# Cal-Pacific Supply Inc. Site Plan Review (SPR) 2020-16

Initial Study / Negative Declaration

January 2021

#### Prepared for:



Planning Department 205 W. 4<sup>th</sup> Street Madera, CA 93637

# Table of Contents

Chapter 1	Introd	luction	1-1
1.1	Regulato	ory Information	1-1
1.2	Docume	nt Format	1-1
Chapter 2	Projec	t Description	2-1
2.1	Project E	Background	2-1
	2.1.1	Project Title	2-1
	2.1.2	Lead Agency Name and Address	2-1
	2.1.3	Contact Person and Phone Number	2-1
	2.1.4	Study Prepared By	2-1
	2.1.5	Project Location	2-1
	2.1.6	Latitude and Longitude	2-1
	2.1.7	General Plan Designation	2-1
	2.1.8	Zoning	2-1
	2.1.9	Description of Project	2-2
	2.1.10	Site and Surrounding Land Uses and Setting	2-2
	2.1.11	Other Public Agencies Whose Approval May Be Required	2-3
	2.1.12	Consultation with California Native American Tribes	2-3
Chapter 3	Deterr	mination	3-1
3.1	Environn	nental Factors Potentially Affected	3-1
3.2	Determi	nation	3-2
Chapter 4	Impac	t Analysis	4-1
4.1	Aestheti	cs	4-1
	4.1.1	Environmental Setting	4-1
	4.1.2	Impact Assessment	4-2
4.2	Agricultu	ure and Forestry Resources	4-3
	4.2.1	Environmental Setting	4-3
	4.2.2	Impact Assessment	4-4
4.3	Air Quali	ity	4-5
	4.3.1	Environmental Setting	4-5
	4.3.2	Impact Assessment	4-8
4.4	Biologica	al Resources	4-10

	4.4.1	Environmental Setting	4-11
	4.4.2	Impact Assessment	4-11
4.5	Cultural F	Resources	4-13
	4.5.1	Environmental Setting	4-13
	4.5.2	Impact Assessment	4-13
4.6	Energy		4-15
	4.6.1	Environmental Setting	4-15
	4.6.2	Impact Assessment	4-15
4.7	Geology a	and Soils	4-17
	4.7.1	Environmental Setting	4-18
	4.7.2	Impact Assessment	4-18
4.8	Greenhou	use Gas Emissions	4-21
	4.8.1	Environmental Setting	4-21
	4.8.2	Impact Assessment	4-22
4.9	Hazards a	and Hazardous Materials	4-23
	4.9.1	Environmental Setting	4-23
	4.9.2	Impact Assessment	4-24
4.10	Hydrolog	y and Water Quality	4-26
	4.10.1	Environmental Setting	4-27
	4.10.2	Impact Assessment	4-27
4.11	Land Use	and Planning	4-30
	4.11.1	Environmental Setting	4-30
	4.11.2	Impact Assessment	4-30
4.12	Mineral F	Resources	4-31
	4.12.1	Environmental Setting	4-31
	4.12.2	Impact Assessment	4-31
4.13	Noise		4-32
	4.13.1	Environmental Setting	4-32
	4.13.2	Impact Assessment	4-32
4.14	Populatio	on and Housing	4-34
	4.14.1	Environmental Setting	4-34
	4.14.2	Impact Assessment	4-34
4.15	Public Sei	rvices	4-35

	4.15.1	Environmental Setting	4-35
	4.15.2	Impact Assessment	4-35
4.16	Recreatio	n	4-37
	4.16.1	Environmental Setting	4-37
	4.16.2	Impact Assessment	4-37
4.17	Transport	ration	4-38
	4.17.1	Environmental Setting	4-38
	4.17.2	Impact Assessment	4-38
4.18	Tribal Cul	tural Resources	4-40
	4.18.1	Environmental Setting	4-40
	4.18.2	Impact Assessment	4-41
4.19	Utilities a	nd Service Systems	4-42
	4.19.1	Environmental Setting	4-42
	4.19.2	Impact Assessment	4-43
4.20	Wildfire		4-45
	4.20.1	Environmental Setting	4-45
	4.20.2	Impact Assessment	4-45
4.21	CEQA Ma	ndatory Findings of Significance	4-47
	4.21.1	Environmental Setting	4-47
	4 21 2	Impact Assessment	4-48

# List of Figures

Figure 2-1	Vicinity Map	2-4
Figure 2-2	Project Site	2-5
Figure 2-3	Site Plan	2-6
List	of Tables	
Table 2-1	Existing Uses, General Plan Designations, and Zone Districts of Surrounding Properties	2-3
Table 4-1.	Unmitigated Short-Term Construction-Generated Emissions of Criteria Air Pollutants	4-8
Table 4-2.	Unmitigated Long-Term Operational Emissions of Criteria Air Pollutants	4-8
Table 4-4.	Unmitigated Emissions of CO2e, 20224	-22
Table 1-5	Unmitigated Emissions of CO2e 2030	-22

# **Appendices**

Appendix A: CalEEMod Output Files

January 2021 iv

# Chapter 1 Introduction

Provost & Pritchard Consulting Group has prepared this Initial Study/Negative Declaration (IS/ND) on behalf of the City of Madera to address the environmental effects of the CAL-Pacific Supply Inc. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et. seq. The City of Madera is the CEQA lead agency for this proposed Project.

The site and the proposed Project are described in detail in Chapter 2 Project Description.

# 1.1 Regulatory Information

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, et seq.)— also known as the CEQA Guidelines— Section 15064(a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the proposed project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels. A negative declaration (ND) may be prepared instead if the lead agency finds that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, an ND or mitigated ND shall be prepared for a project subject to CEQA when either:

- a) The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or
- b) The IS identified potentially significant effects, but:
  - Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed Mitigated ND and IS is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and
  - 2. There is no substantial evidence, in light of the whole record before the agency, that the proposed Project as revised may have a significant effect on the environment.

### 1.2 Document Format

This IS/ND contains four chapters plus appendices. Chapter 1 Introduction provides an overview of the proposed project and the CEQA process. Chapter 2 Project Description provides a detailed description of proposed project components. Chapter 3 Determination identifies the environmental factors potentially affected based on the analyses contained in this IS and includes the Lead Agency's determination based upon those analyses. Chapter 4 Impact Analysis presents the CEQA checklist and environmental analyses for all impact areas and the mandatory findings of significance. A brief discussion of the reasons why the project impact is anticipated to be less than significant or why no impacts are expected is included. The CalEEMod Output Files are provided as technical Appendix A at the end of this document.

# Chapter 2 Project Description

# 2.1 Project Background

#### 2.1.1 Project Title

CAL-Pacific Supply Inc. Site Plan Review (SPR) 2020-16

#### 2.1.2 Lead Agency Name and Address

City of Madera 205 W. 4<sup>th</sup> Street Madera, CA 93637

#### 2.1.3 Contact Person and Phone Number

#### **Lead Agency Contact**

Gary Conte, AICP, Planning Manager 559.661.5430

#### **Applicant Information**

Ahmed Alamari, Cal-Pacific Supply 559.718.0532

### 2.1.4 Study Prepared By

Provost & Pritchard Consulting Group 286 West Cromwell Avenue Fresno, CA 93711

#### 2.1.5 Project Location

The Project is located in Madera, California on Assessor's Parcel Number 009-350-024, 009-350-025, 009-350-026, and 009-350-029 (see Figure 2-1) at the southeast corner of West Almond Avenue and South Granada Drive (see Figure 2-2).

### 2.1.6 Latitude and Longitude

The centroid of the Project area is 36° 56′ 39.2." N, 120° 05′ 26.8" W.

### 2.1.7 General Plan Designation

The Project site is planned I (Industrial).

#### **2.1.8 Zoning**

The Project site is zoned I (Industrial).

#### 2.1.9 Description of Project

#### **Project Description**

The applicant, CAL-Pacific Supply Inc., proposes to construct a new 102,250 square foot (sf) building to include offices (7,500 sf), a product display area (7,500 sf), a warehouse (85,000 sf), and a covered dock (2,250 sf) for the storage and sale of agricultural products. The Project site contains a total area of 8.55 acres; 6.2 acres are to be developed and 2.35 acres are anticipated for future development. The primary access to the Project will be from South Granada Drive with a secondary access to West Almond Avenue. The South Granada Drive frontage will have a 20-foot wide landscaped buffer (see Figure 2-3).

Construction of the Project is expected to take approximately 9 months to complete. Construction is limited by the City noise ordinance and General Plan Policy N-6 to between the hours of 7 am and 8 pm. At this time, no project construction commencement schedule was submitted as part of the application. Project construction commencement is subject to securing the permits required for the Project.

#### **Actions Required**

The City of Madera has jurisdiction over the review and approval of the Project. The City of Madera Planning Commission would be requested to take action on the following:

- Adoption of the Negative Declaration with appropriate findings; and
- Approval of Site Plan Review 2020-16.

The City of Madera would also issue the following ministerial permits for the Project if and once the above listed actions are taken:

- Grading Permit;
- Encroachment Permit; and
- Building Permit.

### 2.1.10 Site and Surrounding Land Uses and Setting

#### **Environmental Setting**

The 8.55-acre site consists of vacant land with an existing 6-foot chain link fence on the south and east sides. The land has been disced to keep weeds and grasses down. The topography is generally flat with gentle slope from east to west with a differential of 6 inches. There are no trees or structures on the Project site.

#### **Surrounding Land Uses**

Surrounding existing uses include a single family residential complex to the west of the Project site, across South Granada Avenue; industrial uses to the south and east; and a drainage basin and an existing building to the north of the Project site, across West Almond Avenue. The parcels directly abutting the Project site at the southeast corner of West Almond Avenue and South Granada Drive is currently vacant and will remain vacant as it is not a part of this Project.

Table 2-1 Existing Uses, General Plan Designations, and Zone Districts of Surrounding Properties

Direction from Project Site	Existing Use	General Plan Designation	Zone District					
North	Drainage basin and industrial	Resource Conservation/Agriculture; Industrial	IP					
East	Industrial	Industrial	1					
South	Industrial	Industrial	1					
West	Single family residential	Medium Density Residential	PD(4500)					
IP – Industrial Park I – Industrial PD(4500) - Planned	IP – Industrial Park							

#### 2.1.11 Other Public Agencies Whose Approval May Be Required

Other agencies, including but not necessarily limited to the following, may have authority to issue permits prior to Project implementation:

- San Joaquin Valley Air Pollution Control District; and
- Regional Water Quality Control Board.

#### 2.1.12 Consultation with California Native American Tribes

Public Resources Code Section 21080.3.1, et seq. (codification of AB 52, 2013-14)) requires that a lead agency, within 14 days of determining that it will undertake a project, notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate a request for formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement will be made.

The City of Madera has not received a request from any California Native American tribes in the geographic area which it is traditionally and culturally affiliated with or that has otherwise requested to be notified about projects in the City of Madera.

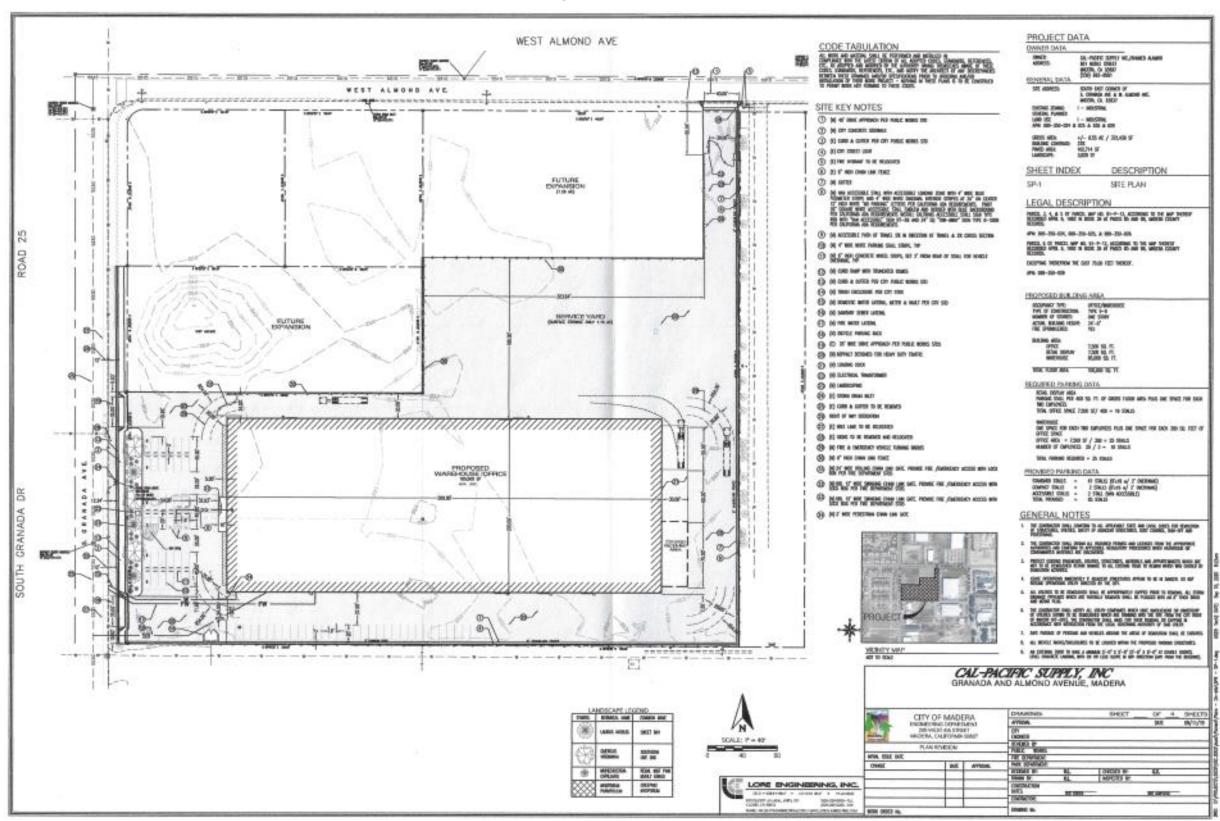
TRABON WAY PACIFIC CT ANNON AVE STATE ST BARON ST HILLCREST CT SUNSET AVE FAIRVIEW AVE NATIONAL AVE THIRD ST SSAFRAS DR SUMMER LN WINTER WAY REN WAY OAK ST K MODOC ST PLUMAS STREET PLUMAS ST PINE ST AVE 13 3/4 SCHNOOR AVE PETITE AVE MERLOT, AVE GILL AVE CHIANTI AVE ALMOND AVE W ALMOND AVE INDEPENDENCE DRIVE GRANADA DR Project Site City Limit PROVOST& PRITCHARD 500 1,000 Feet

Figure 2-1 Vicinity Map

Figure 2-2 Project Site



Figure 2-3 Site Plan



# Chapter 3 Determination

# 3.1 Environmental Factors Potentially Affected

As indicated by the discussions of existing and baseline conditions, and impact analyses that follows in **Chapter 4**, environmental factors not checked below would have no impacts or less than significant impacts resulting from the Project. Environmental factors that are checked below would have potentially significant impacts resulting from the Project. Mitigation measures are recommended for each of the potentially significant impacts that would reduce the impact to less than significant.

Aesthetics	Agriculture & Forestry Resources	Air Quality
☐ Biological Resources	Cultural Resources	☐ Energy
Geology/Soils	Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
Noise	Population/Housing	Public Services
Recreation	☐ Transportation	Tribal Cultural Resources
Utilities/Service Systems	Wildfire	<ul><li>Mandatory Findings of Significance</li></ul>

The analyses of environmental impacts in **Chapter 4 Impact Analysis** result in an impact statement, which shall have the following meanings.

