00	84	0.74
4	Rough Terrain Forklifts	1	8.00	100	0.40
4	Skid Steer Loaders	1	8.00	65	0.37
4	Cement and Mortar Mixers	4	8.00	9	0.56
4	Other Material Handling Equipment	1	8.00	168	0.40

**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
4	11	173.00	12.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction****3.2 4 - 2023****Unmitigated Construction On-Site**

## SCG-VCS Project - Phase 4 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
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	0.0369	0.3457	0.3903	8.4000e-004		0.0148	0.0148		0.0140	0.0140	0.0000	72.2842	72.2842	0.0189	0.0000	72.7572
<b>Total</b>	<b>0.0369</b>	<b>0.3457</b>	<b>0.3903</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>0.0148</b>	<b>0.0148</b>	<b>0.0000</b>	<b>0.0140</b>	<b>0.0140</b>	<b>0.0000</b>	<b>72.2842</b>	<b>72.2842</b>	<b>0.0189</b>	<b>0.0000</b>	<b>72.7572</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	2.7000e-004	0.0112	3.8000e-003	5.0000e-005	1.9500e-003	7.0000e-005	2.0100e-003	5.6000e-004	6.0000e-005	6.2000e-004	0.0000	5.2994	5.2994	2.2000e-004	7.9000e-004	5.5412
Worker	0.0163	0.0126	0.1596	4.8000e-004	0.0575	3.0000e-004	0.0578	0.0153	2.8000e-004	0.0156	0.0000	43.6282	43.6282	1.0300e-003	1.1300e-003	43.9901
<b>Total</b>	<b>0.0166</b>	<b>0.0238</b>	<b>0.1634</b>	<b>5.3000e-004</b>	<b>0.0595</b>	<b>3.7000e-004</b>	<b>0.0598</b>	<b>0.0158</b>	<b>3.4000e-004</b>	<b>0.0162</b>	<b>0.0000</b>	<b>48.9276</b>	<b>48.9276</b>	<b>1.2500e-003</b>	<b>1.9200e-003</b>	<b>49.5313</b>

**Mitigated Construction On-Site**

## SCG-VCS Project - Phase 4 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
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	0.0369	0.3457	0.3903	8.4000e-004		0.0148	0.0148		0.0140	0.0140	0.0000	72.2841	72.2841	0.0189	0.0000	72.7571
<b>Total</b>	<b>0.0369</b>	<b>0.3457</b>	<b>0.3903</b>	<b>8.4000e-004</b>	<b>0.0000</b>	<b>0.0148</b>	<b>0.0148</b>	<b>0.0000</b>	<b>0.0140</b>	<b>0.0140</b>	<b>0.0000</b>	<b>72.2841</b>	<b>72.2841</b>	<b>0.0189</b>	<b>0.0000</b>	<b>72.7571</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	2.7000e-004	0.0112	3.8000e-003	5.0000e-005	1.9500e-003	7.0000e-005	2.0100e-003	5.6000e-004	6.0000e-005	6.2000e-004	0.0000	5.2994	5.2994	2.2000e-004	7.9000e-004	5.5412
Worker	0.0163	0.0126	0.1596	4.8000e-004	0.0575	3.0000e-004	0.0578	0.0153	2.8000e-004	0.0156	0.0000	43.6282	43.6282	1.0300e-003	1.1300e-003	43.9901
<b>Total</b>	<b>0.0166</b>	<b>0.0238</b>	<b>0.1634</b>	<b>5.3000e-004</b>	<b>0.0595</b>	<b>3.7000e-004</b>	<b>0.0598</b>	<b>0.0158</b>	<b>3.4000e-004</b>	<b>0.0162</b>	<b>0.0000</b>	<b>48.9276</b>	<b>48.9276</b>	<b>1.2500e-003</b>	<b>1.9200e-003</b>	<b>49.5313</b>

## SCG-VCS Project - Phase 4 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050	
Unmitigated	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
General Heavy Industry	171.19	279.66	221.72	749,142		749,142	
Total	171.19	279.66	221.72	749,142		749,142	

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.0068

**5.0 Energy Detail**

## SCG-VCS Project - Phase 4 - Ventura County, Annual

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

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	63.8874	63.8874	5.3900e-003	6.5000e-004	64.2170
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.8874	63.8874	5.3900e-003	6.5000e-004	64.2170
NaturalGas Mitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
NaturalGas Unmitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442

**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				
General Heavy Industry	904309	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
Total		4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442

## SCG-VCS Project - Phase 4 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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			
General Heavy Industry	904309	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
<b>Total</b>		<b>4.8800e-003</b>	<b>0.0443</b>	<b>0.0372</b>	<b>2.7000e-004</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>48.2574</b>	<b>48.2574</b>	<b>9.2000e-004</b>	<b>8.8000e-004</b>	<b>48.5442</b>

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e	
Land Use	kWh/yr	MT/yr				
General Heavy Industry	360243	63.8874	5.3900e-003	6.5000e-004	64.2170	
<b>Total</b>		<b>63.8874</b>	<b>5.3900e-003</b>	<b>6.5000e-004</b>	<b>64.2170</b>	

**Mitigated**

## SCG-VCS Project - Phase 4 - Ventura County, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	360243	63.8874	5.3900e-003	6.5000e-004	64.2170
<b>Total</b>		<b>63.8874</b>	<b>5.3900e-003</b>	<b>6.5000e-004</b>	<b>64.2170</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	0.1904	0.0000	4.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Unmitigated	0.1904	0.0000	4.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004

**6.2 Area by SubCategory****Unmitigated**

## SCG-VCS Project - Phase 4 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					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	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-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	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					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	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-004</b>

**7.0 Water Detail**

## SCG-VCS Project - Phase 4 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	26.4571	0.3302	7.9900e-003	37.0926
Unmitigated	26.4571	0.3302	7.9900e-003	37.0926

**7.2 Water by Land Use****Unmitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003
<b>Total</b>	<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

**Mitigated**

## SCG-VCS Project - Phase 4 - Ventura County, Annual

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

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003
<b>Total</b>	<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.9635	0.6479	0.0000	27.1617
Unmitigated	10.9635	0.6479	0.0000	27.1617

**8.2 Waste by Land Use****Unmitigated**

## SCG-VCS Project - Phase 4 - Ventura County, Annual

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

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

**9.0 Operational Offroad**

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

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

## SCG-VCS Project - Phase 4 - Ventura County, Annual

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

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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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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## SCG-VCS Project - Phase 6 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 5**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	43.56	1000sqft	1.00	43,560.17	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics -

Land Use - used 1 acre

Construction Phase - Used Moreno project

Off-road Equipment - Moreno project

Grading - used 1 acres

Off-road Equipment - Moreno project

Trips and VMT - Moreno project

Architectural Coating -

Area Coating -

Vehicle Trips -

Fleet Mix -

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	45.00
tblLandUse	LandUseSquareFeet	43,560.00	43,560.17
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripLength	6.60	7.90
tblTripsAndVMT	VendorTripNumber	7.00	20.00
tblTripsAndVMT	WorkerTripLength	16.80	19.80
tblTripsAndVMT	WorkerTripNumber	18.00	296.00

**2.0 Emissions Summary****2.1 Overall Construction**Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
Year																MT/yr
2023	0.1320	0.8666	1.1431	2.6300e-003	0.1016	0.0334	0.1350	0.0271	0.0319	0.0590	0.0000	228.0059	228.0059	0.0360	3.2500e-003	229.8758
Maximum	0.1320	0.8666	1.1431	2.6300e-003	0.1016	0.0334	0.1350	0.0271	0.0319	0.0590	0.0000	228.0059	228.0059	0.0360	3.2500e-003	229.8758

Mitigated Construction

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1320	0.8666	1.1431	2.6300e-003	0.1016	0.0334	0.1350	0.0271	0.0319	0.0590	0.0000	228.0058	228.0058	0.0360	3.2500e-003	229.8756
Maximum	0.1320	0.8666	1.1431	2.6300e-003	0.1016	0.0334	0.1350	0.0271	0.0319	0.0590	0.0000	228.0058	228.0058	0.0360	3.2500e-003	229.8756

	ROG	NOx	CO	SO2	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
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	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1448	112.1448	6.3200e-003	1.5400e-003	112.7612
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

Waste						0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water						0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926
Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2170	387.3764	0.9995	0.0203	418.4213

**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	0.1904	0.0000	4.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1448	112.1448	6.3200e-003	1.5400e-003	112.7612
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050
Waste						0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water						0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926
Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2170	387.3764	0.9995	0.0203	418.4213

	ROG	NOx	CO	SO2	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**

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	6	Building Construction	10/2/2023	12/3/2023	5	45	Building Construction

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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
6	Aerial Lifts	4	8.00	63	0.31
6	Air Compressors	1	8.00	78	0.48
6	Cranes	3	8.00	231	0.29
6	Forklifts	1	8.00	89	0.20
6	Generator Sets	1	8.00	84	0.74
6	Rough Terrain Forklifts	2	8.00	100	0.40
6	Welders	8	8.00	46	0.45
6	Off-Highway Trucks	1	8.00	402	0.38