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Less than Significant with Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

**Less Than Significant Impact.** This category is identified when the project would result in impacts below the threshold of significance, and no mitigation measures are required.

**No Impact.** This category applies when a project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

# 3.2 Determination

On the basis of this initial study:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.					
	will not be a significant effect in this cas	t could have a significant effect on the environment, there se because revisions in the project have been made by or IITIGATED NEGATIVE DECLARATION will be prepared.				
	I find that the proposed project MAY ENVIRONMENTAL IMPACT REPORT is red	have a significant effect on the environment, and an quired.				
	significant unless mitigated" impact on adequately analyzed in an earlier docume addressed by mitigation measures based	have a "potentially significant impact" or "potentially the environment, but at least one effect 1) has been ent pursuant to applicable legal standards, and 2) has been d on the earlier analysis as described on attached sheets. required, but it must analyze only the effects that remain				
	because all potentially significant effect NEGATIVE DECLARATION pursuant to ap	ect could have a significant effect on the environment, is (a) have been analyzed adequately in an earlier EIR or plicable standards, and (b) have been avoided or mitigated DECLARATION, including revisions or mitigation measures bject, nothing further is required.				
-	2 Ch	January 11, 2021				
Signatu	ire	Date				
Gary C	onte, AICP, Planning Manager					
Printed	Name/Position					

# Chapter 4 Impact Analysis

### 4.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<ul> <li>a) Have a substantial adverse effect on a scenic vista?</li> </ul>				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			$\boxtimes$	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

### 4.1.1 Environmental Setting

The Project site, which is visible from South Granada Drive and West Almond Avenue, is a vacant field that is periodically disced for weed control. The surrounding area is dominated by developed industrial uses with vacant properties designated and zoned for industrial development. There is an existing single-family residential development to the west across South Granada Drive, enclosed by a block wall. Existing sources of lighting in the vicinity of the Project include streetlights along West Almond Avenue, South Granada Drive, and exterior lighting from nearby industrial development.

Topography is relatively flat and there are no natural drainages in the immediate area surrounding the Project. The Fresno River, approximately 1.5 miles to the north, the San Joaquin River, approximately 9 miles to the south, and the foothill region of the Sierra Nevada, approximately 34 miles to the northeast, are the nearest significant topographic reliefs. There are no state or county designated scenic highways or historical buildings or properties present in the Project vicinity.

#### 4.1.2 Impact Assessment

a) Would the project have a substantial adverse effect on a scenic vista?

**No impact.** Scenic vistas are generally interpreted as long-range views of a specific scenic feature (e.g., open space, mountain ridges, ocean views). The Project is not located near a scenic vista, nor does the Project provide notable scenic values such as undisturbed open space, prominent landforms, or features. The Project will not result in the obstruction of federal, state, or locally classified scenic areas, historic properties, community landmarks, or formally classified scenic resources, such as a scenic highway, national or state scenic area, or scenic vista. Therefore, there would be **no impact.** 

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

**No impact.** The Project is not located along a State-designated Scenic Highway. Furthermore, there are no notable trees, rock outcroppings, or historical buildings on the Project that would be affected, and the Project would not alter long-range views to ridgelines or other natural features. Therefore, there would be *no impact.* 

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than significant impact. Installation of the Project would not change the existing visual character of the Project site and its surroundings; additionally, the Project will not substantially degrade the existing visual character or quality of the site and its surroundings. Nor would the Project conflict with applicable zoning and other regulations governing scenic quality. The Project would *less than significant* on visual character.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than significant impact. Development of the site will introduce new sources of light and glare. The site is within an urbanized area which has existing sources of light and glare. Lighting sources within the Project's vicinity provide for direction and security, as well as contributing visually to the developing landscape. Existing light sources within the Project's vicinity currently affect day and nighttime views in the Project area to a degree equal to or greater than the light sources proposed by the Project. Compliance with California Building Code (Title 24, California Code of Regulations) standards would ensure that light and glare impacts from the Project would be *less than significant*.

January 2021 4-2

\_

<sup>1</sup> California Department of Transportation website, Officially Designated State Scenic Highways, <a href="http://www.dot.ca.gov/hq/LandArch/16">http://www.dot.ca.gov/hq/LandArch/16</a> livability/scenic highways/, accessed November 2020.

# 4.2 Agriculture and Forestry Resources

Would	the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?				$\boxtimes$
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				$\boxtimes$
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				$\boxtimes$
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				$\boxtimes$
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				$\boxtimes$

### 4.2.1 Environmental Setting

Pursuant to the California Department of Conservation, the Project site is located on land identified as "Urban and Built-Up Land". Urban and Built-Up Land is defined as land consisting residential, industrial, commercial, and institutional land; construction sites; public administrative sites; railroad yards; cemeteries; airports; golf courses; sanitary landfills; sewage treatment plants; water control structures and spillways; other land used for such purposes; small parks (less than 10 acres) within urban and built-up areas; and highways, railroads, and other transportation facilities if they are surrounded by urban areas.

<sup>&</sup>lt;sup>2</sup> California Department of Conservation, California Important Farmland Finder, <a href="https://maps.conservation.ca.gov/planning/Data\_Viewer/California">https://maps.conservation.ca.gov/planning/Data\_Viewer/California</a> Important Farmland: 2016, accessed December 2020.

Neither the Project site nor surrounding properties are subject to a Williamson Act contract. The site is designated and zoned Industrial in both the City's General Plan and Zoning Code.

#### 4.2.2 Impact Assessment

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

**No impact.** The Project would not convert land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency) to non-agricultural use. Therefore, there would be *no impact*.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

**No impact.** The Project would not conflict with existing zoning for agricultural use and there are no Williamson Act contracts affecting the Project site or surrounding properties. Therefore, there would be *no impact*.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

**No impact**. Neither the Project site nor surrounding properties are defined as forest land (as defined by Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)). Therefore, there would be *no impact*.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

**No impact.** The Project site neither contains nor is adjacent to forested lands. Furthermore, the Project site and its adjacent lands are not designated or zoned for timberland or timberland protection. Thus, the Project would not conflict with or result in the loss of forest land or conversion of forest land to a nonforest use. Therefore, there would be *no impact*.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

**No impact.** The Project is designated as Urban and Built-Up Land. Surrounding properties have either been developed for industrial or residential purposes or remain vacant. Accordingly, the Project would not introduce changes in the existing environment that would result in the conversion of Farmland to a non-agricultural use or conversion of forest land to a non-forest use. Therefore, there would be **no impact.** 

### 4.3 Air Quality

establis manage may be	available, the significance criteria shed by the applicable air quality ement district or air pollution control district e relied upon to make the following hinations. Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?			$\boxtimes$	
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				
c)	Expose sensitive receptors to substantial pollutant concentrations?				
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

#### 4.3.1 Environmental Setting

The Project site is located within the San Joaquin Valley Air Basin (SJVAB). The SJVAB, which occupies the southern half of California's Central Valley, is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). Other air quality regulatory agencies that share responsibility with regulating SJVAB's air quality to ensure that all state and federal ambient air quality standards are attained within the SJVAB include the California Air Resources Board (CARB) and the United States Environmental Protection Agency (USEPA). The SJVAPCD, which is responsible for the attainment of state and federal air quality standards in the SJVAB, develops rules, regulations, and policies to comply with applicable state and federal air quality legislation.

The SJVAPCD air quality-related planning documents, rules, and regulations applicable to this Project include:

Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). The GAMAQI provides assistance in evaluating potential air quality impacts of projects in the SJVAB, by providing guidance on evaluating short-term (construction) and long-term (operational) air emissions. The GAMAQI provides criteria and thresholds for determining whether a project may have a significant adverse air quality impact, specific procedures and modeling protocols for quantifying and analyzing air quality impacts, methods to mitigate air quality impacts, and information for use in air quality assessments and environmental documents. The thresholds of significance are summarized, as follows:

Short-Term Emissions of Particulate Matter ( $PM_{10}$ ): Construction impacts associated with the proposed project would be considered significant if the feasible control measures for construction in compliance with Regulation VIII as listed in the SJVAPCD guidelines are not incorporated or implemented, or if project-generated emissions would exceed 15 tons per year (TPY) or 100 pounds per day.

Short-Term Emissions of Ozone Precursors (ROG and NO<sub>X</sub>): Construction impacts associated with the proposed project would be considered significant if the project generates emissions of Reactive Organic Gases (ROG) or  $NO_X$  that exceeds 10 TPY or 100 pounds per day.

Long-Term Emissions of Particulate Matter ( $PM_{10}$ ): Operational impacts associated with the proposed project would be considered significant if the project generates emissions of  $PM_{10}$  that exceed 15 TPY or 100 pounds per day.

Long-Term Emissions of Ozone Precursors (ROG and NO<sub>X</sub>): Operational impacts associated with the proposed project would be considered significant if the project generates emissions of ROG or  $NO_X$  that exceeds 10 TPY or 100 pounds per day.

Conflict with or Obstruct Implementation of Applicable Air Quality Plan: Due to the region's nonattainment status for ozone,  $PM_{2.5}$ , and  $PM_{10}$ , if the project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and  $NO_x$ ) or  $PM_{10}$  would exceed the SJVAPCD's significance thresholds, then the project would be considered to conflict with the attainment plans. In addition, if the project would result in a change in land use and corresponding increases in vehicle miles traveled, the project may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans.

Local Mobile-Source CO Concentrations: Local mobile source impacts associated with the proposed project would be considered significant if the project contributes to CO concentrations at receptor locations in excess of the CAAQS (i.e. 9.0 ppm for 8 hours or 20 ppm for 1 hour).

Exposure to toxic air contaminants (TAC) would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 10 in 1 million or would result in a Hazard Index greater than 1.

Odor impacts associated with the proposed project would be considered significant if the project has the potential to frequently expose members of the public to objectionable odors.

**Rule 2280 Portable Equipment Registration.** Portable equipment used at project sites for less than six consecutive months must be registered with the SJVAPCD. The SJVAPCD will issue the registration 30 days after receipt of application.

Rule 8011 General Requirements: Fugitive Dust Emission Sources. Operations, including construction operations, must control fugitive dust emissions in accordance with SJVAPCD Regulation VIII. The SJVACPD requires the implementation of control measures for fugitive dust emissions. For projects in which construction-related activities would disturb equal to or greater than one (1) acre of surface area, the SJVAPCD recommends that demonstration of receipt of an SJVAPCD approved "Dust Control Plan" or "Construction Notification Form," before issuance of the first grading permit, be made a condition of approval.

Rule 9510 Indirect Source Review. This rule requires project applicants to reduce operational emission of oxides of nitrogen ( $NO_x$ ) by 33 percent of the project's operational baseline and 50 percent of the project's operational suspended particulate matter less than 10 microns in diameter ( $PM_{10}$ ) emissions. Projects subject to SJVAPCD's District Rule 9510 are required to submit an Air Impact Assessment (AIA)

application to the SJVAPCD no later than applying for final discretionary approval of a proposed project, and to pay any applicable off-site mitigation fees before issuance of the first building permit.

Air quality is determined by the type and amount (concentration) of contaminants emitted into the atmosphere, the size and topography of the SJVAB, and its meteorological conditions. National and State air quality standards specify the upper limits of concentrations and duration in the ambient air for the following air pollutants: ozone  $(O_3)$ , carbon monoxide (CO), nitrogen dioxide  $(NO_2)$ , suspended particulate matter less than 10 microns in diameter  $(PM_{10})$ , suspended particulate matter less than 2.5 microns in diameter  $(PM_{2.5})$ , sulfur dioxide  $(SO_2)$  and lead (Pb). These pollutants are commonly referred to as "criteria pollutants." The SJVAPCD also conducts monitoring for two other State standards: sulfates and visibility.

The SJVAPCD, together with the CARB, maintains ambient air quality monitoring stations in the SJVAB. The air quality monitoring station closest to the Project site is the Madera - 28261 Avenue 14 monitoring station. The pollutants monitored at this station are  $O_3$ , PM  $_{2.5}$ , and PM $_{10}$ . Air quality trends for CO, NO $_2$ , and SO $_2$  are not monitored at this air quality monitoring station. Madera County - Road 29½, north of Avenue 8 monitoring station monitors NO $_2$ . The nearest station monitoring CO and SO $_2$  is in Fresno - 3727 North First Street.

The 2017 to 2019 monitoring results from these stations indicate the state 1-hour  $O_3$  standard was exceeded 3 times in 2017, 2 times in 2018, and an unknown number of times 2019. Additionally, the State 8-hour  $O_3$  standard was exceeded 29 times in 2017, 17 times in 2018, and unknown number of times in 2019. Furthermore, the federal 8-hour  $O_3$  standard was exceeded 27 times in 2017, 14 times in 2018 and 10 times in 2019. The state  $PM_{10}$  standard was exceeded 16 times in 2017 and 23 times in 2018. The CO,  $NO_2$ , and  $SO_2$  standards were not exceeded in this area during the 3-year period.<sup>3</sup>

The CARB is required to designate areas of the state as attainment, non-attainment, or unclassified for all state standards. An attainment designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A non-attainment designation indicates that a pollutant concentration violated that standard at least once, excluding those occasions when the violation was caused by an exceptional event, as defined in the criteria. An unclassified designation signifies that data does not support either an attainment or non-attainment status. The California Clean Air Act divides the air districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category. The USEPA also designates areas as attainment, non-attainment, or classified. The air quality data are also used to monitor progress in attaining air quality standards.

The CARB has designated the SJVAB as being a severe non-attainment for 1-hour  $O_3$ , and non-attainment for 8-hour  $O_3$ ,  $PM_{10}$ , and for  $PM_{2.5}$ . The CARB has designated the Air Basin as attainment for  $NO_2$ ,  $SO_2$ , Pb, and as an attainment / unclassified area for CO and all other air contaminants.

The USEPA has designated the SJVAB as being an extreme non-attainment area for 8-hour  $O_3$ , and non-attainment for PM<sub>2.5</sub>. USEPA has designated the SJVAB as attainment / unclassified for CO, NO<sub>2</sub>, SO<sub>2</sub> and no designation / classification for PM. There is no federal standard for 1-hour  $O_3$ .<sup>4</sup>

January 2021 4-7

-

<sup>&</sup>lt;sup>3</sup> CARB. iADAM Air Quality Statistics. Website: https://www.arb.ca.gov/adam. Accessed December 2020.

<sup>&</sup>lt;sup>4</sup> CARB. Maps of State and Federal Area Designations. <a href="https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations">https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations</a>. Accessed December 2020.

There are no stationary sources that generate air quality emissions on the Project site.

Short-term and long-term emissions associated with the Project were calculated using California Emissions Estimator Model (CalEEMod, Version 2016.3.2) based on Project information available. Emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. Emissions were quantified based on anticipated construction schedules provided by the Project applicant. All remaining assumptions were based on the default parameters contained in the model. Modeling assumptions and output files are included in Appendix A.

#### 4.3.2 Impact Assessment

- a) Would the project conflict with or obstruct implementation of the applicable air quality plan?
- b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than significant impact. The Project would not exceed established thresholds (see Table 4-1 and Table 4-2); therefore, the Project will not conflict with or obstruct implementation of the applicable air quality plan and the impacts would be *less than significant*.