**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
6	21	296.00	20.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## SCG-VCS Project - Phase 6 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.2 6 - 2023**Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1037	0.8263	0.8637	1.7300e-003		0.0328	0.0328		0.0314	0.0314	0.0000	144.5265	144.5265	0.0339	0.0000	145.3742
Total	0.1037	0.8263	0.8637	1.7300e-003		0.0328	0.0328		0.0314	0.0314	0.0000	144.5265	144.5265	0.0339	0.0000	145.3742

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	4.5000e-004	0.0187	6.3400e-003	9.0000e-005	3.2400e-003	1.1000e-004	3.3500e-003	9.4000e-004	1.0000e-004	1.0400e-003	0.0000	8.8324	8.8324	3.6000e-004	1.3200e-003	9.2354
Worker	0.0279	0.0216	0.2730	8.1000e-004	0.0984	5.2000e-004	0.0989	0.0261	4.7000e-004	0.0266	0.0000	74.6471	74.6471	1.7600e-003	1.9300e-003	75.2662
Total	0.0284	0.0403	0.2794	9.0000e-004	0.1016	6.3000e-004	0.1023	0.0271	5.7000e-004	0.0276	0.0000	83.4795	83.4795	2.1200e-003	3.2500e-003	84.5016

Mitigated Construction On-Site

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1037	0.8263	0.8637	1.7300e-003		0.0328	0.0328		0.0314	0.0314	0.0000	144.5263	144.5263	0.0339	0.0000	145.3740
Total	0.1037	0.8263	0.8637	1.7300e-003		0.0328	0.0328		0.0314	0.0314	0.0000	144.5263	144.5263	0.0339	0.0000	145.3740

**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	4.5000e-004	0.0187	6.3400e-003	9.0000e-005	3.2400e-003	1.1000e-004	3.3500e-003	9.4000e-004	1.0000e-004	1.0400e-003	0.0000	8.8324	8.8324	3.6000e-004	1.3200e-003	9.2354
Worker	0.0279	0.0216	0.2730	8.1000e-004	0.0984	5.2000e-004	0.0989	0.0261	4.7000e-004	0.0266	0.0000	74.6471	74.6471	1.7600e-003	1.9300e-003	75.2662
Total	0.0284	0.0403	0.2794	9.0000e-004	0.1016	6.3000e-004	0.1023	0.0271	5.7000e-004	0.0276	0.0000	83.4795	83.4795	2.1200e-003	3.2500e-003	84.5016

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050
Unmitigated	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Heavy Industry	171.19	279.66	221.72	749,142	749,142	749,142	749,142
Total	171.19	279.66	221.72	749,142	749,142	749,142	749,142

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.0068

**5.0 Energy Detail**

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

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	63.8874	63.8874	5.3900e-003	6.5000e-004	64.2170
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.8874	63.8874	5.3900e-003	6.5000e-004	64.2170
NaturalGas Mitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
NaturalGas Unmitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442

**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					
General Heavy Industry	904309	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
Total		4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442

## SCG-VCS Project - Phase 6 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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			
General Heavy Industry	904309	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
<b>Total</b>		<b>4.8800e-003</b>	<b>0.0443</b>	<b>0.0372</b>	<b>2.7000e-004</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>48.2574</b>	<b>48.2574</b>	<b>9.2000e-004</b>	<b>8.8000e-004</b>	<b>48.5442</b>

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e	
Land Use	kWh/yr	MT/yr				
General Heavy Industry	360243	63.8874	5.3900e-003	6.5000e-004	64.2170	
<b>Total</b>		<b>63.8874</b>	<b>5.3900e-003</b>	<b>6.5000e-004</b>	<b>64.2170</b>	

**Mitigated**

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	360243	63.8874	5.3900e-003	6.5000e-004	64.2170
<b>Total</b>		<b>63.8874</b>	<b>5.3900e-003</b>	<b>6.5000e-004</b>	<b>64.2170</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	0.1904	0.0000	4.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Unmitigated	0.1904	0.0000	4.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004

**6.2 Area by SubCategory****Unmitigated**

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					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	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-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	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					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	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-004</b>

**7.0 Water Detail**

## SCG-VCS Project - Phase 6 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	26.4571	0.3302	7.9900e-003	37.0926
Unmitigated	26.4571	0.3302	7.9900e-003	37.0926

**7.2 Water by Land Use****Unmitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003
<b>Total</b>	<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

**Mitigated**

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003
<b>Total</b>	<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.9635	0.6479	0.0000	27.1617
Unmitigated	10.9635	0.6479	0.0000	27.1617

**8.2 Waste by Land Use****Unmitigated**

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

**9.0 Operational Offroad**

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

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

## SCG-VCS Project - Phase 6 - Ventura County, Annual

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

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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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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## SCG-VCS Project - Phase 7 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 6**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	43.56	1000sqft	1.00	43,560.17	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics -

Land Use - used 1 acre

Construction Phase - Used Moreno project

Off-road Equipment - Moreno project

Grading - used 1 acres

Off-road Equipment - Moreno project

Trips and VMT - Moreno project

Architectural Coating -

Area Coating -

Vehicle Trips -

Fleet Mix -

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	45.00
tblLandUse	LandUseSquareFeet	43,560.00	43,560.17
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripLength	6.60	7.90
tblTripsAndVMT	VendorTripNumber	0.00	16.00
tblTripsAndVMT	WorkerTripLength	16.80	19.80
tblTripsAndVMT	WorkerTripNumber	25.00	296.00

**2.0 Emissions Summary****2.1 Overall Construction**Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0736	0.4726	0.7485	1.8400e-003	0.1010	0.0202	0.1212	0.0269	0.0191	0.0460	0.0000	164.1224	164.1224	0.0212	2.9900e-003	165.5418
Maximum	0.0736	0.4726	0.7485	1.8400e-003	0.1010	0.0202	0.1212	0.0269	0.0191	0.0460	0.0000	164.1224	164.1224	0.0212	2.9900e-003	165.5418

Mitigated Construction

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0736	0.4726	0.7485	1.8400e-003	0.1010	0.0202	0.1212	0.0269	0.0191	0.0460	0.0000	164.1223	164.1223	0.0212	2.9900e-003	165.5417
Maximum	0.0736	0.4726	0.7485	1.8400e-003	0.1010	0.0202	0.1212	0.0269	0.0191	0.0460	0.0000	164.1223	164.1223	0.0212	2.9900e-003	165.5417

	ROG	NOx	CO	SO2	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
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	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1448	112.1448	6.3200e-003	1.5400e-003	112.7612
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

Waste						0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water						0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926
Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2170	387.3764	0.9995	0.0203	418.4213

**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	0.1904	0.0000	4.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1448	112.1448	6.3200e-003	1.5400e-003	112.7612
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050
Waste						0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water						0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926
Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2170	387.3764	0.9995	0.0203	418.4213

	ROG	NOx	CO	SO2	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**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	7	Paving	10/2/2023	12/3/2023	5	45	Paving

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 0****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
7	Excavators	1	8.00	158	0.38
7	Generator Sets	1	8.00	84	0.74
7	Graders	1	8.00	187	0.41
7	Paving Equipment	1	8.00	132	0.36
7	Pumps	1	8.00	84	0.74
7	Rollers	1	8.00	80	0.38
7	Surfacing Equipment	1	8.00	263	0.30
7	Sweepers/Scrubbers	1	8.00	64	0.46
7	Cement and Mortar Mixers	2	8.00	9	0.56

**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
7	10	296.00	16.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.2 7 - 2023**Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0453	0.4360	0.4704	9.5000e-004		0.0196	0.0196		0.0186	0.0186	0.0000	82.4094	82.4094	0.0191	0.0000	82.8872
Paving	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>0.0453</b>	<b>0.4360</b>	<b>0.4704</b>	<b>9.5000e-004</b>		<b>0.0196</b>	<b>0.0196</b>		<b>0.0186</b>	<b>0.0186</b>	<b>0.0000</b>	<b>82.4094</b>	<b>82.4094</b>	<b>0.0191</b>	<b>0.0000</b>	<b>82.8872</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	3.6000e-004	0.0150	5.0700e-003	7.0000e-005	2.6000e-003	9.0000e-005	2.6800e-003	7.5000e-004	8.0000e-005	8.3000e-004	0.0000	7.0659	7.0659	2.9000e-004	1.0600e-003	7.3883
Worker	0.0279	0.0216	0.2730	8.1000e-004	0.0984	5.2000e-004	0.0989	0.0261	4.7000e-004	0.0266	0.0000	74.6471	74.6471	1.7600e-003	1.9300e-003	75.2662
<b>Total</b>	<b>0.0283</b>	<b>0.0366</b>	<b>0.2781</b>	<b>8.8000e-004</b>	<b>0.1010</b>	<b>6.1000e-004</b>	<b>0.1016</b>	<b>0.0269</b>	<b>5.5000e-004</b>	<b>0.0274</b>	<b>0.0000</b>	<b>81.7130</b>	<b>81.7130</b>	<b>2.0500e-003</b>	<b>2.9900e-003</b>	<b>82.6545</b>

## SCG-VCS Project - Phase 7 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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	0.0453	0.4360	0.4704	9.5000e-004		0.0196	0.0196		0.0186	0.0186	0.0000	82.4093	82.4093	0.0191	0.0000	82.8871
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0453	0.4360	0.4704	9.5000e-004		0.0196	0.0196		0.0186	0.0186	0.0000	82.4093	82.4093	0.0191	0.0000	82.8871