Table 4-1. Unmitigated Short-Term Construction-Generated Emissions of Criteria Air Pollutants

Source	Annual Emissions (in Tons)						
Source	ROG	NO <sub>X</sub>	CO	$SO_2$	$PM_{10}$	PM <sub>2.5</sub>	
Maximum Annual Proposed Project Emissions <sup>1</sup>	0.3634	3.2707	2.8968	0.0070	0.4830	0.2625	
SJVAPCD Significance Thresholds	10	10	100	27	15	15	
Exceed Thresholds?	No	No	No	No	No	No	

<sup>1</sup> Emissions were quantified using CalEEMod Output Files Version 2016.3.2. Refer to **Appendix A** for modeling results and assumptions. Totals may not sum due to rounding.

A quantified analysis of the Project's long-term operational emissions was also conducted using CalEEMod version 2016.3.2 based on information available. According to the CalEEMod results, the Project would have a *less than significant impact* on air quality when compared to the significance thresholds of annual criteria pollutant emissions (see Table 4-2) for long-term operational activities.

Table 4-2. Unmitigated Long-Term Operational Emissions of Criteria Air Pollutants

Source	Annual Emissions (in Tons)						
Source	ROG	NOX	0	$SO_2$	$PM_{10}$	$PM_{2.5}$	
Maximum Annual Proposed Project Emissions <sup>1</sup>	0.5088	0.6628	0.7275	0.0033	0.1823	0.0556	
SJVAPCD Significance Thresholds	10	10	100	27	15	15	
Exceed Thresholds?	No	No	No	No	No	No	

<sup>1.</sup> Emissions were quantified using CalEEMod Output Files Version 2016.3.2. Refer to **Appendix A** for modeling results and assumptions. Total may not sum due to rounding.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. The Project would not expose sensitive receptors to substantial pollutant concentrations. The nearest sensitive receptors to the Project site are single-family housing neighboring the Project to the west. No schools, convalescent homes, hospitals or other sensitive receptors are within a one-half mile of the project site. Therefore, there would be a *less than significant impact*.

Table 4-3. Maximum Dai	v Unmitigated Emissions	of Criteria Air Pollutants
------------------------	-------------------------	----------------------------

Source	Daily Emissions (in Pounds)					
Source	ROG	NO <sub>X</sub>	CO	$SO_2$	$PM_{10}$	PM <sub>2.5</sub>
Construction – Summer	27.3036	40.5413	23.3740	0.0579	20.2597	11.8518
Construction – Winter						
Operations – Winter						
Operations - Summer						
SJVAPCD Significance Thresholds	100	100	100	100	100	100
Exceed Thresholds?	No	No	No	No	No	No

<sup>1.</sup> Emissions were quantified using CalEEMod Output Files Version 2016.3.2. Refer to **Appendix A** for modeling results and assumptions. Totals may not sum due to rounding.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than significant impact. During construction activities, construction equipment exhaust and application of asphalt, structural coating and other construction applications would temporarily emit odors. However, construction nor operation of the Project is anticipated to generate substantial odors that would affect a substantial number of people. Therefore, the Project would result in a *less than significant impact*.

# 4.4 Biological Resources

Would	the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			$\boxtimes$	
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				$\boxtimes$
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				$\boxtimes$
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

#### 4.4.1 Environmental Setting

Neither the City of Madera General Plan Update nor its Environmental Impact Report (EIR) identified threatened or endangered species in the Project area<sup>5</sup>.

The Project site is void of any natural features, such as seasonal drainages, riparian or wetland habitat, rock outcroppings, or other native habitat or associated species. No shrubs or trees are present on or immediately adjacent to the Project site. The property is periodically disced for weed control. No wetlands have been reported or observed on the site. Development of the site would not conflict with any local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

#### 4.4.2 Impact Assessment

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than significant impact. The Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Therefore, the Project would result in a *less than significant impact*.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

**No impact.** The Project site and its surroundings are absent of any riparian habitat, sensitive natural communities of special concern or of any critical habitat designated by the California Department Fish and Wildlife or by the United States Fish and Wildlife Service as critical habitat essential for the preservation and recovery of state and/or federally listed plant or animal species. The Project would not result in any direct or indirect impacts to riparian corridor, stream channel, or potentially viable habitat in which sensitive species could be found. Therefore, this Project would have *no impact*.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

**No impact.** Project site soils are composed of loam to sandy loam texture. Soils have moderately course textures, moderate to high infiltration rates, and are moderate to well drained. Further, no wetlands have been reported or observed on the site. Therefore, the Project would have *no impact* on federally protected wetlands as defined by Section 404 of the Clean Water Act.

January 2021 4-11

\_

<sup>&</sup>lt;sup>5</sup> USFWS. Information for Planning and Conservation. Website: https://ecos.fws.gov/ipac/, accessed December 2020.

<sup>&</sup>lt;sup>6</sup> Natural Wetlands Inventory, https://www.fws.gov/wetlands/data/mapper.html, accessed November 2020.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

**No impact.** The Project site does not present any features of a river, creek, stream, or other form of water course, nor does the Project site include features of a wildlife corridor. Wildlife movement corridors are absent from the Project site. Therefore, the Project would have *no impact* on the movement of any native resident or migratory fish or wildlife species or on an established native resident or migratory wildlife corridor.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

**No impact.** The Project would not conflict with any local policies or ordinances protecting biological resources and the City of Madera does not have a tree preservation ordinance. Therefore, this Project will have *no impact*.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

**No impact.** Neither the Project site nor the immediate area surrounding the Project site are subject to an adopted or proposed local, regional, or state adopted habitat conservation plan (HCP), or similar types of conservation plans. Therefore, the Project would not conflict with the provisions of an adopted or proposed HCP or similar approved local, regional, or state habitat conservation plan. As such, the Project will have **no impact.** 

#### 4.5 Cultural Resources

Would	the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?				

#### 4.5.1 Environmental Setting

Based on the City of Madera General Plan Update and its Environmental Impact Report (EIR) dated April 29, 2009, no known recorded archeological sites or historic properties are within or in the immediate vicinity of the Project site. The EIR also did not indicate the presence of Native American traditional cultural place(s) within or adjacent to the Project site.

#### 4.5.2 Impact Assessment

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

**No impact.** Based on the City of Madera General Plan Update EIR, the Project site and its surroundings are absent of any known historic properties. The Project is devoid of structures. No historic properties would be affected by the Project. Therefore, the Project would result in **no impact**.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than significant impact. While no known archaeological deposits are present on the Project site, it is possible that unknown buried archaeological materials could be found during ground disturbing activities, including unrecorded Native American prehistoric archaeological materials. If such resources were discovered, the impact to archaeological resources could be significant. General Plan Action Item HC-9.2 requires a condition of approval on all discretionary projects that the Planning Department be notified immediately if any prehistoric, archaeologic, or fossil artifact or resource is uncovered during construction. All construction must stop and an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to evaluate the finds and recommend appropriate action. Implementation of the required condition, in accordance with the provisions of Public Resources Code Section 21083.2, would reduce the impact to *less than significant*.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than significant impact. There are no known formal cemeteries or known interments to have occurred on the Project site. Though unlikely, there is the possibility human remains may be present beneath the Project site. Should human remains be discovered during ground disturbing construction activities, such discovery could be considered significant. Any human remain encountered during ground disturbing activities are required to be treated in accordance with California Code of Regulations Section 15064.5(e), Public Resources Code Section 5097.98, and California Health and Safety Code Section 7050.5, which state the mandated procedures of conduct following discovery of human remains. Additionally, General Plan Action Item HC-9.2 requires a condition of approval on all discretionary projects that all construction must stop if any human remains are uncovered, and the County Coroner must be notified according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in CEQA Section 15064.5 (d) and (e) shall be followed. If human remains are determined to be of possible Native American descent, the Coroner shall notify the Native American Heritage Commission who will appoint a "Most Likely Descendent" and the local Native American Tribe representative to identify and preserve Native American remains, burial, and cultural artifacts. Implementation of the required condition and above-referenced sections would reduce the impact to less than significant.

# 4.6 Energy

Would	the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

#### 4.6.1 Environmental Setting

The Project site is currently devoid of any energy-consuming equipment. The site is periodically disced for weeds.

#### 4.6.2 Impact Assessment

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than significant impact. Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. For heavy-duty construction equipment, horsepower and load factor were assumed using default data from the CalEEMod model. Fuel use associated with construction vehicle trips generated by the Project was also estimated; trips include construction worker trips, haul trucks trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the Project was based on (1) the projected number of trips the Project will generate (CalEEMod default values), (2) default average trip distance by land use in CalEEMod, and (3) fuel efficiencies estimated in the ARB 2017 Emissions Factors model (EMFAC2017) mobile source emission model.

Construction is estimated to consume a total of 60,472 gallons of diesel fuel and 15,080 gallons of gasoline fuel.<sup>7</sup> California Code of Regulations Title 13, Motor Vehicles, Section 2449(d)(2), Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel because of unproductive idling of construction equipment. In addition, the energy consumption for construction activities would not be ongoing as they would be limited to the duration of Project construction.

<sup>&</sup>lt;sup>7</sup> Emissions for the Project were quantified using CalEEMod Output Files Version 2016.3.2. Refer to **Appendix A** for modeling results and assumptions.

The development's anticipated annual energy consumption is approximately 871,586 kilowatt-hours and 18,084 therms of natural gas.<sup>8</sup> Energy consumption for industrial and warehousing uses is currently governed by the 2019 California Building Code, Part 6 for the structure itself, and Title 20 of the California Code of Regulations for appliances. Energy consumption is anticipated to decrease over time as more energy efficient standards take effect and energy-consuming equipment reaches its end-of-life and necessitates replacement. The Project will have a *less than significant impact*.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than significant impact. State and local authorities regulate energy use and consumption. These regulations at the State level intended to reduce energy use and greenhouse gas (GHG) emissions. These include, among others, Assembly Bill (AB) 1493 — Light-Duty Vehicle Standards; California Code of Regulations Title 24, Part 6 — Energy Efficiency Standards; and California Code of Regulations Title 24, Parts 6 and 11 — California Energy Code and Green Building Standards. The Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, this Project will have a *less than significant impact*.

<sup>&</sup>lt;sup>8</sup> Emissions for the Project were quantified using CalEEMod Output Files Version 2016.3.2. Refer to **Appendix A** for modeling results and assumptions.

# 4.7 Geology and Soils

Would	the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	ii) Strong seismic ground shaking?			$\boxtimes$	
	iii) Seismic-related ground failure, including liquefaction?				
	iv) Landslides?				
b)	Result in substantial soil erosion or the loss of topsoil?				
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial direct or indirect risks to life or property?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?			$\boxtimes$	

#### 4.7.1 Environmental Setting

The Project site is located in the central portion of the San Joaquin Valley. The San Joaquin Valley is part of the Great Valley Geomorphic Province topographic and structural basin bound on the east by the Sierra Nevada and the west by the Coast Range. The Sierra Nevada, a fault block dipping gently to the southwest, is composed of igneous and metamorphic rocks of pre-Tertiary age which comprise the basement complex beneath the Valley. The subsurface of the Project site and surrounding vicinity is characterized by a thick sequence of unconsolidated sediments. Subsurface material beneath the site is primarily composed of alluvial fan deposits and floodplain over-bank deposits including interbedded silts, sands, clays, and gravels. Project site soils are of sandy loam of moderately to excessively drained.

There are no known faults on the Project site or in the immediate area. The San Andreas fault and San Joaquin faults are approximately 85 and 47 miles west, respectively<sup>9</sup>. The Project site is subject to relatively low seismic hazards compared to many other parts of California. Potential ground shaking produced by earthquakes generated on regional faults lying outside the immediate vicinity in the Project area may occur. Due to the distance of the known faults in the region, no significant ground shaking is anticipated on this site. Seismic hazards on the built environment are addressed in the California Building Code (CBC) that is utilized by the City of Madera Building Department to monitor safe construction within the City limits.

The Project site and the greater City of Madera consists of lands with less than two percent slope grade, and therefore are not subject to landslides.

#### 4.7.2 Impact Assessment

- a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - a-i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less than significant impact. Groundshaking intensity is largely a function of distance from the earthquake epicenter and underlying geology. Generally, the City of Madera, which is located on deep alluvial and unconsolidated sediments, could experience strong shaking during a large earthquake. The most common impact associated with strong ground shaking is damage to structures. The CBC establishes minimum standards for structures located in regions subject to ground shaking hazard areas. Structures constructed on-site would be required by state law and City ordinances to be constructed in accordance with CBC and to adhere to all current earthquake construction requirements. The Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. No known faults with evidence of historic activity cut through the valley soils in the Project vicinity. The major active faults and fault zones occur at some distance to the east, west, and south of the Project site. Due to

January 2021 4-18

-

<sup>&</sup>lt;sup>9</sup> California Department of Conservation. Data Viewer. Website: <a href="https://maps.conservation.ca.gov/cgs/DataViewer/">https://maps.conservation.ca.gov/cgs/DataViewer/</a>. Accessed December 2020.

the geology of the Project area and its distance from active faults, the potential for loss of life, property damage, ground settlement, or liquefaction to occur in the Project vicinity is considered minimal. The Project would not introduce residential development on the site nor expose people to strong seismic ground shaking. Therefore, the Project would result in a *less than significant impact*.

#### a-ii) Strong seismic ground shaking?

Less than significant impact. The Project site is not within an Alquist-Priolo Earthquake Fault Zone. The Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. Ground shaking generally decreases with distance and increases with the depth of unconsolidated alluvial deposits. The most likely source of potential ground shaking is attributed to the San Andreas (approximately 85 miles west), Owens Valley (approximately 100 miles east), and the White Wolf faults. Based on this premise and taking into account the distance to the causative faults, the potential for ground motion in the vicinity of the Project site is such that a minimal risk can be assigned. Therefore, the Project would result in a *less than significant impact*.

#### a-iii) Seismic-related ground failure, including liquefaction?

Less than significant impact. The Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Liquefaction describes a phenomenon in which a saturated soil loses strength during an earthquake as a result of induced shearing strains. Lateral and vertical movement of the soil mass combined with loss of bearing usually results. Loose sand, high groundwater conditions (where the water table is less than 30 feet below the surface), higher intensity earthquakes, and particularly long duration of ground shaking are the requisite conditions for liquefaction. None of these conditions is present at the Project site. Therefore, the Project would result in a *less than significant impact*.

#### a-iv) Landslides?

**No impact.** The Project site is generally flat. Due to the flat and level topography, the Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Therefore, the Project would result in **no impact**.

#### b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than significant impact. Earthmoving activities associated with the Project would include excavation, trenching, grading, and construction. These activities could expose soils to erosion processes however, the extent of erosion would vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. Dischargers whose projects disturb one (1) or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the Statewide General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, and construction of linear underground or overhead facilities associated with residential construction but does not include regular maintenance activities performed to restore the original lines, grade, or capacity of the overhead or underground facilities. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Since the Project site has relatively flat terrain with a low potential for soil erosion and would comply with the State Water Resources Control Board (SWRCB) requirements, the Project's impacts would be *less than significant*.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than significant impact. Due to the relatively flat topography of the Project site and greater surrounding area and distance from active faults, landslides, lateral spreading, subsidence, liquefaction, or collapse are not considered potentially significant geologic hazards. Therefore, the Project would result in a *less than significant impact*.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than significant impact. The Project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), not creating substantial direct or indirect risks to life or property. The Project soil types consist of loam to sandy loam textures. Therefore, the Project would result in a *less than significant impact*.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

**No impact.** The Project would not require the construction or use septic tanks or alternative wastewater disposal systems. Therefore, there would be *no impact*.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less than significant impact. There are no known unique paleontological resources or geological features on the Project site; however, during construction unique paleontological or geological resources could be unearthed. General Plan Action Item HC-9.2 requires a condition of approval on all discretionary projects that the Planning Department be notified immediately if any prehistoric, archaeologic, or fossil artifact or resource is uncovered during construction. All construction must stop and an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology shall be retained to evaluate the finds and recommend appropriate action. Implementation of the required condition, in accordance with the provisions of Public Resources Code Section 21083.2, would reduce the impact to *less than significant*.

#### 4.8 Greenhouse Gas Emissions

Would	the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			$\boxtimes$	
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			$\boxtimes$	

#### 4.8.1 Environmental Setting

Climate change is a public health and environmental concern around the world. Globally, temperature, precipitation, sea level, ocean currents, wind patterns, and storm activity are all affected by the presence of greenhouse gas (GHG) emissions in the atmosphere. Human activity contributes to emissions of six primary GHG gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of GHGs are linked to climate change.

In 2006, the California State Legislature adopted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, which aims to reduce GHG emissions in California. GHGs, as defined by AB 32, include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires the CARB, the State agency that regulates statewide air quality, to adopt rules and regulations that would achieve GHG emissions equivalent to 1990 statewide levels by 2020. The Air District adopted a 29 percentless than Business-As-Usual (BAU) to meet the 2020 standard.

In 2016, Senate Bill (SB) 32 was adopted, which established a goal to achieve GHG emissions equivalent to 40 percent below 1990 statewide levels by 2030. No project-level reduction standard has been adopted to meet the 2030 standard established by SB 32; however, the 2017 Climate Scoping Plan has estimated that a reduction of between 8 and 15 percent in the industrial sector would contribute to an overall 40 percent reduction in GHG emissions below 1990 levels. This would equate to an overall reduction target of 34.6 to 39.7 percent below BAU for industrial projects. An average target of 37.2 percent reduction from BAU has been used in this analysis as an interim threshold of significance for 2030 in-lieu of an adopted project-level standard for industrial projects.

The Conservation Element of the 2011 City of Madera General Plan Update includes several goals, policies, and programs in the Air Quality, GHG Emissions, and Climate Change sections that address and promote practices that meet or exceed all State and federal standards and meet or exceed all current and future State-mandated targets for reducing GHG emissions. The City also requires applicants for all public and private development to integrate appropriate methods that reduce GHG emissions consistent with the Energy and Green Building sections of the Conservation Element, General Plan Policies CON-40 through 46.

### 4.8.2 Impact Assessment

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than significant impact. The Project would generate GHG emissions and contribute to global warming. GHG emissions from construction activities are one-time, short-term emissions and therefore would not significantly contribute to long-term cumulative GHG emissions impacts of the Project. Long-term GHG emissions consist of vehicular emissions, the consumption of energy produced by carbon-based sources, and the decomposition of solid waste generated from the Project. According to the CalEEMod results for unmitigated construction and operation emissions (see Table 4-3 and Table 4-5), the Project would not exceed the thresholds of significance. Therefore, emissions would be *less than significant*.

Source	Annual Carbon Dioxide Equivalent Emissions (MT CO2e/Year)			
	BAU (2005)	2022	Reduction (%)	
Operational Emissions	815.7989	530.1398	35.0	
Amortized Construction	23.5801	21.0125	10.9	
Emissions				
Total Emissions	839.379	551.1523	34.4	
2020 Reduction Standard (	29			
Exceed Thresholds?	No			

Table 4-3. Unmitigated Emissions of CO2e, 2022

<sup>1.</sup> Emissions were quantified using CalEEMod Output Files Version 2016.3.2. Refer to **Appendix A** for modeling results and assumptions.

Source	Annual Carbon Dioxide Equivalent Emissions (MT CO2e/Year)				
	BAU (2005)	2030	Reduction (%)		
Operational Emissions	815.7989	487.0310	40.3		
Amortized Construction	23.5801	21.0125	10.9		
Emissions					
Total Emissions	839.379	508.0435	39.5		
2030 Reduction Standard (	37.2				
Exceed Thresholds?	No				

Table 4-4. Unmitigated Emissions of CO2e, 2030

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant impact. Staff found that the Project is consistent with all General Plan policies, is required to incorporate water-efficient landscaping, and is required to make the necessary road improvements to improve traffic flow. The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, the Project would have a *less than significant impact*.

<sup>1.</sup> Emissions were quantified using CalEEMod Output Files Version 2016.3.2. Refer to **Appendix A** for modeling results and assumptions.

## 4.9 Hazards and Hazardous Materials

Would	the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				$\boxtimes$
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g)	Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?				

# 4.9.1 Environmental Setting

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws and regulations. Laws and regulations established by the USEPA are enforced by the California Protection Agency (CAL-EPA). CAL-EPA also oversees the unified hazardous waste and hazardous materials management regulatory program. California Health and Safety Code Section 25501

defines a hazardous material as "any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment." Section 21092.6 of the CEQA Statutes requires the Lead Agency to consult the lists compiled pursuant to Government Code Section 65962.5 to determine whether a proposed project and any alternative are identified as contaminated sites.

The required lists include the California Department of Toxic Substance Control's (DTSC) online EnviroStor database<sup>10</sup> and the State Water Resources Control Board's (SWRCB) online GeoTracker database<sup>11</sup>. These two databases include hazardous release sites, along with other categories of sites or facilities where known or suspected sources of contamination were identified. A search of DTSC's EnviroStor and SWRCB's GeoTracker database in November 2020 revealed no hazardous material release sites at the Project site or in the immediate vicinity.

#### 4.9.2 Impact Assessment

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than significant impact. The Project would not involve the routine transport of hazardous waste, thus no impacts to the public or the environment would occur. Potential impacts during construction of the Project include potential spills associated with the use of fuels and lubricants in construction equipment. These potential impacts would be short-term in nature and would be reduced to less than significant levels through compliance with applicable local, state, and federal regulations, as well as the use of standard equipment operating practices. Project operations would consist of consumer grade pesticides, fertilizers, and petroleum-based fuels. These potentially hazardous materials, however, would not be of a type or occur in sufficient quantities to pose a significant hazard to public health and safety or the environment. Compliance with applicable laws and regulations would minimize hazards associated with the routine transport, use, or disposal of hazardous materials to the maximum extent practicable. Therefore, impacts would be *less than significant*.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than significant impact. There are no known hazardous materials found on the site. The Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Therefore, impacts would be *less than significant*.

January 2021 4-24

\_

<sup>&</sup>lt;sup>10</sup> Department of Toxic Substances Control. EnviroStor. Website: <a href="https://www.envirostor.dtsc.ca.gov/public/">https://www.envirostor.dtsc.ca.gov/public/</a>. Accessed November 2020.

<sup>&</sup>lt;sup>11</sup> State Water Resources Control Board. GeoTracker. Website: <a href="https://geotracker.waterboards.ca.gov/">https://geotracker.waterboards.ca.gov/</a>. Accessed November 2020.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

**No impact.** There are no schools, existing or planned, within one quarter-mile of the Project. The closest school is John Adams Elementary located just over one mile to the northeast. Therefore, there would be *no impact*.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

**No impact.** The Project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, it would not create a significant hazard to the public or the environment. Therefore, there would be **no impact.** 

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less than significant impact. The Project is located within the Madera Municipal Airport Compatibility Policy Map of the 2015 Madera Countywide Airport Land Use Compatibility Plan. A portion of the Project site is located in Compatibility Zone D (Other Airport Environs). Warehouse uses are designated Normally Compatible in Zone D. Therefore, the Project would result in a *less than significant impact* 

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. The Project would not involve any material changes to public streets, roads, or evacuation infrastructure and it would not include the construction of any feature that might impair the implementation of any relevant emergency operation plan. Moreover, the Project would not change existing emergency response and rescue access routes within the City or County of Madera. Therefore, there would be a *less than significant impact*.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

**No impact.** The Project site is not located within an area of moderate, high, or very high Fire Hazard Severity for the Local Responsibility Area, nor does it contain any areas of moderate, high, or very high Fire Hazard Severity for the State Responsibility Area. <sup>12</sup> Therefore, there would be *no impact*.

January 2021 4-25

\_

<sup>&</sup>lt;sup>12</sup> Cal FIRE. Fire Hazard Severity Zones Maps. Website: <a href="https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/">https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/</a>. Accessed November 2020.

# 4.10 Hydrology and Water Quality

Would	the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			$\boxtimes$	
с)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:  i) result in substantial erosion or siltation				
	on- or off-site;				
	<ul> <li>substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;</li> </ul>				
	iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	iv) impede or redirect flood flows?			$\boxtimes$	
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				$\boxtimes$
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

#### 4.10.1 Environmental Setting

The City of Madera is within the San Joaquin River watershed and Basin Hydrological Study Area covering roughly 13,500 square miles, or approximately the southern two-thirds of the San Joaquin Valley. The San Joaquin River watershed is divided into numerous hydrologic areas and subareas. The Madera hydrologic area encompasses the southwestern and northwestern portions of the City and extends northwest to the City of Chowchilla, draining into the Fresno River and its tributaries. The Fresno River is the main hydrologic feature in the City. The river flows west from the Sierra Nevada before entering the Chowchilla Bypass in western Madera County. The Fresno River is dry throughout most of the year, with flows depending mainly on water releases from upstream water agencies.<sup>13</sup>

The City of Madera is not within or adjacent to the boundaries of a sole source aquifer. The nearest sole source aquifer is the Fresno County Sole Source Aquifer, located approximately 8.2 miles to the south.

FEMA FIRM Panel No. 06039C1155E (September 26, 2008) indicates that the Project site is located in Zone X, <sup>14</sup> an area of minimal flood hazard.

#### 4.10.2 Impact Assessment

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than significant impact. Clearing, grading, excavation, and construction activities have the potential to impact water quality through soil erosion and increased silt and debris discharged into runoff. Additionally, the use of construction materials such as fuels, solvents, and paints may present a risk to surface water quality. Temporary storage of construction material and equipment in work areas or staging areas could create the potential for a release of hazardous materials, trash, or sediment to the storm drain system.

The Project would disturb more than one acre of soil on the Project site. Therefore, the Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit (GCP). The GCP requires the submittal of Permit Registration Documents (PRDs) to the State Water Resources Board (SWRCB) prior to the start of the construction. The PRDs include a Notice of Intent (NOI), risk assessment, site map, annual fee, signed certification statement, Stormwater Pollution Prevention Plan (SWPPP), and post-construction water balance calculations. The SWPPP describes the incorporation of best management practices to control sedimentation, erosion, and the potential for hazardous materials contamination of runoff during construction.

Upon completion of the Project, stormwater would runoff on-site into the permeable ground adjacent to homes, or into the City's stormwater system. The Project would be required to implement applicable portions of the City's Storm Water Quality Management Program, ensuring that effective and adequate Best Management Practices would be in place to minimize the pollutant load in storm drainage, thereby protecting surface water quality. In addition, implementation of General Plan policies would further protect surface quality by requiring the Storm Water Quality Management Program to be updated to include newly

January 2021 4-27

-

<sup>13</sup> City of Madera, City of Madera General Plan Update, Draft Environmental Impact Report, p 4.9-1.

<sup>&</sup>lt;sup>14</sup> Federal Emergency Management Agency. Flood Insurance Rate Map, Madera County and Incorporated Areas, Panel 1155 of 1385. Accessed November 2020.

available best management practices. The Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, the Project impacts would be *less than significant*.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than significant impact. The proposed Project is within the City's water service area. The City of Madera 2015 UWMP anticipated having a 2020 minimum supply of 15,700 AFY with a demand based on a 2020 population of 71,555 persons. The population as of 2020 was approximately 66,000 persons. Further, the Project use was anticipated by and is consistent with the General Plan designation of Industrial evaluated under the UWMP. Therefore, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin and the impacts would be *less than significant*.

- c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - *i)* result in substantial erosion or siltation on- or off-site;

Less than significant impact. The Project site does not contain any waterways and therefore implementation of the Project would not alter the course of a stream or river. However, the Project would require grading or soil exposure during construction. If not controlled, the transport of these materials via local stormwater systems into local waterways could temporarily increase sediment concentrations. To minimize this impact, the Project would be required to comply with all of the requirements of the state GCP, including preparation of PRDs and submittal of a SWPPP to the SWRCB prior to start of construction activities. Mandatory compliance with state regulations would ensure that impacts from erosion and siltation would be *less than significant*.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Less than significant impact. The Project would substantially increase the amount of impervious surface area on the Project site. However, the Project would be required to comply with all of the requirements of the state GCP as described above to ensure the adequate control of runoff and prevention of on-site flooding. Therefore, the potential impacts to flooding on- or off-site would be *less than significant*.

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than significant impact. The Project would not substantially alter the existing drainage pattern of the site or area. Storm runoff has been required by the City Engineer to drain into the Basila Basin located southeast of the Project site. The Project would be required to comply with the City's Master Plan, ordinances, and standard practices for stormwater drainage. Therefore, the Project impacts would be *less than significant*.

#### iv) impede or redirect flood flows?

**Less than significant impact.** All Project-related storm flows and runoff will be captured on-site and percolated in the existing soil base or conveyed to a City drainage basin located southeast of the Project site. Therefore, the Project impacts would be *less than significant*.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundations?

**No impact.** The Project is not located in flood hazard, tsunami, or seiche zones and it will not risk the release of pollutants due to Project inundation. Therefore, there would be *no impact*.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than significant impact. The City of Madera is located in the Madera Subbasin. The City of Madera adopted the Joint Groundwater Sustainability Plan (GSP) in January 2020. The GSP includes two City of Madera projects, which include the installation of water meters and the construction of Berry Basin, a groundwater recharge basin<sup>15</sup>. The basin is currently under construction and the Project is required to install water meters. Therefore, the Project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. Therefore, there would be a *less than significant impact*.

<sup>&</sup>lt;sup>15</sup> Madera Subbasin Coordination Committee. Madera Subbasin Sustainable Groundwater Management Act Joint Groundwater Sustainability Plan. January 2020. Website: <a href="https://sgma.water.ca.gov/portal/gsp/preview/21">https://sgma.water.ca.gov/portal/gsp/preview/21</a>. Accessed December 2020.

# 4.11 Land Use and Planning

Would	the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Physically divide an established community?				$\boxtimes$
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

#### 4.11.1 Environmental Setting

The Project site is within the City limits. The site is designated in the City's General Plan as Industrial and zoned I (Industrial). The Project is compatible with industrial land use and is consistent with all applicable General Plan policies and Zoning Ordinance development standards.

#### 4.11.2 Impact Assessment

a) Would the project physically divide an established community?

**No impact.** The Project would not physically divide an established community. The Project is located on a vacant lot and proposes to develop a warehouse as anticipated by the General Plan. Residential housing located across South Granada Drive from the Project site would not be impacted. Therefore, there would be *no impact*.

b) Would the project cause a significant environmental conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**No impact.** The Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, there would be **no impact.** 

#### 4.12 Mineral Resources

Would	the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				

#### 4.12.1 Environmental Setting

The California Geological Survey (CGS) is responsible for the classification and designation of areas within California containing or potentially containing significant mineral resources. The CGS classifies lands into Aggregate and Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geologic Board, as mandated by the Surface Mining and Reclamation Act of 1974. These MRZs identify whether known or inferred significant mineral resources are presented in areas. Lead agencies are required to incorporate identified MRZs resource areas delineated by the state into their general plans. <sup>16</sup> According to the findings of the City of Madera General Plan Update EIR, the Project site does not have the potential to affect the availability of any state or locally designated mineral resource.