**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	3.6000e-004	0.0150	5.0700e-003	7.0000e-005	2.6000e-003	9.0000e-005	2.6800e-003	7.5000e-004	8.0000e-005	8.3000e-004	0.0000	7.0659	7.0659	2.9000e-004	1.0600e-003	7.3883
Worker	0.0279	0.0216	0.2730	8.1000e-004	0.0984	5.2000e-004	0.0989	0.0261	4.7000e-004	0.0266	0.0000	74.6471	74.6471	1.7600e-003	1.9300e-003	75.2662
Total	0.0283	0.0366	0.2781	8.8000e-004	0.1010	6.1000e-004	0.1016	0.0269	5.5000e-004	0.0274	0.0000	81.7130	81.7130	2.0500e-003	2.9900e-003	82.6545

## SCG-VCS Project - Phase 7 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050
Unmitigated	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
General Heavy Industry	171.19	279.66	221.72	749,142		749,142	
Total	171.19	279.66	221.72	749,142		749,142	

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.0068

## SCG-VCS Project - Phase 7 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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	63.8874	63.8874	5.3900e-003	6.5000e-004	64.2170
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.8874	63.8874	5.3900e-003	6.5000e-004	64.2170
NaturalGas Mitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
NaturalGas Unmitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442

**5.2 Energy by Land Use - NaturalGas**Mitigation

	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					
General Heavy Industry	904309	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

Total		4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
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**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					
General Heavy Industry	904309	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442
Total		4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2574	48.2574	9.2000e-004	8.8000e-004	48.5442

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	360243	63.8874	5.3900e-003	6.5000e-004	64.2170
Total		63.8874	5.3900e-003	6.5000e-004	64.2170

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	360243	63.8874	5.3900e-003	6.5000e-004	64.2170
<b>Total</b>		<b>63.8874</b>	<b>5.3900e-003</b>	<b>6.5000e-004</b>	<b>64.2170</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	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Unmitigated	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004

**6.2 Area by SubCategory**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					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	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	0.0000	8.3000e-004
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-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	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					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	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	0.0000	8.3000e-004
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-004</b>

## SCG-VCS Project - Phase 7 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****7.0 Water Detail****7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	26.4571	0.3302	7.9900e-003	37.0926
Unmitigated	26.4571	0.3302	7.9900e-003	37.0926

**7.2 Water by Land Use****Unmitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003
<b>Total</b>	<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003
<b>Total</b>	<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.9635	0.6479	0.0000	27.1617
Unmitigated	10.9635	0.6479	0.0000	27.1617

**8.2 Waste by Land Use****Unmitigated**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

**9.0 Operational Offroad**

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

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

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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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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## SCG-VCS Project - Phase 7 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 7**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	264.00	1000sqft	6.06	264,001.00	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics -

Land Use - used 1 mile

Construction Phase - Used North-South project

Off-road Equipment - North-South project

Grading - used 1 mile

Off-road Equipment - North-South project

Trips and VMT - North-South project

Architectural Coating -

Area Coating -

Vehicle Trips -

Fleet Mix -

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	7.00
tblGrading	AcresOfGrading	3.50	6.06
tblGrading	MaterialExported	0.00	3,911.11
tblGrading	MaterialImported	0.00	1,955.56
tblLandUse	LandUseSquareFeet	264,000.00	264,001.00
tblOffRoadEquipment	HorsePower	187.00	46.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	3.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	580.00	3.00
tblTripsAndVMT	VendorTripLength	6.60	7.90
tblTripsAndVMT	VendorTripNumber	0.00	7.00
tblTripsAndVMT	WorkerTripLength	16.80	19.80
tblTripsAndVMT	WorkerTripNumber	10.00	195.00

**2.0 Emissions Summary****2.1 Overall Construction**Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	6.7400e-003	0.0255	0.0602	1.3000e-004	0.0135	1.5000e-003	0.0150	3.0800e-003	1.3800e-003	4.4600e-003	0.0000	11.6101	11.6101	1.3000e-003	2.8000e-004	11.7272
Maximum	6.7400e-003	0.0255	0.0602	1.3000e-004	0.0135	1.5000e-003	0.0150	3.0800e-003	1.3800e-003	4.4600e-003	0.0000	11.6101	11.6101	1.3000e-003	2.8000e-004	11.7272

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr												MT/yr			
2023	6.7400e-003	0.0255	0.0602	1.3000e-004	0.0135	1.5000e-003	0.0150	3.0800e-003	1.3800e-003	4.4600e-003	0.0000	11.6101	11.6101	1.3000e-003	2.8000e-004	11.7272
Maximum	6.7400e-003	0.0255	0.0602	1.3000e-004	0.0135	1.5000e-003	0.0150	3.0800e-003	1.3800e-003	4.4600e-003	0.0000	11.6101	11.6101	1.3000e-003	2.8000e-004	11.7272

	ROG	NOx	CO	SO2	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	0.0300	0.0300
		Highest	0.0300	0.0300

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT/yr			
Area	1.1536	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003

SCG-VCS Project - Phase 7 - Ventura County, Annual

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

Energy	0.0296	0.2687	0.2257	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	679.6654	679.6654	0.0383	9.3200e-003	683.4009
Mobile	0.7190	0.9470	7.3174	0.0156	1.7099	0.0122	1.7221	0.4565	0.0114	0.4679	0.0000	1,441.2736	1,441.2736	0.0914	0.0654	1,463.0603
Waste						0.0000	0.0000		0.0000	0.0000	66.4511	0.0000	66.4511	3.9272	0.0000	164.6298
Water						0.0000	0.0000		0.0000	0.0000	19.3684	140.9777	160.3460	2.0012	0.0484	224.8038
Total	1.9022	1.2157	7.5455	0.0172	1.7099	0.0327	1.7425	0.4565	0.0319	0.4883	85.8195	2,261.9213	2,347.7408	6.0581	0.1232	2,535.8998

## **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1536	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003
Energy	0.0296	0.2687	0.2257	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	679.6654	679.6654	0.0383	9.3200e-003	683.4009
Mobile	0.7190	0.9470	7.3174	0.0156	1.7099	0.0122	1.7221	0.4565	0.0114	0.4679	0.0000	1,441.2736	1,441.2736	0.0914	0.0654	1,463.0603
Waste						0.0000	0.0000		0.0000	0.0000	66.4511	0.0000	66.4511	3.9272	0.0000	164.6298
Water						0.0000	0.0000		0.0000	0.0000	19.3684	140.9777	160.3460	2.0012	0.0484	224.8038
Total	1.9022	1.2157	7.5455	0.0172	1.7099	0.0327	1.7425	0.4565	0.0319	0.4883	85.8195	2,261.9213	2,347.7408	6.0581	0.1232	2,535.8998

## SCG-VCS Project - Phase 7 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	7	Site Preparation	1/2/2023	1/10/2023	5	7	Site Preparation to install pipeline

**Acres of Grading (Site Preparation Phase): 6.06****Acres of Grading (Grading Phase): 0****Acres of Paving: 0****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
7	Graders	1	8.00	46	0.41
7	Tractors/Loaders/Backhoes	3	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
7	4	195.00	7.00	3.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction****3.2 7 - 2023****Unmitigated Construction On-Site**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2100e-003	0.0000	3.2100e-003	3.5000e-004	0.0000	3.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8600e-003	0.0221	0.0318	4.0000e-005		1.4400e-003	1.4400e-003		1.3200e-003	1.3200e-003	0.0000	3.3944	3.3944	1.1000e-003	0.0000	3.4219
<b>Total</b>	<b>3.8600e-003</b>	<b>0.0221</b>	<b>0.0318</b>	<b>4.0000e-005</b>	<b>3.2100e-003</b>	<b>1.4400e-003</b>	<b>4.6500e-003</b>	<b>3.5000e-004</b>	<b>1.3200e-003</b>	<b>1.6700e-003</b>	<b>0.0000</b>	<b>3.3944</b>	<b>3.3944</b>	<b>1.1000e-003</b>	<b>0.0000</b>	<b>3.4219</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	1.9000e-004	5.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0852	0.0852	1.0000e-005	1.0000e-005	0.0894
Vendor	2.0000e-005	1.0200e-003	3.4000e-004	0.0000	1.8000e-004	1.0000e-005	1.8000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.4809	0.4809	2.0000e-005	7.0000e-005	0.5028
Worker	2.8600e-003	2.2100e-003	0.0280	8.0000e-005	0.0101	5.0000e-005	0.0101	2.6800e-003	5.0000e-005	2.7300e-003	0.0000	7.6497	7.6497	1.8000e-004	2.0000e-004	7.7131
<b>Total</b>	<b>2.8800e-003</b>	<b>3.4200e-003</b>	<b>0.0284</b>	<b>8.0000e-005</b>	<b>0.0103</b>	<b>6.0000e-005</b>	<b>0.0104</b>	<b>2.7400e-003</b>	<b>6.0000e-005</b>	<b>2.8000e-003</b>	<b>0.0000</b>	<b>8.2157</b>	<b>8.2157</b>	<b>2.1000e-004</b>	<b>2.8000e-004</b>	<b>8.3053</b>