#### 4.12.2 Impact Assessment

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

**No impact.** The Project site is not identified as containing any mineral deposits. Therefore, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. As such, there would be **no impact.** 

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

**No impact.** The Project site is not identified as containing any mineral deposits. Therefore, the Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. As such, there would be **no impact.** 

<sup>&</sup>lt;sup>16</sup> Public Resources Code, Section 2762(a)(1).

#### 4.13 Noise

Would	the project result in:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			$\boxtimes$	
b)	Generation of excessive ground borne vibration or ground borne noise levels?				
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

#### 4.13.1 Environmental Setting

The Project site is located on a vacant lot with housing developed to the east of the Project site. Existing industrial development is located to the south and east. An existing drainage basin and industrial use is located to the north of the Project site.

#### 4.13.2 Impact Assessment

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than significant impact. The proposed Project would require the utilization of large construction equipment, including rollers, pavers, dozers, and graders. This equipment has noise levels exceeding General Plan noise standards for residential land uses, when measured 50 feet away from the noise source. General Plan Policies N-5, N-6, and MMC Section 3-11.02(B) requires the reduction of noise, including construction noise, to acceptable levels. The Project has been conditioned to restrict construction to the hours between 7 am and 8 pm in accordance with the General Plan and for compliance with the Section 3-11.02, Specific Noise Prohibitions, of the Madera Municipal Code. Further, there are no residential uses within 50 feet of the Project site. Therefore, construction-related noise impacts would remain *less than significant*.

b) Would the project result in generation of excessive ground borne vibration or ground borne noise levels?

Less than significant impact. Construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. Construction activities can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. The generation of vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight damage at the highest levels. Given the type of improvements, it is not anticipated the Project would generate excessive ground-borne vibration or ground-borne noise levels. Therefore, the Project would have a *less than significant impact*.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less than significant impact. The Project is located within the Madera Municipal Airport Compatibility Policy Map of the 2015 Madera Countywide Airport Land Use Compatibility Plan. A portion of the Project site is located in Compatibility Zone D (Other Airport Environs). Warehouse uses are designated Normally Compatible in Zone D. Therefore, the Project would result in a *less than significant impact*.

# 4.14 Population and Housing

Would the pro	oject:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
growt exam busin throu	e substantial unplanned population the in an area, either directly (for ple, by proposing new homes and esses) or indirectly (for example, gh extension of roads or other tructure)?			$\boxtimes$	
peopl const	ace substantial numbers of existing e or housing, necessitating the ruction of replacement housing here?				

#### 4.14.1 Environmental Setting

The Project site is a vacant, undeveloped property with residential development to the west, industrial development to the south and east, and industrial development with a drainage basin to the north.

#### 4.14.2 Impact Assessment

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than significant impact. Implementation of the Project would result in the construction of a 102,250 sf warehouse with related office uses. The Project is consistent with the General Plan and construction of infrastructure serving the Project would connect to existing infrastructure. As such, the Project will have a *less than significant impact*.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

**No impact.** The proposed Project site is an existing vacant, undeveloped property. There are no existing homes on the site. Thus, the proposed Project would not displace substantial numbers of existing people or housing and will not necessitate the construction of replacement housing elsewhere. Therefore, there would be *no impact*.

#### 4.15 Public Services

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			$\boxtimes$	
Police protection?			$\boxtimes$	
Schools?				$\boxtimes$
Parks?				$\boxtimes$
Other public facilities?				

#### 4.15.1 Environmental Setting

Fire, emergency, medical, and police protection services for the Project site is provided by the City of Madera. The City of Madera has a contract service with CalFire to provide management and staffing of the City's fire stations and equipment. Ambulance services is provided by a private contractor. The Project site is located within the Madera Unified School District. The District oversees pre-K through 12 education services. Parks are operated and maintained by the City of Madera.

#### 4.15.2 Impact Assessment

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

#### Fire Protection:

Less than significant impact. The Project site is located within the City's fire service area and is within acceptable restrictions for fire response. No additional need for fire facilities are required. The Project will be required to install fire hydrants and meet specification for required fire flow. Therefore, the Project will

have a less than significant impact on fire service facilities and will not warrant the need for new or physically altered fire facilities to maintain acceptable service ratios and meet performance objectives. Therefore, the Project would have a *less than significant impact*.

#### Police Protection:

Less than significant impact. The Project site is currently served by the Madera Police Department and would continue to be served by the Madera Police Department. The Project will be constructed in a secured fenced and gated environment. The Project would not result in the need for new or altered services, or a substantial alteration to the patrol requirements from City's Police Department. Therefore, the Project would have a *less than significant impact*.

#### Schools:

**No impact.** The Project would not result in the construction of new residences and no additional employees would be required to operate or maintain the Project. Therefore, the Project would have *no impact* on school facilities.

#### Parks:

**No impact.** The Project would not result in the construction of new residences and no additional employees would be required to operate or maintain the Project. Therefore, the project would have **no impact** on parks.

#### Other Public Facilities:

**No impact.** Due to the nature of the Project, the project would not result in a need for additional or other public facilities. The Project would have *no impact*.

#### 4.16 Recreation

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<ul> <li>a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</li> </ul>				$\boxtimes$
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

#### 4.16.1 Environmental Setting

The City of Madera operates and maintains a number of recreational facilities in the City, including Lions Town and Country Park, which is the nearest park to the Project site. Lions Town and Country Park is located less than 0.5 mile to the north of the site along South Granada Drive.

#### 4.16.2 Impact Assessment

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

**No impact.** Increased demand for existing parks or other recreational facilities is typically driven by an increase in population. The Project, an industrial use including a warehouse with some office uses, would not result in a net increase of residents at the Project site. Therefore, the Project would not contribute to the substantial deterioration of existing facilities or require the construction of new facilities or expansion of existing facilities. Therefore, there is **no impact.** 

# 4.17 Transportation

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<ul> <li>a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?</li> </ul>				
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)??				
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d) Result in inadequate emergency access?				

#### 4.17.1 Environmental Setting

The Project site is located along the east side of South Granada Drive and along the south side of West Almond Avenue, both designated collectors, which will provide primary access from the Project site to the larger City transportation network.

#### 4.17.2 Impact Assessment

a) Would the project conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less than significant impact. The Project would not conflict with any program plan, ordinance, or policy addressing the circulation system, including transit, roadway, and bicycle and pedestrian facilities. The Project is required to submit improvement plans, including roadway improvements, for review and approval by the City Engineer to ensure improvements will be consistent with City standards. Therefore, there would be a *less than significant impact*.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?

Less than significant impact. The Project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Truck trips are excluded from the vehicle miles traveled (VMT) thresholds; however, employee and customer trips are considered relative to VMT. The Project estimates 20 employees and approximately 7,500 product display area for customers. However, the employee and customers trips generated is anticipated to be less than 110 average trips daily (ADT) and is therefore considered to be a *less than significant impact* in accordance with the Office of Planning and Research Technical Advisory for Senate Bill 743.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than significant impact. Site access would be provided by two point of access; the primary point of access is along South Granada Drive and the second point of access is along West Almond Avenue. The driveways would be at a right angle and the design would not create hazards. Project access would be reviewed and approved in conformance to City street specifications and sight distance standards. Therefore, the Project would result in a *less than significant impact*.

d) Would the project result in inadequate emergency access?

**Less than significant impact.** The Project has been reviewed by the Engineering Department to ensure that the Project would not increase hazards due to dangerous curves, incompatible uses or inadequate emergency access. Therefore, the Project would result in a *less than significant impact*.

## 4.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
<ul> <li>i) Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or</li> </ul>				
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

## 4.18.1 Environmental Setting

A previous sacred lands search completed for General Plan Environmental Impact Report (EIR) did not identify any sensitive Native American cultural resources either within or near the Project site. California Native American tribes traditionally and culturally affiliated with the Project area did not request consultation pursuant to Public Resources Code Section 21080.3.1.

#### 4.18.2 Impact Assessment

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - i) Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or

**No impact.** The Project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and the Project is not listed or eligible for listing in the California Register of Historical Resources (CRHR), or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). As described above, no known tribal cultural resources have been identified (as defined in Section 21074) within the Project area. Therefore, the Project would **not impact** the significance of a tribal cultural resource that is either listed in, or eligible for listing in, the CRHR, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than significant impact. The Project site is not a resource determined by the lead agency (City of Madera), in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. The Project site is not listed as a historical resource in the California Register of Historical Sources. As described above, no known tribal cultural resources have been identified (as defined in Section 21074) within the Project area, and no substantial information has been provided to the City to indicate otherwise. Therefore, the Project would have a *less than significant impact* on the significance of a tribal cultural resource.

# 4.19 Utilities and Service Systems

Would	the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			$\boxtimes$	
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			$\boxtimes$	
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			$\boxtimes$	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

# 4.19.1 Environmental Setting

The Project site is a vacant property planned for industrial uses in the General Plan. The Project site's land uses were analyzed in several utility planning documents, including the following:

- 2014 Water System Master Plan
- 2014 Sanitary Sewer System Master Plan
- 2015 Urban Water Management Plan

#### 4.19.2 Impact Assessment

- a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Less than significant impact. The City implements a City-wide program for completion of incremental expansions to facilities for planned water supply, sewer treatment, and stormwater drainage. The City Engineer has conditioned the Project to require the installation of an 8-inch water main and extension of water mains to provide service to the subdivision and payment of impact fees to offset the Project's incremental water usage.

The City has sufficient water supplies available to serve the Project and its existing commitments during normal, dry, and multiple dry years. The Project must comply with the requirements of the Engineering Department for the construction of water, wastewater, and storm water drainage infrastructure.

PG&E, the natural gas and electric service provider for the area, incrementally expands and updates its service system as needed to serve its users. Accordingly, telecommunications providers in the area incrementally expand and update their service systems in response to usage and demand. The developer will be responsible for planning and installing wastewater collection and water delivery systems, as well as electrical and telecommunications service infrastructure. In addition, the developer be responsible for the payment of development impact fees to off-set potential impacts to these facilities resulting in *less than significant impacts*.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than significant impact. The Project will be served by the City of Madera Wastewater Treatment Plant (WWTP). The Madera WWTP has a design capacity of 10.1 MGD and it can accommodate a design peak dry weather flow of up to 15.1 MGD. The 2014 Sanitary Sewer System assumed a 2020 population of 86,633 with an average day flow of 10.4 MGD. The served population with the Project will be approximately 66,000, and therefore approximately 24 percent below the assumed 2020 average flow. The WWTP has adequate capacity to serve the Project in addition to its existing commitments, therefore the Project will have a *less than significant impact*.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than significant impact. The Project would not result in the demolition of existing structures. Refuse generated during construction would be picked up the City's contracted waste hauler. The Fairmead Solid Waste Disposal Site located at 21739 Road 19 serves the City of Madera. The landfill has an estimated closure date for December 2028; however, throughput has typically been less than maximum capacity. The

landfill currently has sufficient capacity to serve the Project. The Project is not anticipated to generate solid waste in excess of State or local standards. Therefore, the Project would have a *less than significant impact*.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

**Less than significant impact.** The project would be required to comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, the impact would *less than significant*.

#### 4.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<ul> <li>a) Substantially impair an adopted emergency response plan or emergency evacuation plan?</li> </ul>				
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of wildfire?				
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				$\boxtimes$
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

# 4.20.1 Environmental Setting

The Project site is not located in or near State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones. The Project will be developed consistent with all regulations of the California Fire Code.

#### 4.20.2 Impact Assessment

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) Due to slope, prevailing winds, and other factors exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No impact. The Project is located in an area of low fire risk and is not located in or near a State Responsibility Area nor near land classified by either CalFire<sup>17</sup> or the City of Madera as a Very High Fire Hazard Severity Zone<sup>18</sup>. The nearest State Responsibility Area is approximately 21 miles to the northeast of the Project site. Additionally, the site is approximately 29 miles from the nearest Very High Fire Hazard Severity Zone classification. As the Project is not subject to wildfire, it would have no impact on adopted emergency response plans or emergency evacuation plans relative to the risk of wildfire. The Project area does not generally experience strong prevailing winds and experiences less than 2 percent slope. As the Project is relatively flat, and not located in or near a State Responsibility Area nor land classified by either Cal Fire or the City as a Very High Fire Hazard Severity Zone, it is not subject to the risk of downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. Installation or maintenance of the Project or any associated infrastructure would not exacerbate fire risks or result in an impact to the environment. Therefore, there would be *no impact*.

January 2021 4-46

\_\_\_

<sup>&</sup>lt;sup>17</sup> CAL FIRE. Fire Hazard Severity Zones in SRA, Madera County. Website: <a href="https://osfm.fire.ca.gov/media/6700/fhszs">https://osfm.fire.ca.gov/media/6700/fhszs</a> map20.pdf. Accessed November 2020.

<sup>&</sup>lt;sup>18</sup> CAL FIRE. Draft Fire Hazard Severity Zones in LRA, Madera County. Website: https://osfm.fire.ca.gov/media/6703/fhszl06 1 map20.pdf. Accessed November 2020.

# 4.21 CEQA Mandatory Findings of Significance

Does th	ne project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b)	Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c)	Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

#### 4.21.1 Environmental Setting

Based upon staff analysis and comments from experts, it has been determined that the proposed Project could generate some limited adverse impacts in the areas of Aesthetics, Air Quality, Biologic Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, and Utilities and Service Systems.

The potential impacts identified in this Initial Study are considered to be less than significant since they will cease upon completion of construction or do not exceed a threshold of significance. Therefore, a Negative Declaration is the appropriate level of documentation for this Project.

#### 4.21.2 Impact Assessment

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than significant impact. The analysis conducted in this Initial Study/Negative Declaration results in a determination that the Project will have a *less than significant* effect on the environment. Accordingly, the Project will involve no potential for significant impacts through the degradation of the quality of the environment, the reduction in the habitat or population of fish or wildlife, including endangered plants or animals, the elimination of a plant or animal community or example of a major period of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than significant impact. CEQA Guidelines Section 15064(i) States that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of cumulative effects of a project must be conducted in connection with the effects of past projects, other current projects, and probable future projects. The Project site was anticipated for urbanization with the development of the City's General Plan. Therefore, implementation of the Project would not result in significant cumulative impacts and all potential impacts would be reduced to *less than significant* through the implementation of basic regulatory requirements incorporated into Project design.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

**Less than significant impact.** The Project would not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. Impacts are considered to be *less than significant*.

# Appendix A: CalEEMod Output Files

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

#### SPR 2020-16

#### **Madera County, Annual**

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	100.00	1000sqft	2.30	100,000.00	0
Parking Lot	272.44	1000sqft	6.25	272,438.00	0

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.9Precipitation Freq (Days)51Climate Zone3Operational Year2022

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 290
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

Project Characteristics - PG&E Intensity Factor

Land Use -

Construction Phase - Site is vacant without structures or trees. No demolition phase.

Grading - Assumes project site will be balanced.

Architectural Coating - Architectural coating phase to occur in 2022--Year 2022 regulations of SJVAPCD Rule 4601 apply.

Area Coating - Reapplication of architectural coating phase to occur in 2022 or later--Year 2022 regulations of SJVAPCD Rule 4601 apply.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - "Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades."