**Mitigated Construction On-Site**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2100e-003	0.0000	3.2100e-003	3.5000e-004	0.0000	3.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8600e-003	0.0221	0.0318	4.0000e-005		1.4400e-003	1.4400e-003		1.3200e-003	1.3200e-003	0.0000	3.3944	3.3944	1.1000e-003	0.0000	3.4219
<b>Total</b>	<b>3.8600e-003</b>	<b>0.0221</b>	<b>0.0318</b>	<b>4.0000e-005</b>	<b>3.2100e-003</b>	<b>1.4400e-003</b>	<b>4.6500e-003</b>	<b>3.5000e-004</b>	<b>1.3200e-003</b>	<b>1.6700e-003</b>	<b>0.0000</b>	<b>3.3944</b>	<b>3.3944</b>	<b>1.1000e-003</b>	<b>0.0000</b>	<b>3.4219</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	1.9000e-004	5.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0852	0.0852	1.0000e-005	1.0000e-005	0.0894
Vendor	2.0000e-005	1.0200e-003	3.4000e-004	0.0000	1.8000e-004	1.0000e-005	1.8000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.4809	0.4809	2.0000e-005	7.0000e-005	0.5028
Worker	2.8600e-003	2.2100e-003	0.0280	8.0000e-005	0.0101	5.0000e-005	0.0101	2.6800e-003	5.0000e-005	2.7300e-003	0.0000	7.6497	7.6497	1.8000e-004	2.0000e-004	7.7131
<b>Total</b>	<b>2.8800e-003</b>	<b>3.4200e-003</b>	<b>0.0284</b>	<b>8.0000e-005</b>	<b>0.0103</b>	<b>6.0000e-005</b>	<b>0.0104</b>	<b>2.7400e-003</b>	<b>6.0000e-005</b>	<b>2.8000e-003</b>	<b>0.0000</b>	<b>8.2157</b>	<b>8.2157</b>	<b>2.1000e-004</b>	<b>2.8000e-004</b>	<b>8.3053</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Mitigated	0.7190	0.9470	7.3174	0.0156	1.7099	0.0122	1.7221	0.4565	0.0114	0.4679	0.0000	1,441.2736	1,441.2736	0.0914	0.0654	1,463.0603	
Unmitigated	0.7190	0.9470	7.3174	0.0156	1.7099	0.0122	1.7221	0.4565	0.0114	0.4679	0.0000	1,441.2736	1,441.2736	0.0914	0.0654	1,463.0603	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Heavy Industry	1,037.52	1,694.88	1343.76	4,540,257	4,540,257	4,540,257	4,540,257
Total	1,037.52	1,694.88	1,343.76	4,540,257	4,540,257	4,540,257	4,540,257

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.006

**5.0 Energy Detail**

Historical Energy Use: N

## SCG-VCS Project - Phase 7 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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	387.1965	387.1965	0.0327	3.9600e-003	389.1939
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	387.1965	387.1965	0.0327	3.9600e-003	389.1939
NaturalGas Mitigated	0.0296	0.2687	0.2257	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	292.4689	292.4689	5.6100e-003	5.3600e-003	294.2069
NaturalGas Unmitigated	0.0296	0.2687	0.2257	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	292.4689	292.4689	5.6100e-003	5.3600e-003	294.2069

**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					
General Heavy Industry	5.48066e+006	0.0296	0.2687	0.2257	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	292.4689	292.4689	5.6100e-003	5.3600e-003	294.2069
Total		0.0296	0.2687	0.2257	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	292.4689	292.4689	5.6100e-003	5.3600e-003	294.2069

## SCG-VCS Project - Phase 7 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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						
General Heavy Industry	5.48066e+006	0.0296	0.2687	0.2257	1.6100e-003			0.0204	0.0204		0.0204	0.0204	0.0000	292.4689	292.4689	5.6100e-003	5.3600e-003	294.2069
Total		0.0296	0.2687	0.2257	1.6100e-003			0.0204	0.0204		0.0204	0.0204	0.0000	292.4689	292.4689	5.6100e-003	5.3600e-003	294.2069

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	2.18329e+006	387.1965	0.0327	3.9600e-003	389.1939
Total		387.1965	0.0327	3.9600e-003	389.1939

**Mitigated**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	2.18329e+006	387.1965	0.0327	3.9600e-003	389.1939
Total		387.1965	0.0327	3.9600e-003	389.1939

**6.0 Area Detail****6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1536	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003
Unmitigated	1.1536	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003

**6.2 Area by SubCategory****Unmitigated**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1224						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0311						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003
<b>Total</b>	<b>1.1536</b>	<b>2.0000e-005</b>	<b>2.4200e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.7200e-003</b>	<b>4.7200e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>5.0300e-003</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	0.1224						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0311						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003
<b>Total</b>	<b>1.1536</b>	<b>2.0000e-005</b>	<b>2.4200e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.7200e-003</b>	<b>4.7200e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>5.0300e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	160.3460	2.0012	0.0484	224.8038
Unmitigated	160.3460	2.0012	0.0484	224.8038

**7.2 Water by Land Use****Unmitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Heavy Industry	61.05 / 0	160.3460	2.0012	0.0484
<b>Total</b>	<b>160.3460</b>	<b>2.0012</b>	<b>0.0484</b>	<b>224.8038</b>

**Mitigated**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr		
General Heavy Industry	61.05 / 0	160.3460	2.0012	0.0484
<b>Total</b>	<b>160.3460</b>	<b>2.0012</b>	<b>0.0484</b>	<b>224.8038</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	66.4511	3.9272	0.0000	164.6298
Unmitigated	66.4511	3.9272	0.0000	164.6298

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

Land Use	tons	MT/yr			
General Heavy Industry	327.36	66.4511	3.9272	0.0000	164.6298
<b>Total</b>		<b>66.4511</b>	<b>3.9272</b>	<b>0.0000</b>	<b>164.6298</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	327.36	66.4511	3.9272	0.0000	164.6298
<b>Total</b>		<b>66.4511</b>	<b>3.9272</b>	<b>0.0000</b>	<b>164.6298</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**

## SCG-VCS Project - Phase 7 - Ventura County, Annual

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

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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## SCG-VCS Project - Phase 8 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 8**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	264.00	1000sqft	6.06	264,001.00	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics -

Land Use - used 1 mile

Construction Phase - Used North-South project

Off-road Equipment - North-South project

Grading - used 1 mile

Off-road Equipment - North-South project

Trips and VMT - North-South project

Architectural Coating -

Area Coating -

Vehicle Trips -

Fleet Mix -

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	7.00
tblLandUse	LandUseSquareFeet	264,000.00	264,001.00
tblOffRoadEquipment	HorsePower	231.00	46.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	97.00	80.00
tblOffRoadEquipment	HorsePower	221.00	205.00
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	158.00	89.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	LoadFactor	0.29	0.45
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	14.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripLength	6.60	7.90
tblTripsAndVMT	VendorTripNumber	43.00	42.00
tblTripsAndVMT	WorkerTripLength	16.80	19.80
tblTripsAndVMT	WorkerTripNumber	111.00	195.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0450	0.3372	0.4307	7.6000e-004	0.0111	0.0163	0.0275	2.9800e-003	0.0153	0.0183	0.0000	65.4123	65.4123	0.0148	6.3000e-004	65.9703
Maximum	0.0450	0.3372	0.4307	7.6000e-004	0.0111	0.0163	0.0275	2.9800e-003	0.0153	0.0183	0.0000	65.4123	65.4123	0.0148	6.3000e-004	65.9703

#### Mitigated Construction

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr										MT/yr						
2023	0.0450	0.3372	0.4307	7.6000e-004	0.0111	0.0163	0.0275	2.9800e-003	0.0153	0.0183	0.0000	65.4123	65.4123	0.0148	6.3000e-004	65.9702	
Maximum	0.0450	0.3372	0.4307	7.6000e-004	0.0111	0.0163	0.0275	2.9800e-003	0.0153	0.0183	0.0000	65.4123	65.4123	0.0148	6.3000e-004	65.9702	

	ROG	NOx	CO	SO2	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
Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)							Maximum Mitigated ROG + NOX (tons/quarter)						
1	1-2-2023	4-1-2023	0.3513							0.3513						
		Highest	0.3513							0.3513						

**2.2 Overall Operational**Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Area	1.1536	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003	
Energy	0.0296	0.2687	0.2257	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	679.6654	679.6654	0.0383	9.3200e-003	683.4009	
Mobile	0.7190	0.9470	7.3174	0.0156	1.7099	0.0122	1.7221	0.4565	0.0114	0.4679	0.0000	1,441.2736	1,441.2736	0.0914	0.0654	1,463.0603	
Waste						0.0000	0.0000		0.0000	0.0000	66.4511	0.0000	66.4511	3.9272	0.0000	164.6298	

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

Water						0.0000	0.0000		0.0000	0.0000	19.3684	140.9777	160.3460	2.0012	0.0484	224.8038
Total	1.9022	1.2157	7.5455	0.0172	1.7099	0.0327	1.7425	0.4565	0.0319	0.4883	85.8195	2,261.9213	2,347.7408	6.0581	0.1232	2,535.8998