(https://www.energy.ca.gov/sites/default/files/2020-03/Title\_24\_2019\_Building\_Standards\_FAQ\_ada.pdf)

Energy Use -

Waste Mitigation - AB 341 requires 75% waste diversion by 2020.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	Area_EF_Parking	150	100
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

#### 2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 3 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

# 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
2021	0.3634	3.2707	2.8968	7.0100e- 003	0.3471	0.1359	0.4830	0.1353	0.1273	0.2625	0.0000	627.9405	627.9405	0.0973	0.0000	630.3738
2022	0.2917	0.1209	0.1689	2.8000e- 004	3.6000e- 003	6.2400e- 003	9.8400e- 003	9.6000e- 004	5.8100e- 003	6.7600e- 003	0.0000	24.6805	24.6805	6.4000e- 003	0.0000	24.8406
Maximum	0.3634	3.2707	2.8968	7.0100e- 003	0.3471	0.1359	0.4830	0.1353	0.1273	0.2625	0.0000	627.9405	627.9405	0.0973	0.0000	630.3738

#### **Mitigated Construction**

	ROG	NOx	СО	SO2	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					tor	ns/yr							M	T/yr		
2021	0.3634	3.2707	2.8968	7.0100e- 003	0.3471	0.1359	0.4830	0.1353	0.1273	0.2625	0.0000	627.9401	627.9401	0.0973	0.0000	630.3735
	0.2917	0.1209	0.1689	2.8000e- 004	3.6000e- 003	6.2400e- 003	9.8400e- 003	9.6000e- 004	5.8100e- 003	6.7600e- 003	0.0000	24.6804	24.6804	6.4000e- 003	0.0000	24.8405
Maximum	0.3634	3.2707	2.8968	7.0100e- 003	0.3471	0.1359	0.4830	0.1353	0.1273	0.2625	0.0000	627.9401	627.9401	0.0973	0.0000	630.3735
	ROG	NOx	СО	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

Page 4 of 30 SPR 2020-16 - Madera County, Annual

Date: 12/10/2020 4:27 PM

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.9622	0.9622
2	4-1-2021	6-30-2021	0.8845	0.8845
3	7-1-2021	9-30-2021	0.8942	0.8942
4	10-1-2021	12-31-2021	0.8931	0.8931
5	1-1-2022	3-31-2022	0.4146	0.4146
		Highest	0.9622	0.9622

#### 2.2 Overall Operational

#### **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	0.4354	3.0000e- 005	3.4300e- 003	0.0000		1.0000e- 005	1.0000e- 005	 	1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0900e- 003
Energy	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003	       	6.7400e- 003	6.7400e- 003	0.0000	232.5425	232.5425	0.0155	4.5800e- 003	234.2948
Mobile	0.0655	0.5929	0.6862	2.9500e- 003	0.1859	2.6400e- 003	0.1885	0.0500	2.4900e- 003	0.0524	0.0000	273.1260	273.1260	0.0188	0.0000	273.5963
Waste						0.0000	0.0000		0.0000	0.0000	19.0812	0.0000	19.0812	1.1277	0.0000	47.2727
Water						0.0000	0.0000	1       	0.0000	0.0000	7.3365	16.4597	23.7962	0.7552	0.0181	48.0792
Total	0.5107	0.6816	0.7641	3.4800e- 003	0.1859	9.3900e- 003	0.1952	0.0500	9.2400e- 003	0.0592	26.4177	522.1348	548.5525	1.9171	0.0227	603.2502

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	0.4354	3.0000e- 005	3.4300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0900e- 003
Energy	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	211.1317	211.1317	0.0133	4.1400e- 003	212.6985
Mobile	0.0636	0.5742	0.6496	2.7700e- 003	0.1730	2.4800e- 003	0.1755	0.0465	2.3400e- 003	0.0488	0.0000	257.0777	257.0777	0.0184	0.0000	257.5368
Waste			1       			0.0000	0.0000		0.0000	0.0000	4.7703	0.0000	4.7703	0.2819	0.0000	11.8182
Water			,			0.0000	0.0000		0.0000	0.0000	7.3365	16.4597	23.7962	0.7552	0.0181	48.0792
Total	0.5088	0.6628	0.7275	3.3000e- 003	0.1730	9.2300e- 003	0.1823	0.0465	9.0900e- 003	0.0556	12.1068	484.6758	496.7826	1.0688	0.0223	530.1398

	ROG	NOx	СО	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	0.38	2.75	4.79	5.17	6.90	1.70	6.65	6.91	1.62	6.08	54.17	7.17	9.44	44.25	1.94	12.12

#### 3.0 Construction Detail

#### **Construction Phase**

Page 6 of 30

Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2021	1/14/2021	5	10	
2	Grading	Grading	1/15/2021	2/11/2021	5	20	
3	Building Construction	Building Construction	2/12/2021	12/30/2021	5	230	
4	Paving	Paving	12/31/2021	1/27/2022	5	20	
5	Architectural Coating	Architectural Coating	1/28/2022	2/24/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 6.25

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 16,346 (Architectural Coating – sqft)

OffRoad Equipment

Page 7 of 30

Date: 12/10/2020 4:27 PM

SPR 2020-16 - Madera County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	156.00	61.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

CalEEMod Version: CalEEMod.2016.3.2 Page 8 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

3.2 Site Preparation - 2021

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Off-Road	0.0194	0.2025	0.1058	1.9000e- 004		0.0102	0.0102	       	9.4000e- 003	9.4000e- 003	0.0000	16.7179	16.7179	5.4100e- 003	0.0000	16.8530			
Total	0.0194	0.2025	0.1058	1.9000e- 004	0.0903	0.0102	0.1006	0.0497	9.4000e- 003	0.0591	0.0000	16.7179	16.7179	5.4100e- 003	0.0000	16.8530			

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Worker	3.8000e- 004	2.4000e- 004	2.6700e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6399	0.6399	2.0000e- 005	0.0000	0.6404		
Total	3.8000e- 004	2.4000e- 004	2.6700e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6399	0.6399	2.0000e- 005	0.0000	0.6404		

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

3.2 Site Preparation - 2021

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
	0.0194	0.2025	0.1058	1.9000e- 004		0.0102	0.0102		9.4000e- 003	9.4000e- 003	0.0000	16.7178	16.7178	5.4100e- 003	0.0000	16.8530		
Total	0.0194	0.2025	0.1058	1.9000e- 004	0.0903	0.0102	0.1006	0.0497	9.4000e- 003	0.0591	0.0000	16.7178	16.7178	5.4100e- 003	0.0000	16.8530		

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Worker	3.8000e- 004	2.4000e- 004	2.6700e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6399	0.6399	2.0000e- 005	0.0000	0.6404		
Total	3.8000e- 004	2.4000e- 004	2.6700e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6399	0.6399	2.0000e- 005	0.0000	0.6404		

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

3.3 Grading - 2021
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e- 004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e- 003	0.0000	26.2644
Total	0.0229	0.2474	0.1586	3.0000e- 004	0.0655	0.0116	0.0771	0.0337	0.0107	0.0443	0.0000	26.0537	26.0537	8.4300e- 003	0.0000	26.2644

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e- 004	4.0000e- 004	4.4400e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.2000e- 003	3.2000e- 004	1.0000e- 005	3.3000e- 004	0.0000	1.0665	1.0665	3.0000e- 005	0.0000	1.0673
Total	6.3000e- 004	4.0000e- 004	4.4400e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.2000e- 003	3.2000e- 004	1.0000e- 005	3.3000e- 004	0.0000	1.0665	1.0665	3.0000e- 005	0.0000	1.0673

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

3.3 Grading - 2021

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0229	0.2474	0.1586	3.0000e- 004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e- 003	0.0000	26.2643
Total	0.0229	0.2474	0.1586	3.0000e- 004	0.0655	0.0116	0.0771	0.0337	0.0107	0.0443	0.0000	26.0537	26.0537	8.4300e- 003	0.0000	26.2643

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e- 004	4.0000e- 004	4.4400e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.2000e- 003	3.2000e- 004	1.0000e- 005	3.3000e- 004	0.0000	1.0665	1.0665	3.0000e- 005	0.0000	1.0673
Total	6.3000e- 004	4.0000e- 004	4.4400e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.2000e- 003	3.2000e- 004	1.0000e- 005	3.3000e- 004	0.0000	1.0665	1.0665	3.0000e- 005	0.0000	1.0673

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

# 3.4 Building Construction - 2021 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2186	2.0047	1.9062	3.1000e- 003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3829	266.3829	0.0643	0.0000	267.9895
Total	0.2186	2.0047	1.9062	3.1000e- 003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3829	266.3829	0.0643	0.0000	267.9895

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0254	0.7614	0.1802	1.9900e- 003	0.0464	2.3200e- 003	0.0487	0.0134	2.2200e- 003	0.0156	0.0000	188.4712	188.4712	0.0151	0.0000	188.8487
Worker	0.0750	0.0477	0.5314	1.4100e- 003	0.1429	1.1100e- 003	0.1440	0.0380	1.0300e- 003	0.0390	0.0000	127.5540	127.5540	3.7600e- 003	0.0000	127.6479
Total	0.1004	0.8091	0.7116	3.4000e- 003	0.1893	3.4300e- 003	0.1927	0.0514	3.2500e- 003	0.0546	0.0000	316.0251	316.0251	0.0189	0.0000	316.4966

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

# 3.4 Building Construction - 2021 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.2186	2.0047	1.9062	3.1000e- 003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3826	266.3826	0.0643	0.0000	267.9892
Total	0.2186	2.0047	1.9062	3.1000e- 003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3826	266.3826	0.0643	0.0000	267.9892

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0254	0.7614	0.1802	1.9900e- 003	0.0464	2.3200e- 003	0.0487	0.0134	2.2200e- 003	0.0156	0.0000	188.4712	188.4712	0.0151	0.0000	188.8487
Worker	0.0750	0.0477	0.5314	1.4100e- 003	0.1429	1.1100e- 003	0.1440	0.0380	1.0300e- 003	0.0390	0.0000	127.5540	127.5540	3.7600e- 003	0.0000	127.6479
Total	0.1004	0.8091	0.7116	3.4000e- 003	0.1893	3.4300e- 003	0.1927	0.0514	3.2500e- 003	0.0546	0.0000	316.0251	316.0251	0.0189	0.0000	316.4966

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

3.5 Paving - 2021
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
	6.3000e- 004	6.4600e- 003	7.3300e- 003	1.0000e- 005		3.4000e- 004	3.4000e- 004		3.1000e- 004	3.1000e- 004	0.0000	1.0012	1.0012	3.2000e- 004	0.0000	1.0093
Paving	4.1000e- 004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0400e- 003	6.4600e- 003	7.3300e- 003	1.0000e- 005		3.4000e- 004	3.4000e- 004		3.1000e- 004	3.1000e- 004	0.0000	1.0012	1.0012	3.2000e- 004	0.0000	1.0093

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 005	2.0000e- 005	2.2000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0533	0.0533	0.0000	0.0000	0.0534
Total	3.0000e- 005	2.0000e- 005	2.2000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0533	0.0533	0.0000	0.0000	0.0534

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

3.5 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.3000e- 004	6.4600e- 003	7.3300e- 003	1.0000e- 005		3.4000e- 004	3.4000e- 004		3.1000e- 004	3.1000e- 004	0.0000	1.0012	1.0012	3.2000e- 004	0.0000	1.0093
	4.1000e- 004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0400e- 003	6.4600e- 003	7.3300e- 003	1.0000e- 005		3.4000e- 004	3.4000e- 004		3.1000e- 004	3.1000e- 004	0.0000	1.0012	1.0012	3.2000e- 004	0.0000	1.0093

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr MT/yr															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
I Worker	3.0000e- 005	2.0000e- 005	2.2000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0533	0.0533	0.0000	0.0000	0.0534
Total	3.0000e- 005	2.0000e- 005	2.2000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0533	0.0533	0.0000	0.0000	0.0534

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

3.5 Paving - 2022 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Off-Road	0.0105	0.1057	0.1385	2.2000e- 004		5.4000e- 003	5.4000e- 003		4.9600e- 003	4.9600e- 003	0.0000	19.0262	19.0262	6.1500e- 003	0.0000	19.1800
Paving	7.7800e- 003		 		 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0183	0.1057	0.1385	2.2000e- 004		5.4000e- 003	5.4000e- 003		4.9600e- 003	4.9600e- 003	0.0000	19.0262	19.0262	6.1500e- 003	0.0000	19.1800

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e- 004	3.4000e- 004	3.8500e- 003	1.0000e- 005	1.1400e- 003	1.0000e- 005	1.1400e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	0.9766	0.9766	3.0000e- 005	0.0000	0.9772
Total	5.5000e- 004	3.4000e- 004	3.8500e- 003	1.0000e- 005	1.1400e- 003	1.0000e- 005	1.1400e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	0.9766	0.9766	3.0000e- 005	0.0000	0.9772

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
	0.0105	0.1057	0.1385	2.2000e- 004		5.4000e- 003	5.4000e- 003		4.9600e- 003	4.9600e- 003	0.0000	19.0262	19.0262	6.1500e- 003	0.0000	19.1800
ı	7.7800e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0183	0.1057	0.1385	2.2000e- 004		5.4000e- 003	5.4000e- 003		4.9600e- 003	4.9600e- 003	0.0000	19.0262	19.0262	6.1500e- 003	0.0000	19.1800

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e- 004	3.4000e- 004	3.8500e- 003	1.0000e- 005	1.1400e- 003	1.0000e- 005	1.1400e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	0.9766	0.9766	3.0000e- 005	0.0000	0.9772
Total	5.5000e- 004	3.4000e- 004	3.8500e- 003	1.0000e- 005	1.1400e- 003	1.0000e- 005	1.1400e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	0.9766	0.9766	3.0000e- 005	0.0000	0.9772

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

# 3.6 Architectural Coating - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.2696					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	2.0500e- 003	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574
Total	0.2717	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e- 003	7.4000e- 004	8.3800e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.6000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.1245	2.1245	6.0000e- 005	0.0000	2.1259
Total	1.2000e- 003	7.4000e- 004	8.3800e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.6000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.1245	2.1245	6.0000e- 005	0.0000	2.1259

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

# 3.6 Architectural Coating - 2022 Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.2696					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e- 003	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004	i i i	8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574
Total	0.2717	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574

#### **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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e- 003	7.4000e- 004	8.3800e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.6000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.1245	2.1245	6.0000e- 005	0.0000	2.1259
Total	1.2000e- 003	7.4000e- 004	8.3800e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.6000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.1245	2.1245	6.0000e- 005	0.0000	2.1259

# 4.0 Operational Detail - Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

# **4.1 Mitigation Measures Mobile**

Improve Destination Accessibility
Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0636	0.5742	0.6496	2.7700e- 003	0.1730	2.4800e- 003	0.1755	0.0465	2.3400e- 003	0.0488	0.0000	257.0777	257.0777	0.0184	0.0000	257.5368
Unmitigated	0.0655	0.5929	0.6862	2.9500e- 003	0.1859	2.6400e- 003	0.1885	0.0500	2.4900e- 003	0.0524	0.0000	273.1260	273.1260	0.0188	0.0000	273.5963

# **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	168.00	168.00	168.00	490,478	456,635
Total	168.00	168.00	168.00	490,478	456,635

# **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
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
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No		7.30	7.30	59.00	0.00	41.00	92	5	3

# SPR 2020-16 - Madera County, Annual

# 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.530844	0.031753	0.165023	0.117863	0.020860	0.005456	0.014179	0.100253	0.002735	0.001704	0.007139	0.001243	0.000949
Unrefrigerated Warehouse-No Rail	0.530844	0.031753	0.165023	0.117863	0.020860	0.005456	0.014179	0.100253	0.002735	0.001704	0.007139	0.001243	0.000949

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

Install High Efficiency Lighting

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	114.6499	114.6499	0.0115	2.3700e- 003	115.6434
Electricity Unmitigated	61 61 61 61			,		0.0000	0.0000	,     	0.0000	0.0000	0.0000	136.0607	136.0607	0.0136	2.8200e- 003	137.2397
	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003	,	6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551
NaturalGas Unmitigated	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003	y ! !	6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 30 Date: 12/10/2020 4:27 PM

# SPR 2020-16 - Madera County, Annual

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.808e +006	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551
Total		9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551

#### **Mitigated**

	NaturalGa s 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					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.808e +006	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551
Total		9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Parking Lot	95353.3	12.5429	1.2500e- 003	2.6000e- 004	12.6516
Unrefrigerated Warehouse-No Rail	939000	123.5177	0.0124	2.5600e- 003	124.5881
Total		136.0607	0.0136	2.8200e- 003	137.2397

#### **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	/yr	
Parking Lot	00100.0	7.6512	7.7000e- 004	1.6000e- 004	7.7175
Unrefrigerated Warehouse-No Rail	813420	106.9987	0.0107	2.2100e- 003	107.9259
Total		114.6499	0.0115	2.3700e- 003	115.6434

#### 6.0 Area Detail

# **6.1 Mitigation Measures Area**

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 30 Date: 12/10/2020 4:27 PM

# SPR 2020-16 - Madera County, Annual

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.4354	3.0000e- 005	3.4300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0900e- 003
Unmitigated	0.4354	3.0000e- 005	3.4300e- 003	0.0000		1.0000e- 005	1.0000e- 005	 	1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0900e- 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					ton	s/yr							MT	-/yr		
Architectural Coating	0.0270					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4082		,			0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e- 004	3.0000e- 005	3.4300e- 003	0.0000		1.0000e- 005	1.0000e- 005	1 1 1 1	1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0900e- 003
Total	0.4354	3.0000e- 005	3.4300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0900e- 003

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

# 6.2 Area by SubCategory Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	-/yr		
Architectural Coating	0.0270					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4082					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e- 004	3.0000e- 005	3.4300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0900e- 003
Total	0.4354	3.0000e- 005	3.4300e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0900e- 003

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 30 Date: 12/10/2020 4:27 PM

SPR 2020-16 - Madera County, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
Imagatou	23.7962	0.7552	0.0181	48.0792
- Crimingatou	23.7962	0.7552	0.0181	48.0792

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.125 / 0	23.7962	0.7552	0.0181	48.0792
Total		23.7962	0.7552	0.0181	48.0792

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 30 Date: 12/10/2020 4:27 PM

#### SPR 2020-16 - Madera County, Annual

7.2 Water by Land Use Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	√yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.125 / 0	23.7962	0.7552	0.0181	48.0792
Total		23.7962	0.7552	0.0181	48.0792

#### 8.0 Waste Detail

# **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

# SPR 2020-16 - Madera County, Annual

# Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	T/yr	
gatea	4.7703	0.2819	0.0000	11.8182
Jgatea	19.0812	1.1277	0.0000	47.2727

# 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	√yr	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	94	19.0812	1.1277	0.0000	47.2727
Total		19.0812	1.1277	0.0000	47.2727

SPR 2020-16 - Madera County, Annual

Date: 12/10/2020 4:27 PM

# 8.2 Waste by Land Use

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.5	4.7703	0.2819	0.0000	11.8182
Total		4.7703	0.2819	0.0000	11.8182

# 9.0 Operational Offroad

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

# 10.0 Stationary Equipment

#### **Fire Pumps and Emergency Generators**

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

#### **Boilers**

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

# **User Defined Equipment**

Equipment Type	Number

# 11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 30 Date: 12/10/2020 4:27 PM

SPR 2020-16 - Madera County, Annual

-

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 25 Date: 12/10/2020 3:30 PM

SPR 2020-16 - Madera County, Summer

#### SPR 2020-16

#### **Madera County, Summer**

# 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	100.00	1000sqft	2.30	100,000.00	0
Parking Lot	272.44	1000sqft	6.25	272,438.00	0

# 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.9Precipitation Freq (Days)51Climate Zone3Operational Year2022

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 290
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

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

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 25 Date: 12/10/2020 3:30 PM

#### SPR 2020-16 - Madera County, Summer

Project Characteristics - PG&E Intensity Factor

Land Use -

Construction Phase - Site is vacant without structures or trees. No demolition phase.

Grading - Assumes project site will be balanced.

Architectural Coating - Architectural coating phase to occur in 2022--Year 2022 regulations of SJVAPCD Rule 4601 apply.

Area Coating - Reapplication of architectural coating phase to occur in 2022 or later--Year 2022 regulations of SJVAPCD Rule 4601 apply.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - "Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades." (https://www.energy.ca.gov/sites/default/files/2020-03/Title\_24\_2019\_Building\_Standards\_FAQ\_ada.pdf)

Energy Use -

SPR 2020-16 - Madera County, Summer

Date: 12/10/2020 3:30 PM

Page 3 of 25

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	Area_EF_Parking	150	100
tblConstructionPhase	PhaseEndDate	3/24/2022	2/24/2022
tblConstructionPhase	PhaseEndDate	1/27/2022	12/30/2021
tblConstructionPhase	PhaseEndDate	3/11/2021	2/11/2021
tblConstructionPhase	PhaseEndDate	2/24/2022	1/27/2022
tblConstructionPhase	PhaseEndDate	2/11/2021	1/14/2021
tblConstructionPhase	PhaseStartDate	2/25/2022	1/28/2022
tblConstructionPhase	PhaseStartDate	3/12/2021	2/12/2021
tblConstructionPhase	PhaseStartDate	2/12/2021	1/15/2021
tblConstructionPhase	PhaseStartDate	1/28/2022	12/31/2021
tblConstructionPhase	PhaseStartDate	1/29/2021	1/1/2021
tblLandUse	LandUseSquareFeet	272,440.00	272,438.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

# 2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 25 Date: 12/10/2020 3:30 PM

# SPR 2020-16 - Madera County, Summer

# 2.1 Overall Construction (Maximum Daily Emission)

#### **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day									lb/day						
2021	3.9735	40.5413	23.3740	0.0579	18.2141	2.0456	20.2597	9.9699	1.8819	11.8518	0.0000	5,720.890 2	5,720.890 2	1.1966	0.0000	5,740.720 9
2022	27.3036	11.1578	15.0497	0.0240	0.2547	0.5688	0.6920	0.0676	0.5233	0.5560	0.0000	2,331.521 7	2,331.521 7	0.7174	0.0000	2,349.457 5
Maximum	27.3036	40.5413	23.3740	0.0579	18.2141	2.0456	20.2597	9.9699	1.8819	11.8518	0.0000	5,720.890 2	5,720.890 2	1.1966	0.0000	5,740.720 9

# **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day									lb/day						
2021	3.9735	40.5413	23.3740	0.0579	18.2141	2.0456	20.2597	9.9699	1.8819	11.8518	0.0000	5,720.890 2	5,720.890 2	1.1966	0.0000	5,740.720 9
2022	27.3036	11.1578	15.0497	0.0240	0.2547	0.5688	0.6920	0.0676	0.5233	0.5560	0.0000	2,331.521 7	2,331.521 7	0.7174	0.0000	2,349.457 5
Maximum	27.3036	40.5413	23.3740	0.0579	18.2141	2.0456	20.2597	9.9699	1.8819	11.8518	0.0000	5,720.890 2	5,720.890 2	1.1966	0.0000	5,740.720 9
	ROG	NOx	СО	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

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 25 Date: 12/10/2020 3:30 PM

# SPR 2020-16 - Madera County, Summer

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day								lb/day							
Area	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869
Energy	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189
Mobile	0.4256	3.2076	4.1168	0.0171	1.0523	0.0144	1.0667	0.2821	0.0136	0.2957		1,746.596 6	1,746.596 6	0.1118		1,749.390 5
Total	2.8668	3.6936	4.5629	0.0200	1.0523	0.0515	1.1037	0.2821	0.0506	0.3327		2,329.434 0	2,329.434	0.1232	0.0107	2,335.696 3

# **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		lb/day									lb/day					
Area	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869
Energy	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189
Mobile	0.4146	3.1100	3.8813	0.0161	0.9797	0.0135	0.9932	0.2626	0.0127	0.2754		1,643.957 1	1,643.957 1	0.1089		1,646.678 3
Total	2.8558	3.5960	4.3274	0.0190	0.9797	0.0506	1.0302	0.2626	0.0498	0.3124		2,226.794 5	2,226.794 5	0.1202	0.0107	2,232.984 0

Page 6 of 25

Date: 12/10/2020 3:30 PM

#### SPR 2020-16 - Madera County, Summer

	ROG	NOx	СО	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	0.38	2.64	5.16	5.00	6.90	1.73	6.66	6.90	1.66	6.10	0.00	4.41	4.41	2.36	0.00	4.40

#### 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2021	1/14/2021	5	10	
2	Grading	Grading	1/15/2021	2/11/2021	5	20	
3	Building Construction	Building Construction	2/12/2021	12/30/2021	5	230	
4	Paving	Paving	12/31/2021	1/27/2022	5	20	
5	Architectural Coating	Architectural Coating	1/28/2022	2/24/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 6.25

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 16,346 (Architectural Coating – sqft)

**OffRoad Equipment** 

Page 7 of 25

Date: 12/10/2020 3:30 PM

SPR 2020-16 - Madera County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

# **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	156.00	61.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

CalEEMod Version: CalEEMod.2016.3.2 Page 8 of 25 Date: 12/10/2020 3:30 PM

# SPR 2020-16 - Madera County, Summer

3.2 Site Preparation - 2021

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.0442	0.6157	1.5500e- 003	0.1479	1.1200e- 003	0.1490	0.0392	1.0300e- 003	0.0403		154.2102	154.2102	4.6100e- 003		154.3254
Total	0.0853	0.0442	0.6157	1.5500e- 003	0.1479	1.1200e- 003	0.1490	0.0392	1.0300e- 003	0.0403		154.2102	154.2102	4.6100e- 003		154.3254

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 25 Date: 12/10/2020 3:30 PM

# SPR 2020-16 - Madera County, Summer

3.2 Site Preparation - 2021 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920	; ; ;	3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	#	0.0000	0.0000	0.0000	       	0.0000
Worker	0.0853	0.0442	0.6157	1.5500e- 003	0.1479	1.1200e- 003	0.1490	0.0392	1.0300e- 003	0.0403		154.2102	154.2102	4.6100e- 003	       	154.3254
Total	0.0853	0.0442	0.6157	1.5500e- 003	0.1479	1.1200e- 003	0.1490	0.0392	1.0300e- 003	0.0403		154.2102	154.2102	4.6100e- 003		154.3254

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 25 Date: 12/10/2020 3:30 PM

# SPR 2020-16 - Madera County, Summer

3.3 Grading - 2021
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296	       	1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9288	       	2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.928 5	2,871.928 5	0.9288		2,895.149 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0368	0.5131	1.2900e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		128.5085	128.5085	3.8400e- 003	       	128.6045
Total	0.0711	0.0368	0.5131	1.2900e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		128.5085	128.5085	3.8400e- 003		128.6045

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 25 Date: 12/10/2020 3:30 PM

# SPR 2020-16 - Madera County, Summer

3.3 Grading - 2021

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0368	0.5131	1.2900e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		128.5085	128.5085	3.8400e- 003		128.6045
Total	0.0711	0.0368	0.5131	1.2900e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		128.5085	128.5085	3.8400e- 003		128.6045

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 25 Date: 12/10/2020 3:30 PM

# SPR 2020-16 - Madera County, Summer

# 3.4 Building Construction - 2021 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160	-	2,568.764 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2175	6.5420	1.4628	0.0175	0.4136	0.0199	0.4334	0.1191	0.0190	0.1381		1,831.038 1	1,831.038 1	0.1373	       	1,834.470 1
Worker	0.7392	0.3830	5.3360	0.0134	1.2815	9.6900e- 003	1.2912	0.3399	8.9300e- 003	0.3488		1,336.488 2	1,336.488 2	0.0399	       	1,337.486 6
Total	0.9567	6.9250	6.7988	0.0309	1.6951	0.0295	1.7246	0.4590	0.0279	0.4869		3,167.526 3	3,167.526 3	0.1772		3,171.956 6

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 25 Date: 12/10/2020 3:30 PM

# SPR 2020-16 - Madera County, Summer

# 3.4 Building Construction - 2021 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
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
Vendor	0.2175	6.5420	1.4628	0.0175	0.4136	0.0199	0.4334	0.1191	0.0190	0.1381		1,831.038 1	1,831.038 1	0.1373		1,834.470 1
Worker	0.7392	0.3830	5.3360	0.0134	1.2815	9.6900e- 003	1.2912	0.3399	8.9300e- 003	0.3488		1,336.488 2	1,336.488 2	0.0399		1,337.486 6
Total	0.9567	6.9250	6.7988	0.0309	1.6951	0.0295	1.7246	0.4590	0.0279	0.4869		3,167.526 3	3,167.526 3	0.1772		3,171.956 6

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 25 Date: 12/10/2020 3:30 PM

# SPR 2020-16 - Madera County, Summer

3.5 Paving - 2021
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777	! !	0.6235	0.6235		2,207.210 9	2,207.210 9	0.7139		2,225.057 3
Paving	0.8188		1 1 1 1		       	0.0000	0.0000	1	0.0000	0.0000		<del></del>       	0.0000		       	0.0000
Total	2.0743	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.210 9	2,207.210 9	0.7139		2,225.057 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0368	0.5131	1.2900e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		128.5085	128.5085	3.8400e- 003		128.6045
Total	0.0711	0.0368	0.5131	1.2900e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		128.5085	128.5085	3.8400e- 003		128.6045

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 25 Date: 12/10/2020 3:30 PM

# SPR 2020-16 - Madera County, Summer

3.5 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.210 9	2,207.210 9	0.7139		2,225.057 3
Paving	0.8188					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0743	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.210 9	2,207.210 9	0.7139		2,225.057 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0368	0.5131	1.2900e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		128.5085	128.5085	3.8400e- 003		128.6045
Total	0.0711	0.0368	0.5131	1.2900e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		128.5085	128.5085	3.8400e- 003		128.6045

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 25 Date: 12/10/2020 3:30 PM

## SPR 2020-16 - Madera County, Summer

3.5 Paving - 2022 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
J. Trodu	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.8188					0.0000	0.0000	1 1 1	0.0000	0.0000		       	0.0000		i i	0.0000
Total	1.9216	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0657	0.0329	0.4692	1.2400e- 003	0.1232	9.0000e- 004	0.1241	0.0327	8.3000e- 004	0.0335		123.8614	123.8614	3.4300e- 003		123.9471
Total	0.0657	0.0329	0.4692	1.2400e- 003	0.1232	9.0000e- 004	0.1241	0.0327	8.3000e- 004	0.0335		123.8614	123.8614	3.4300e- 003		123.9471

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 25 Date: 12/10/2020 3:30 PM

## SPR 2020-16 - Madera County, Summer

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.8188					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9216	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0657	0.0329	0.4692	1.2400e- 003	0.1232	9.0000e- 004	0.1241	0.0327	8.3000e- 004	0.0335		123.8614	123.8614	3.4300e- 003	       	123.9471
Total	0.0657	0.0329	0.4692	1.2400e- 003	0.1232	9.0000e- 004	0.1241	0.0327	8.3000e- 004	0.0335		123.8614	123.8614	3.4300e- 003		123.9471

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 25 Date: 12/10/2020 3:30 PM