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1536	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003
Energy	0.0296	0.2687	0.2257	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	679.6654	679.6654	0.0383	9.3200e-003	683.4009
Mobile	0.7190	0.9470	7.3174	0.0156	1.7099	0.0122	1.7221	0.4565	0.0114	0.4679	0.0000	1,441.2736	1,441.2736	0.0914	0.0654	1,463.0603
Waste						0.0000	0.0000		0.0000	0.0000	66.4511	0.0000	66.4511	3.9272	0.0000	164.6298
Water						0.0000	0.0000		0.0000	0.0000	19.3684	140.9777	160.3460	2.0012	0.0484	224.8038
<b>Total</b>	<b>1.9022</b>	<b>1.2157</b>	<b>7.5455</b>	<b>0.0172</b>	<b>1.7099</b>	<b>0.0327</b>	<b>1.7425</b>	<b>0.4565</b>	<b>0.0319</b>	<b>0.4883</b>	<b>85.8195</b>	<b>2,261.9213</b>	<b>2,347.7408</b>	<b>6.0581</b>	<b>0.1232</b>	<b>2,535.8998</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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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	8	Building Construction	2/20/2023	2/28/2023	5	7	Pipeline Installation

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 0****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
8	Cranes	1	8.00	46	0.45
8	Other Construction Equipment	1	6.00	171	0.42
8	Forklifts	1	6.00	89	0.20
8	Other Construction Equipment	2	8.00	171	0.42
8	Other Construction Equipment	4	6.00	171	0.42
8	Other Construction Equipment	2	8.00	171	0.42
8	Other Construction Equipment	1	6.00	171	0.42
8	Other Construction Equipment	2	6.00	171	0.42
8	Other Construction Equipment	4	6.00	171	0.42
8	Excavators	4	8.00	162	0.38
8	Excavators	1	6.00	89	0.38
8	Other Construction Equipment	1	6.00	171	0.42
8	Tractors/Loaders/Backhoes	3	6.00	80	0.37
8	Cranes	3	4.00	226	0.29
8	Air Compressors	5	4.00	78	0.48
8	Welders	14	8.00	46	0.45
8	Bore/Drill Rigs	1	8.00	205	0.50
8	Air Compressors	2	6.00	78	0.48

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

## 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
8	52	195.00	42.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

### **3.1 Mitigation Measures Construction**

3.2 8 - 2023

## **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0420	0.3289	0.4007	6.5000e-004		0.0162	0.0162		0.0152	0.0152	0.0000	54.8774	54.8774	0.0145	0.0000	55.2403
Total	<b>0.0420</b>	<b>0.3289</b>	<b>0.4007</b>	<b>6.5000e-004</b>		<b>0.0162</b>	<b>0.0162</b>		<b>0.0152</b>	<b>0.0152</b>	<b>0.0000</b>	<b>54.8774</b>	<b>54.8774</b>	<b>0.0145</b>	<b>0.0000</b>	<b>55.2403</b>

## **Unmitigated Construction Off-Site**

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

Vendor	1.5000e-004	6.1200e-003	2.0700e-003	3.0000e-005	1.0600e-003	4.0000e-005	1.1000e-003	3.1000e-004	3.0000e-005	3.4000e-004	0.0000	2.8853	2.8853	1.2000e-004	4.3000e-004	3.0169
Worker	2.8600e-003	2.2100e-003	0.0280	8.0000e-005	0.0101	5.0000e-005	0.0101	2.6800e-003	5.0000e-005	2.7300e-003	0.0000	7.6497	7.6497	1.8000e-004	2.0000e-004	7.7131
Total	3.0100e-003	8.3300e-003	0.0301	1.1000e-004	0.0111	9.0000e-005	0.0112	2.9900e-003	8.0000e-005	3.0700e-003	0.0000	10.5349	10.5349	3.0000e-004	6.3000e-004	10.7300

**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	0.0420	0.3289	0.4007	6.5000e-004		0.0162	0.0162		0.0152	0.0152	0.0000	54.8774	54.8774	0.0145	0.0000	55.2403
Total	0.0420	0.3289	0.4007	6.5000e-004		0.0162	0.0162		0.0152	0.0152	0.0000	54.8774	54.8774	0.0145	0.0000	55.2403

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5000e-004	6.1200e-003	2.0700e-003	3.0000e-005	1.0600e-003	4.0000e-005	1.1000e-003	3.1000e-004	3.0000e-005	3.4000e-004	0.0000	2.8853	2.8853	1.2000e-004	4.3000e-004	3.0169

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

Worker	2.8600e-003	2.2100e-003	0.0280	8.0000e-005	0.0101	5.0000e-005	0.0101	2.6800e-003	5.0000e-005	2.7300e-003	0.0000	7.6497	7.6497	1.8000e-004	2.0000e-004	7.7131
Total	3.0100e-003	8.3300e-003	0.0301	1.1000e-004	0.0111	9.0000e-005	0.0112	2.9900e-003	8.0000e-005	3.0700e-003	0.0000	10.5349	10.5349	3.0000e-004	6.3000e-004	10.7300

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7190	0.9470	7.3174	0.0156	1.7099	0.0122	1.7221	0.4565	0.0114	0.4679	0.0000	1,441.2736	1,441.2736	0.0914	0.0654	1,463.0603
Unmitigated	0.7190	0.9470	7.3174	0.0156	1.7099	0.0122	1.7221	0.4565	0.0114	0.4679	0.0000	1,441.2736	1,441.2736	0.0914	0.0654	1,463.0603

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
General Heavy Industry	1,037.52	1,694.88	1343.76	4,540,257		4,540,257	
Total	1,037.52	1,694.88	1,343.76	4,540,257		4,540,257	

**4.3 Trip Type Information**

	Miles	Trip %	Trip Purpose %

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.0063

**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	387.1965	387.1965	0.0327	3.9600e-003	389.1939
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	387.1965	387.1965	0.0327	3.9600e-003	389.1939
NaturalGas Mitigated	0.0296	0.2687	0.2257	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	292.4689	292.4689	5.6100e-003	5.3600e-003	294.2069
NaturalGas Unmitigated	0.0296	0.2687	0.2257	1.6100e-003		0.0204	0.0204		0.0204	0.0204	0.0000	292.4689	292.4689	5.6100e-003	5.3600e-003	294.2069

**5.2 Energy by Land Use - NaturalGas**Unmitigated

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

	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					
General Heavy Industry	5.48066e+006	0.0296	0.2687	0.2257	1.6100e-003			0.0204	0.0204		0.0204	0.0204	0.0000	292.4689	292.4689	5.6100e-003	5.3600e-003	294.2069
<b>Total</b>		<b>0.0296</b>	<b>0.2687</b>	<b>0.2257</b>	<b>1.6100e-003</b>			<b>0.0204</b>	<b>0.0204</b>		<b>0.0204</b>	<b>0.0204</b>	<b>0.0000</b>	<b>292.4689</b>	<b>292.4689</b>	<b>5.6100e-003</b>	<b>5.3600e-003</b>	<b>294.2069</b>

**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					
General Heavy Industry	5.48066e+006	0.0296	0.2687	0.2257	1.6100e-003			0.0204	0.0204		0.0204	0.0204	0.0000	292.4689	292.4689	5.6100e-003	5.3600e-003	294.2069
<b>Total</b>		<b>0.0296</b>	<b>0.2687</b>	<b>0.2257</b>	<b>1.6100e-003</b>			<b>0.0204</b>	<b>0.0204</b>		<b>0.0204</b>	<b>0.0204</b>	<b>0.0000</b>	<b>292.4689</b>	<b>292.4689</b>	<b>5.6100e-003</b>	<b>5.3600e-003</b>	<b>294.2069</b>

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e

SCG-VCS Project - Phase 8 - Ventura County, Annual

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

Land Use	kWh/yr	MT/yr			
General Heavy Industry	2.18329e+006	387.1965	0.0327	3.9600e-003	389.1939
Total		387.1965	0.0327	3.9600e-003	389.1939

### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	2.18329e+006	387.1965	0.0327	3.9600e-003	389.1939
Total		387.1965	0.0327	3.9600e-003	389.1939

## 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
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SCG-VCS Project - Phase 8 - Ventura County, Annual

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

Category	tons/yr										MT/yr					
	Mitigated	Unmitigated	Change	Uncertainty	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Mitigated	1.1536	2.0000e-005	2.4200e-003	0.0000			1.0000e-005	1.0000e-005			0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003
Unmitigated	1.1536	2.0000e-005	2.4200e-003	0.0000			1.0000e-005	1.0000e-005			0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003

## 6.2 Area by SubCategory

### **Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1224						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0311						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003
Total	1.1536	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003

### **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					

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

Architectural Coating	0.1224					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0311					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7200e-003	4.7200e-003	1.0000e-005	0.0000	5.0300e-003		
<b>Total</b>	<b>1.1536</b>	<b>2.0000e-005</b>	<b>2.4200e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.7200e-003</b>	<b>4.7200e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>5.0300e-003</b>		

**7.0 Water Detail****7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	160.3460	2.0012	0.0484	224.8038
Unmitigated	160.3460	2.0012	0.0484	224.8038

**7.2 Water by Land Use****Unmitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

Land Use	Mgal	MT/yr			
General Heavy Industry	61.05 / 0	160.3460	2.0012	0.0484	224.8038
<b>Total</b>		<b>160.3460</b>	<b>2.0012</b>	<b>0.0484</b>	<b>224.8038</b>

**Mitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr			
General Heavy Industry	61.05 / 0	160.3460	2.0012	0.0484	224.8038
<b>Total</b>		<b>160.3460</b>	<b>2.0012</b>	<b>0.0484</b>	<b>224.8038</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

	MT/yr			
Mitigated	66.4511	3.9272	0.0000	164.6298
Unmitigated	66.4511	3.9272	0.0000	164.6298

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	327.36	66.4511	3.9272	0.0000	164.6298
<b>Total</b>		<b>66.4511</b>	<b>3.9272</b>	<b>0.0000</b>	<b>164.6298</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	327.36	66.4511	3.9272	0.0000	164.6298
<b>Total</b>		<b>66.4511</b>	<b>3.9272</b>	<b>0.0000</b>	<b>164.6298</b>

## SCG-VCS Project - Phase 8 - Ventura County, Annual

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

## 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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## 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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## SCG-VCS Project - Phase 9 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 9**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	43.56	1000sqft	1.00	43,560.00	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics -

Land Use -

Construction Phase - Honor Rancho

Off-road Equipment - Honor Rancho

Grading - Honor Rancho

Trips and VMT - Honor Rancho

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	60.00
tblGrading	AcresOfGrading	240.00	1.00
tblGrading	MaterialExported	0.00	59,701.00
tblOffRoadEquipment	HorsePower	78.00	45.00

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

tblOffRoadEquipment	HorsePower	212.00	605.00
tblOffRoadEquipment	HorsePower	85.00	385.00
tblOffRoadEquipment	HorsePower	16.00	450.00
tblOffRoadEquipment	HorsePower	158.00	728.00
tblOffRoadEquipment	HorsePower	84.00	67.00
tblOffRoadEquipment	HorsePower	187.00	139.00
tblOffRoadEquipment	HorsePower	84.00	2.00
tblOffRoadEquipment	HorsePower	203.00	97.00
tblOffRoadEquipment	HorsePower	367.00	407.00
tblOffRoadEquipment	HorsePower	65.00	73.50
tblOffRoadEquipment	HorsePower	402.00	475.00
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.48	0.48
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripLength	6.60	7.90
tblTripsAndVMT	VendorTripNumber	0.00	62.00
tblTripsAndVMT	WorkerTripLength	16.80	19.80
tblTripsAndVMT	WorkerTripNumber	58.00	405.00

**2.0 Emissions Summary****2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.3040	2.5931	2.4179	8.7300e-003	0.2442	0.0933	0.3374	0.0655	0.0869	0.1524	0.0000	808.2259	808.2259	0.1391	0.0357	822.3393
Maximum	0.3040	2.5931	2.4179	8.7300e-003	0.2442	0.0933	0.3374	0.0655	0.0869	0.1524	0.0000	808.2259	808.2259	0.1391	0.0357	822.3393

**Mitigated Construction**

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.3040	2.5931	2.4179	8.7300e-003	0.2442	0.0933	0.3374	0.0655	0.0869	0.1524	0.0000	808.2253	808.2253	0.1391	0.0357	822.3388
Maximum	0.3040	2.5931	2.4179	8.7300e-003	0.2442	0.0933	0.3374	0.0655	0.0869	0.1524	0.0000	808.2253	808.2253	0.1391	0.0357	822.3388

	ROG	NOx	CO	SO2	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	2.5236	2.5236
2	4-2-2023	7-1-2023	0.3764	0.3764
		Highest	2.5236	2.5236

**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	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1444	112.1444	6.3200e-003	1.5400e-003	112.7607
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Waste						0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water						0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926
Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2166	387.3759	0.9995	0.0203	418.4208

**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	0.1904	0.0000	4.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
Energy	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	112.1444	112.1444	6.3200e-003	1.5400e-003	112.7607
Mobile	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050
Waste						0.0000	0.0000		0.0000	0.0000	10.9635	0.0000	10.9635	0.6479	0.0000	27.1617
Water						0.0000	0.0000		0.0000	0.0000	3.1958	23.2613	26.4571	0.3302	7.9900e-003	37.0926
Total	0.3139	0.2006	1.2450	2.8500e-003	0.2821	5.3900e-003	0.2875	0.0753	5.2500e-003	0.0806	14.1593	373.2166	387.3759	0.9995	0.0203	418.4208

	ROG	NOx	CO	SO2	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**

SCG-VCS Project - Phase 9 - Ventura County, Annual

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

## **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	9	Grading	1/19/2023	4/12/2023	5	60	Grading

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

**Acres of Grading (Grading Phase):** 1

## **Acres of Paving: 0**

**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
9	Air Compressors	1	8.00	45	0.4
9	Crawler Tractors	2	8.00	605	0.4
9	Crushing/Proc. Equipment	1	8.00	385	0.7
9	Dumpers/Tenders	6	8.00	450	0.3
9	Excavators	1	8.00	728	0.3
9	Generator Sets	1	8.00	67	0.7
9	Graders	2	8.00	139	0.4
9	Pumps	2	8.00	2	0.7
9	Rubber Tired Loaders	3	8.00	97	0.3
9	Scrapers	2	8.00	407	0.4
9	Skid Steer Loaders	1	8.00	73.5	0.3
9	Off-Highway Trucks	1	8.00	475	0.3

## 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
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## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

9	23	405.00	62.00	5,903.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
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**3.1 Mitigation Measures Construction****3.2 9 - 2023**Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3000e-004	0.0000	5.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2454	2.1072	1.7923	5.2100e-003		0.0893	0.0893		0.0831	0.0831	0.0000	467.8871	467.8871	0.1230	0.0000	470.9624
Total	<b>0.2454</b>	<b>2.1072</b>	<b>1.7923</b>	<b>5.2100e-003</b>	<b>5.3000e-004</b>	<b>0.0893</b>	<b>0.0898</b>	<b>6.0000e-005</b>	<b>0.0831</b>	<b>0.0831</b>	<b>0.0000</b>	<b>467.8871</b>	<b>467.8871</b>	<b>0.1230</b>	<b>0.0000</b>	<b>470.9624</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	5.8000e-003	0.3691	0.1014	1.6600e-003	0.0507	2.6100e-003	0.0533	0.0139	2.5000e-003	0.0164	0.0000	167.6511	167.6511	0.0114	0.0267	175.8941
Vendor	1.8700e-003	0.0775	0.0262	3.7000e-004	0.0134	4.5000e-004	0.0139	3.8700e-003	4.3000e-004	4.3000e-003	0.0000	36.5072	36.5072	1.5000e-003	5.4600e-003	38.1729
Worker	0.0509	0.0393	0.4981	1.4900e-003	0.1795	9.4000e-004	0.1805	0.0477	8.7000e-004	0.0485	0.0000	136.1805	136.1805	3.2200e-003	3.5200e-003	137.3100

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Total	0.0586	0.4859	0.6256	3.5200e-003	0.2436	4.0000e-003	0.2476	0.0655	3.8000e-003	0.0692	0.0000	340.3388	340.3388	0.0161	0.0357	351.3770
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**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					5.3000e-004	0.0000	5.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2454	2.1072	1.7923	5.2100e-003		0.0893	0.0893		0.0831	0.0831	0.0000	467.8865	467.8865	0.1230	0.0000	470.9618
Total	0.2454	2.1072	1.7923	5.2100e-003	5.3000e-004	0.0893	0.0898	6.0000e-005	0.0831	0.0831	0.0000	467.8865	467.8865	0.1230	0.0000	470.9618

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.8000e-003	0.3691	0.1014	1.6600e-003	0.0507	2.6100e-003	0.0533	0.0139	2.5000e-003	0.0164	0.0000	167.6511	167.6511	0.0114	0.0267	175.8941
Vendor	1.8700e-003	0.0775	0.0262	3.7000e-004	0.0134	4.5000e-004	0.0139	3.8700e-003	4.3000e-004	4.3000e-003	0.0000	36.5072	36.5072	1.5000e-003	5.4600e-003	38.1729
Worker	0.0509	0.0393	0.4981	1.4900e-003	0.1795	9.4000e-004	0.1805	0.0477	8.7000e-004	0.0485	0.0000	136.1805	136.1805	3.2200e-003	3.5200e-003	137.3100

SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Total	0.0586	0.4859	0.6256	3.5200e-003	0.2436	4.0000e-003	0.2476	0.0655	3.8000e-003	0.0692	0.0000	340.3388	340.3388	0.0161	0.0357	351.3770
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## **4.0 Operational Detail - Mobile**

#### **4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050
Unmitigated	0.1186	0.1563	1.2074	2.5800e-003	0.2821	2.0200e-003	0.2842	0.0753	1.8800e-003	0.0772	0.0000	237.8101	237.8101	0.0151	0.0108	241.4050

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	171.19	279.66	221.72	749,142	749,142
Total	171.19	279.66	221.72	749,142	749,142

### **4.3 Trip Type Information**

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

General Heavy Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
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**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.548670	0.058343	0.171689	0.130773	0.027316	0.007545	0.011806	0.006161	0.000681	0.000392	0.029028	0.000637	0.0069

**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	63.8872	63.8872	5.3900e-003	6.5000e-004	64.2168
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.8872	63.8872	5.3900e-003	6.5000e-004	64.2168
NaturalGas Mitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2572	48.2572	9.2000e-004	8.8000e-004	48.5440
NaturalGas Unmitigated	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2572	48.2572	9.2000e-004	8.8000e-004	48.5440

**5.2 Energy by Land Use - NaturalGas**Unmitigated

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

	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					
General Heavy Industry	904306	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2572	48.2572	9.2000e-004	8.8000e-004	48.5440	
<b>Total</b>		<b>4.8800e-003</b>	<b>0.0443</b>	<b>0.0372</b>	<b>2.7000e-004</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>48.2572</b>	<b>48.2572</b>	<b>9.2000e-004</b>	<b>8.8000e-004</b>	<b>48.5440</b>	

**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					
General Heavy Industry	904306	4.8800e-003	0.0443	0.0372	2.7000e-004		3.3700e-003	3.3700e-003		3.3700e-003	3.3700e-003	0.0000	48.2572	48.2572	9.2000e-004	8.8000e-004	48.5440	
<b>Total</b>		<b>4.8800e-003</b>	<b>0.0443</b>	<b>0.0372</b>	<b>2.7000e-004</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>		<b>3.3700e-003</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>48.2572</b>	<b>48.2572</b>	<b>9.2000e-004</b>	<b>8.8000e-004</b>	<b>48.5440</b>	

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e

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

Land Use	kWh/yr	MT/yr			
General Heavy Industry	360241	63.8872	5.3900e-003	6.5000e-004	64.2168
<b>Total</b>		<b>63.8872</b>	<b>5.3900e-003</b>	<b>6.5000e-004</b>	<b>64.2168</b>

## Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	360241	63.8872	5.3900e-003	6.5000e-004	64.2168
Total		63.8872	5.3900e-003	6.5000e-004	64.2168

## 6.0 Area Detail

### **6.1 Mitigation Measures Area**

ROG NOx CO SO<sub>2</sub> Fugitive PM10 Exhaust PM10 PM10 Total Fugitive PM2.5 Exhaust PM2.5 PM2.5 Total Bio- CO<sub>2</sub> NBio- CO<sub>2</sub> Total CO<sub>2</sub> CH4 N<sub>2</sub>O CO<sub>2</sub>e

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Category	tons/yr												MT/yr					
	Mitigated	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	0.0000	8.3000e-004
Unmitigated	0.1904	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	0.0000	8.3000e-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	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					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	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	8.3000e-004
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-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					

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Architectural Coating	0.0202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.8000e-004	7.8000e-004	0.0000	0.0000	0.0000	8.3000e-004	
<b>Total</b>	<b>0.1904</b>	<b>0.0000</b>	<b>4.0000e-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>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.3000e-004</b>	

**7.0 Water Detail****7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	26.4571	0.3302	7.9900e-003	37.0926
Unmitigated	26.4571	0.3302	7.9900e-003	37.0926

**7.2 Water by Land Use****Unmitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

Land Use	Mgal	MT/yr			
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003	37.0926
<b>Total</b>		<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

**Mitigated**

Indoor/Out door Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr			
General Heavy Industry	10.0733 / 0	26.4571	0.3302	7.9900e-003	37.0926
<b>Total</b>		<b>26.4571</b>	<b>0.3302</b>	<b>7.9900e-003</b>	<b>37.0926</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

	MT/yr			
Mitigated	10.9635	0.6479	0.0000	27.1617
Unmitigated	10.9635	0.6479	0.0000	27.1617

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	54.01	10.9635	0.6479	0.0000	27.1617
<b>Total</b>		<b>10.9635</b>	<b>0.6479</b>	<b>0.0000</b>	<b>27.1617</b>

## SCG-VCS Project - Phase 9 - Ventura County, Annual

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

## 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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## 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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## SCG-VCS Project - Phase 10 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 10**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	264.00	1000sqft	6.06	264,001.06	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics - defaults

Land Use - North-South

Construction Phase - North-South

Off-road Equipment - North-South

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	132001	0
tblAreaCoating	Area_Nonresidential_Interior	396002	0
tblConstructionPhase	NumDays	230.00	19.00
tblLandUse	LandUseSquareFeet	264,000.00	264,001.06
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	231.00	226.00

## SCG-VCS Project - Phase 10 - Ventura County, Annual

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

tblOffRoadEquipment	HorsePower	84.00	49.00
tblOffRoadEquipment	HorsePower	221.00	205.00
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	172.00	171.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	14.00
tblOffRoadEquipment	UsageHours	7.00	5.00
tblOffRoadEquipment	UsageHours	7.00	5.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	5.00
tblProjectCharacteristics	TotalLotAcreage	0	0.63
tblProjectCharacteristics	UrbanizationLevel		Rural

SCG-VCS Project - Phase 10 - Ventura County, Annual

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

## 2.0 Emissions Summary

## 2.1 Overall Construction

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1168	0.9073	1.1254	2.1400e-003	5.5200e-003	0.0417	0.0472	2.1900e-003	0.0399	0.0421	0.0000	184.4682	184.4682	0.0300	2.0300e-003	185.8236
Maximum	0.1168	0.9073	1.1254	2.1400e-003	5.5200e-003	0.0417	0.0472	2.1900e-003	0.0399	0.0421	0.0000	184.4682	184.4682	0.0300	2.0300e-003	185.8236

## **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1168	0.9073	1.1254	2.1400e-003	5.5200e-003	0.0417	0.0472	2.1900e-003	0.0399	0.0421	0.0000	184.4680	184.4680	0.0300	2.0300e-003	185.8234
Maximum	0.1168	0.9073	1.1254	2.1400e-003	5.5200e-003	0.0417	0.0472	2.1900e-003	0.0399	0.0421	0.0000	184.4680	184.4680	0.0300	2.0300e-003	185.8234

SCG-VCS Project - Phase 10 - Ventura County, Annual

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	0.9522	0.9522
		Highest	0.9522	0.9522

## 2.2 Overall Operational

## Unmitigated Operational

### **Mitigated Operational**

## SCG-VCS Project - Phase 10 - Ventura County, Annual

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

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

**3.0 Construction Detail**Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	10	Building Construction	2/20/2023	3/17/2023	5	19	Roadwork

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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
10	Air Compressors	8	4.00	78	0.48
10	Air Compressors	2	6.00	78	0.48
10	Air Compressors	2	4.00	78	0.48
10	Bore/Drill Rigs	1	4.00	205	0.50
10	Concrete/Industrial Saws	2	4.00	81	0.73
10	Cranes	2	5.00	226	0.29
10	Cranes	4	5.00	226	0.29
10	Excavators	1	5.00	162	0.38
10	Forklifts	2	4.00	89	0.20
10	Generator Sets	6	2.00	49	0.74
10	Generator Sets	3	6.00	84	0.74

## SCG-VCS Project - Phase 10 - Ventura County, Annual

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

10	Other Construction Equipment	2	4.00	171	0.42
10	Other Construction Equipment	3	4.00	171	0.42
10	Other Construction Equipment	2	4.00	171	0.42
10	Other Construction Equipment	1	4.00	171	0.42
10	Other Construction Equipment	1	4.00	171	0.42
10	Pavers	1	4.00	125	0.42
10	Pumps	1	5.00	84	0.74
10	Pumps	1	6.00	84	0.74
10	Pumps	2	4.00	84	0.74
10	Rollers	2	5.00	80	0.38
10	Tractors/Loaders/Backhoes	5	6.00	97	0.37
10	Tractors/Loaders/Backhoes	6	4.00	97	0.37
10	Welders	14	5.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
10		232.00	46.00	2.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction****3.2 10 - 2023****Unmitigated Construction On-Site**

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

## SCG-VCS Project - Phase 10 - Ventura County, Annual

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

Off-Road	0.1066	0.8805	1.0238	1.7600e-003		0.0414	0.0414		0.0397	0.0397	0.0000	149.3766	149.3766	0.0290	0.0000	150.1014
Total	<b>0.1066</b>	<b>0.8805</b>	<b>1.0238</b>	<b>1.7600e-003</b>		<b>0.0414</b>	<b>0.0414</b>		<b>0.0397</b>	<b>0.0397</b>	<b>0.0000</b>	<b>149.3766</b>	<b>149.3766</b>	<b>0.0290</b>	<b>0.0000</b>	<b>150.1014</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	1.3000e-004	4.0000e-005	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0598	0.0598	0.0000	1.0000e-005	0.0627
Vendor	4.6000e-004	0.0192	6.4800e-003	9.0000e-005	9.7000e-004	1.1000e-004	1.0800e-003	3.8000e-004	1.1000e-004	4.9000e-004	0.0000	9.0287	9.0287	3.7000e-004	1.3500e-003	9.4406
Worker	9.7200e-003	7.5100e-003	0.0951	2.8000e-004	4.5500e-003	1.8000e-004	4.7300e-003	1.8100e-003	1.7000e-004	1.9700e-003	0.0000	26.0032	26.0032	6.1000e-004	6.7000e-004	26.2189
Total	<b>0.0102</b>	<b>0.0268</b>	<b>0.1016</b>	<b>3.7000e-004</b>	<b>5.5200e-003</b>	<b>2.9000e-004</b>	<b>5.8200e-003</b>	<b>2.1900e-003</b>	<b>2.8000e-004</b>	<b>2.4600e-003</b>	<b>0.0000</b>	<b>35.0917</b>	<b>35.0917</b>	<b>9.8000e-004</b>	<b>2.0300e-003</b>	<b>35.7222</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	0.1066	0.8805	1.0238	1.7600e-003		0.0414	0.0414		0.0397	0.0397	0.0000	149.3764	149.3764	0.0290	0.0000	150.1012

## SCG-VCS Project - Phase 10 - Ventura County, Annual

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

Total	0.1066	0.8805	1.0238	1.7600e-003		0.0414	0.0414		0.0397	0.0397	0.0000	149.3764	149.3764	0.0290	0.0000	150.1012
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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	1.3000e-004	4.0000e-005	0.0000	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0598	0.0598	0.0000	1.0000e-005	0.0627
Vendor	4.6000e-004	0.0192	6.4800e-003	9.0000e-005	9.7000e-004	1.1000e-004	1.0800e-003	3.8000e-004	1.1000e-004	4.9000e-004	0.0000	9.0287	9.0287	3.7000e-004	1.3500e-003	9.4406
Worker	9.7200e-003	7.5100e-003	0.0951	2.8000e-004	4.5500e-003	1.8000e-004	4.7300e-003	1.8100e-003	1.7000e-004	1.9700e-003	0.0000	26.0032	26.0032	6.1000e-004	6.7000e-004	26.2189
Total	0.0102	0.0268	0.1016	3.7000e-004	5.5200e-003	2.9000e-004	5.8200e-003	2.1900e-003	2.8000e-004	2.4600e-003	0.0000	35.0917	35.0917	9.8000e-004	2.0300e-003	35.7222

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile****4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Total					

**4.3 Trip Type Information**

SCG-VCS Project - Phase 10 - Ventura County, Annual

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

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

## 4.4 Fleet Mix

Land Use LDA LDT1 LDT2 MDV LHD1 LHD2 MHD HHD OBUS UBUS MCY SBUS MH

## 5.0 Energy Detail

## Historical Energy Use: N

### **5.1 Mitigation Measures Energy**

## 6.0 Area Detail

### **6.1 Mitigation Measures Area**

## SCG-VCS Project - Phase 10 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****6.2 Area by SubCategory****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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0311					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0311</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0311					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0311</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>							

**7.0 Water Detail**

SCG-VCS Project - Phase 10 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

## SCG-VCS Project - Phase 11 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****SCG-VCS Project - Phase 11**

Ventura County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	43.56	1000sqft	1.00	43,560.17	0

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

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

Project Characteristics - defaults

Land Use - San Manuel

Construction Phase - San Manuel

Off-road Equipment - San Manuel

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	21780	0
tblAreaCoating	Area_Nonresidential_Interior	65340	0
tblConstructionPhase	NumDays	100.00	80.00
tblLandUse	LandUseSquareFeet	43,560.00	43,560.17
tblOffRoadEquipment	HorsePower	231.00	500.00
tblOffRoadEquipment	HorsePower	231.00	300.00

SCG-VCS Project - Phase 11 - Ventura County, Annual

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

tblOffRoadEquipment	HorsePower	63.00	350.00
tblOffRoadEquipment	HorsePower	158.00	300.00
tblOffRoadEquipment	HorsePower	84.00	350.00
tblOffRoadEquipment	HorsePower	100.00	125.00
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	TotalLotAcreage	0	0.63
tblProjectCharacteristics	UrbanizationLevel		Rural

## 2.0 Emissions Summary

## 2.1 Overall Construction

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.1570	1.0407	1.4341	4.9800e-003	0.0249	0.0342	0.0591	9.8800e-003	0.0321	0.0420	0.0000	462.1769	462.1769	0.0701	5.7800e-003	465.6514
Maximum	0.1570	1.0407	1.4341	4.9800e-003	0.0249	0.0342	0.0591	9.8800e-003	0.0321	0.0420	0.0000	462.1769	462.1769	0.0701	5.7800e-003	465.6514

### 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
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SCG-VCS Project - Phase 11 - Ventura County, Annual

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

Year	tons/yr										MT/yr					
	0.1570	1.0407	1.4341	4.9800e-003	0.0249	0.0342	0.0591	9.8800e-003	0.0321	0.0420	0.0000	462.1765	462.1765	0.0701	5.7800e-003	465.6511
2023	0.1570	1.0407	1.4341	4.9800e-003	0.0249	0.0342	0.0591	9.8800e-003	0.0321	0.0420	0.0000	462.1765	462.1765	0.0701	5.7800e-003	465.6511
Maximum	0.1570	1.0407	1.4341	4.9800e-003	0.0249	0.0342	0.0591	9.8800e-003	0.0321	0.0420	0.0000	462.1765	462.1765	0.0701	5.7800e-003	465.6511

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
2	4-2-2023	7-1-2023	0.4042	0.4042
3	7-2-2023	9-30-2023	0.7871	0.7871
		Highest	0.7871	0.7871

## **2.2 Overall Operational**

## Unmitigated Operational

## SCG-VCS Project - Phase 11 - Ventura County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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	0.1701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	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	11	Building Construction	5/25/2023	9/13/2023	5	80	Building Construction

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

## SCG-VCS Project - Phase 11 - Ventura County, Annual

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

11	Generator Sets	1	10.00	350	0.74
11	Cranes	1	10.00	500	0.29
11	Aerial Lifts	2	8.00	350	0.31
11	Cranes	1	8.00	300	0.29
11	Rough Terrain Forklifts	1	8.00	125	0.40
11	Excavators	1	8.00	300	0.38

**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
11		296.00	20.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction****3.2 11 - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1066	0.9690	0.9375	3.3700e-003		0.0330	0.0330		0.0311	0.0311	0.0000	313.7689	313.7689	0.0663	0.0000	315.4263
Total	0.1066	0.9690	0.9375	3.3700e-003		0.0330	0.0330		0.0311	0.0311	0.0000	313.7689	313.7689	0.0663	0.0000	315.4263

**Unmitigated Construction Off-Site**

## SCG-VCS Project - Phase 11 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
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	8.1000e-004	0.0333	0.0113	1.6000e-004	1.6800e-003	1.9000e-004	1.8700e-003	6.6000e-004	1.9000e-004	8.5000e-004	0.0000	15.7020	15.7020	6.5000e-004	2.3500e-003	16.4184
Worker	0.0496	0.0383	0.4854	1.4500e-003	0.0233	9.2000e-004	0.0242	9.2200e-003	8.4000e-004	0.0101	0.0000	132.7060	132.7060	3.1300e-003	3.4300e-003	133.8066
<b>Total</b>	<b>0.0504</b>	<b>0.0716</b>	<b>0.4966</b>	<b>1.6100e-003</b>	<b>0.0249</b>	<b>1.1100e-003</b>	<b>0.0260</b>	<b>9.8800e-003</b>	<b>1.0300e-003</b>	<b>0.0109</b>	<b>0.0000</b>	<b>148.4080</b>	<b>148.4080</b>	<b>3.7800e-003</b>	<b>5.7800e-003</b>	<b>150.2251</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	0.1066	0.9690	0.9375	3.3700e-003		0.0330	0.0330		0.0311	0.0311	0.0000	313.7686	313.7686	0.0663	0.0000	315.4260
<b>Total</b>	<b>0.1066</b>	<b>0.9690</b>	<b>0.9375</b>	<b>3.3700e-003</b>		<b>0.0330</b>	<b>0.0330</b>		<b>0.0311</b>	<b>0.0311</b>	<b>0.0000</b>	<b>313.7686</b>	<b>313.7686</b>	<b>0.0663</b>	<b>0.0000</b>	<b>315.4260</b>

**Mitigated Construction Off-Site**

## SCG-VCS Project - Phase 11 - Ventura County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
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	8.1000e-004	0.0333	0.0113	1.6000e-004	1.6800e-003	1.9000e-004	1.8700e-003	6.6000e-004	1.9000e-004	8.5000e-004	0.0000	15.7020	15.7020	6.5000e-004	2.3500e-003	16.4184	
Worker	0.0496	0.0383	0.4854	1.4500e-003	0.0233	9.2000e-004	0.0242	9.2200e-003	8.4000e-004	0.0101	0.0000	132.7060	132.7060	3.1300e-003	3.4300e-003	133.8066	
Total	0.0504	0.0716	0.4966	1.6100e-003	0.0249	1.1100e-003	0.0260	9.8800e-003	1.0300e-003	0.0109	0.0000	148.4080	148.4080	3.7800e-003	5.7800e-003	150.2251	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile****4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
Total							

**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

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH

**5.0 Energy Detail**

## SCG-VCS Project - Phase 11 - Ventura County, Annual

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

Historical Energy Use: N

**5.1 Mitigation Measures Energy****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	0.1701						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.1701						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

**6.2 Area by SubCategory****Unmitigated**

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

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

Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					0.0000	0.0000		0.0000	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>0.1701</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1701					0.0000	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>0.1701</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>										

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## SCG-VCS Project - Phase 11 - Ventura County, Annual

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

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