## SPR 2020-16 - Madera County, Summer

# 3.6 Architectural Coating - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	26.9632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817	1 1 1	0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	27.1677	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1358	0.0680	0.9698	2.5700e- 003	0.2547	1.8700e- 003	0.2565	0.0676	1.7200e- 003	0.0693		255.9802	255.9802	7.0800e- 003	       	256.1574
Total	0.1358	0.0680	0.9698	2.5700e- 003	0.2547	1.8700e- 003	0.2565	0.0676	1.7200e- 003	0.0693		255.9802	255.9802	7.0800e- 003		256.1574

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 25 Date: 12/10/2020 3:30 PM

## SPR 2020-16 - Madera County, Summer

# 3.6 Architectural Coating - 2022 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	26.9632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183	,	281.9062
Total	27.1677	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1358	0.0680	0.9698	2.5700e- 003	0.2547	1.8700e- 003	0.2565	0.0676	1.7200e- 003	0.0693		255.9802	255.9802	7.0800e- 003		256.1574
Total	0.1358	0.0680	0.9698	2.5700e- 003	0.2547	1.8700e- 003	0.2565	0.0676	1.7200e- 003	0.0693		255.9802	255.9802	7.0800e- 003		256.1574

# 4.0 Operational Detail - Mobile

## SPR 2020-16 - Madera County, Summer

## **4.1 Mitigation Measures Mobile**

Improve Destination Accessibility
Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.4146	3.1100	3.8813	0.0161	0.9797	0.0135	0.9932	0.2626	0.0127	0.2754		1,643.957 1	1,643.957 1	0.1089		1,646.678 3
Unmitigated	0.4256	3.2076	4.1168	0.0171	1.0523	0.0144	1.0667	0.2821	0.0136	0.2957		1,746.596 6	1,746.596 6	0.1118		1,749.390 5

## **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	168.00	168.00	168.00	490,478	456,635
Total	168.00	168.00	168.00	490,478	456,635

## **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
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
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No		7.30	7.30	59.00	0.00	41.00	92	5	3

## SPR 2020-16 - Madera County, Summer

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.530844	0.031753	0.165023	0.117863	0.020860	0.005456	0.014179	0.100253	0.002735	0.001704	0.007139	0.001243	0.000949
Unrefrigerated Warehouse-No Rail	0.530844	0.031753	0.165023	0.117863	0.020860	0.005456	0.014179	0.100253	0.002735	0.001704	0.007139	0.001243	0.000949

# 5.0 Energy Detail

Historical Energy Use: N

## **5.1 Mitigation Measures Energy**

Install High Efficiency Lighting

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189
Unmitigated	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 25 Date: 12/10/2020 3:30 PM

#### SPR 2020-16 - Madera County, Summer

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4953.42	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189
Total		0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4.95342	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189
Total		0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189

#### 6.0 Area Detail

## **6.1 Mitigation Measures Area**

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 25 Date: 12/10/2020 3:30 PM

## SPR 2020-16 - Madera County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Mitigated	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869
Unmitigated	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004	1	1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869

# 6.2 Area by SubCategory Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	lay		
	0.1477					0.0000	0.0000	i i	0.0000	0.0000			0.0000			0.0000
	2.2365					0.0000	0.0000	1 1 1 1	0.0000	0.0000			0.0000			0.0000
	3.5400e- 003	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004	,	1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869
Total	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 25 Date: 12/10/2020 3:30 PM

#### SPR 2020-16 - Madera County, Summer

# 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.1477					0.0000	0.0000	! !	0.0000	0.0000			0.0000			0.0000
	2.2365					0.0000	0.0000	1 1 1 1	0.0000	0.0000			0.0000			0.0000
Landscaping	3.5400e- 003	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004	1 1 1 1	1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869
Total	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869

## 7.0 Water Detail

## 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
=4		110 0.10 / 2 0.0	- 3, 3, 1 5 3.1			, , , ,

## 10.0 Stationary Equipment

#### **Fire Pumps and Emergency Generators**

## SPR 2020-16 - Madera County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						

# 11.0 Vegetation

Equipment Type

Number

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 25 Date: 12/10/2020 3:32 PM

SPR 2020-16 - Madera County, Winter

#### **SPR 2020-16**

#### **Madera County, Winter**

## 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	100.00	1000sqft	2.30	100,000.00	0
Parking Lot	272.44	1000sqft	6.25	272,438.00	0

#### 1.2 Other Project Characteristics

Wind Speed (m/s) Precipitation Freq (Days) Urbanization Urban 2.9 51 **Climate Zone** 2022

3 **Operational Year** 

Pacific Gas & Electric Company **Utility Company** 

**CO2 Intensity** 290 **CH4 Intensity** 0.029 **N2O Intensity** 0.006 (lb/MWhr) (lb/MWhr) (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 25 Date: 12/10/2020 3:32 PM

#### SPR 2020-16 - Madera County, Winter

Project Characteristics - PG&E Intensity Factor

Land Use -

Construction Phase - Site is vacant without structures or trees. No demolition phase.

Grading - Assumes project site will be balanced.

Architectural Coating - Architectural coating phase to occur in 2022--Year 2022 regulations of SJVAPCD Rule 4601 apply.

Area Coating - Reapplication of architectural coating phase to occur in 2022 or later--Year 2022 regulations of SJVAPCD Rule 4601 apply.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - "Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades." (https://www.energy.ca.gov/sites/default/files/2020-03/Title\_24\_2019\_Building\_Standards\_FAQ\_ada.pdf)

Energy Use -

Page 3 of 25

Date: 12/10/2020 3:32 PM

SPR 2020-16 - Madera County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	Area_EF_Parking	150	100
tblConstructionPhase	PhaseEndDate	3/24/2022	2/24/2022
tblConstructionPhase	PhaseEndDate	1/27/2022	12/30/2021
tblConstructionPhase	PhaseEndDate	3/11/2021	2/11/2021
tblConstructionPhase	PhaseEndDate	2/24/2022	1/27/2022
tblConstructionPhase	PhaseEndDate	2/11/2021	1/14/2021
tblConstructionPhase	PhaseStartDate	2/25/2022	1/28/2022
tblConstructionPhase	PhaseStartDate	3/12/2021	2/12/2021
tblConstructionPhase	PhaseStartDate	2/12/2021	1/15/2021
tblConstructionPhase	PhaseStartDate	1/28/2022	12/31/2021
tblConstructionPhase	PhaseStartDate	1/29/2021	1/1/2021
tblLandUse	LandUseSquareFeet	272,440.00	272,438.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

# 2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 25 Date: 12/10/2020 3:32 PM

#### SPR 2020-16 - Madera County, Winter

# 2.1 Overall Construction (Maximum Daily Emission) <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/d	day		
2021	3.9678	40.5498	22.8399	0.0557	18.2141	2.0456	20.2597	9.9699	1.8819	11.8518	0.0000	5,505.383 7	5,505.383 7	1.1961	0.0000	5,525.535 6
2022	27.2946	11.1641	14.9796	0.0239	0.2547	0.5688	0.6920	0.0676	0.5233	0.5560	0.0000	2,316.953 4	2,316.953 4	0.7170	0.0000	2,334.878 6
Maximum	27.2946	40.5498	22.8399	0.0557	18.2141	2.0456	20.2597	9.9699	1.8819	11.8518	0.0000	5,505.383 7	5,505.383 7	1.1961	0.0000	5,525.535 6

## **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	day							lb/	day		
2021	3.9678	40.5498	22.8399	0.0557	18.2141	2.0456	20.2597	9.9699	1.8819	11.8518	0.0000	5,505.383 7	5,505.383 7	1.1961	0.0000	5,525.535 6
2022	27.2946	11.1641	14.9796	0.0239	0.2547	0.5688	0.6920	0.0676	0.5233	0.5560	0.0000	2,316.953 4	2,316.953 4	0.7170	0.0000	2,334.878 6
Maximum	27.2946	40.5498	22.8399	0.0557	18.2141	2.0456	20.2597	9.9699	1.8819	11.8518	0.0000	5,505.383 7	5,505.383 7	1.1961	0.0000	5,525.535 6
	ROG	NOx	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

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 25 Date: 12/10/2020 3:32 PM

## SPR 2020-16 - Madera County, Winter

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869
Energy	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189
Mobile	0.3438	3.2761	3.8584	0.0158	1.0523	0.0147	1.0670	0.2821	0.0139	0.2959		1,608.529 4	1,608.529 4	0.1197		1,611.522 2
Total	2.7850	3.7621	4.3044	0.0187	1.0523	0.0518	1.1040	0.2821	0.0509	0.3330		2,191.366 7	2,191.366 7	0.1311	0.0107	2,197.828 0

## **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869
Energy	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189
Mobile	0.3330	3.1699	3.6647	0.0148	0.9797	0.0138	0.9935	0.2626	0.0130	0.2756		1,513.244 9	1,513.244 9	0.1170		1,516.170 2
Total	2.7742	3.6559	4.1107	0.0177	0.9797	0.0509	1.0305	0.2626	0.0501	0.3127		2,096.082 3	2,096.082 3	0.1284	0.0107	2,102.475 9

Page 6 of 25

Date: 12/10/2020 3:32 PM

#### SPR 2020-16 - Madera County, Winter

	ROG	NOx	СО	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	0.39	2.82	4.50	5.04	6.90	1.72	6.66	6.90	1.63	6.10	0.00	4.35	4.35	2.06	0.00	4.34

#### 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2021	1/14/2021	5	10	
2	Grading	Grading	1/15/2021	2/11/2021	5	20	
3	Building Construction	Building Construction	2/12/2021	12/30/2021	5	230	
4	Paving	Paving	12/31/2021	1/27/2022	5	20	
5	Architectural Coating	Architectural Coating	1/28/2022	2/24/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 6.25

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 16,346 (Architectural Coating – sqft)

**OffRoad Equipment** 

Page 7 of 25

Date: 12/10/2020 3:32 PM

SPR 2020-16 - Madera County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

## **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	156.00	61.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

CalEEMod Version: CalEEMod.2016.3.2 Page 8 of 25 Date: 12/10/2020 3:32 PM

## SPR 2020-16 - Madera County, Winter

3.2 Site Preparation - 2021

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0796	0.0527	0.5260	1.3700e- 003	0.1479	1.1200e- 003	0.1490	0.0392	1.0300e- 003	0.0403		136.0676	136.0676	4.0500e- 003		136.1688
Total	0.0796	0.0527	0.5260	1.3700e- 003	0.1479	1.1200e- 003	0.1490	0.0392	1.0300e- 003	0.0403		136.0676	136.0676	4.0500e- 003		136.1688

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 25 Date: 12/10/2020 3:32 PM

## SPR 2020-16 - Madera County, Winter

3.2 Site Preparation - 2021

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307		! ! !	0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.0796	0.0527	0.5260	1.3700e- 003	0.1479	1.1200e- 003	0.1490	0.0392	1.0300e- 003	0.0403		136.0676	136.0676	4.0500e- 003	       	136.1688
Total	0.0796	0.0527	0.5260	1.3700e- 003	0.1479	1.1200e- 003	0.1490	0.0392	1.0300e- 003	0.0403		136.0676	136.0676	4.0500e- 003		136.1688

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 25 Date: 12/10/2020 3:32 PM

#### SPR 2020-16 - Madera County, Winter

3.3 Grading - 2021
Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296	       	1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9288	1 1 1 1	2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.928 5	2,871.928 5	0.9288		2,895.149 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0663	0.0439	0.4383	1.1400e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		113.3897	113.3897	3.3700e- 003		113.4740
Total	0.0663	0.0439	0.4383	1.1400e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		113.3897	113.3897	3.3700e- 003		113.4740

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 25 Date: 12/10/2020 3:32 PM

## SPR 2020-16 - Madera County, Winter

3.3 Grading - 2021

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0663	0.0439	0.4383	1.1400e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		113.3897	113.3897	3.3700e- 003	       	113.4740
Total	0.0663	0.0439	0.4383	1.1400e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		113.3897	113.3897	3.3700e- 003		113.4740

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 25 Date: 12/10/2020 3:32 PM

#### SPR 2020-16 - Madera County, Winter

# 3.4 Building Construction - 2021 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160	-	2,568.764 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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
Vendor	0.2290	6.6044	1.7065	0.0170	0.4136	0.0206	0.4342	0.1191	0.0197	0.1388		1,772.767 4	1,772.767 4	0.1550		1,776.641 8
Worker	0.6899	0.4570	4.5582	0.0119	1.2815	9.6900e- 003	1.2912	0.3399	8.9300e- 003	0.3488		1,179.252 4	1,179.252 4	0.0351		1,180.129 6
Total	0.9189	7.0614	6.2647	0.0288	1.6951	0.0303	1.7254	0.4590	0.0286	0.4876		2,952.019 8	2,952.019 8	0.1901		2,956.771 4

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 25 Date: 12/10/2020 3:32 PM

## SPR 2020-16 - Madera County, Winter

3.4 Building Construction - 2021 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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
Vendor	0.2290	6.6044	1.7065	0.0170	0.4136	0.0206	0.4342	0.1191	0.0197	0.1388		1,772.767 4	1,772.767 4	0.1550		1,776.641 8
Worker	0.6899	0.4570	4.5582	0.0119	1.2815	9.6900e- 003	1.2912	0.3399	8.9300e- 003	0.3488		1,179.252 4	1,179.252 4	0.0351		1,180.129 6
Total	0.9189	7.0614	6.2647	0.0288	1.6951	0.0303	1.7254	0.4590	0.0286	0.4876		2,952.019 8	2,952.019 8	0.1901		2,956.771 4

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 25 Date: 12/10/2020 3:32 PM

#### SPR 2020-16 - Madera County, Winter

3.5 Paving - 2021
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777	! !	0.6235	0.6235		2,207.210 9	2,207.210 9	0.7139		2,225.057 3
Paving	0.8188		1 1 1 1		       	0.0000	0.0000	1	0.0000	0.0000		<del></del>       	0.0000		       	0.0000
Total	2.0743	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.210 9	2,207.210 9	0.7139		2,225.057 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0663	0.0439	0.4383	1.1400e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		113.3897	113.3897	3.3700e- 003		113.4740
Total	0.0663	0.0439	0.4383	1.1400e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		113.3897	113.3897	3.3700e- 003		113.4740

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 25 Date: 12/10/2020 3:32 PM

## SPR 2020-16 - Madera County, Winter

3.5 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.210 9	2,207.210 9	0.7139		2,225.057 3
Paving	0.8188		1 1 1 1			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.0743	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.210 9	2,207.210 9	0.7139		2,225.057 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
	0.0663	0.0439	0.4383	1.1400e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		113.3897	113.3897	3.3700e- 003		113.4740
Total	0.0663	0.0439	0.4383	1.1400e- 003	0.1232	9.3000e- 004	0.1242	0.0327	8.6000e- 004	0.0335		113.3897	113.3897	3.3700e- 003		113.4740

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 25 Date: 12/10/2020 3:32 PM

#### SPR 2020-16 - Madera County, Winter

3.5 Paving - 2022 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
J. Trodu	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.8188					0.0000	0.0000	1 1 1	0.0000	0.0000		       	0.0000		i i	0.0000
Total	1.9216	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0392	0.3992	1.1000e- 003	0.1232	9.0000e- 004	0.1241	0.0327	8.3000e- 004	0.0335		109.2931	109.2931	3.0100e- 003		109.3683
Total	0.0614	0.0392	0.3992	1.1000e- 003	0.1232	9.0000e- 004	0.1241	0.0327	8.3000e- 004	0.0335		109.2931	109.2931	3.0100e- 003		109.3683

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 25 Date: 12/10/2020 3:32 PM

## SPR 2020-16 - Madera County, Winter

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
- Cir rtoud	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.8188				       	0.0000	0.0000	1 1 1	0.0000	0.0000		       	0.0000		i i	0.0000
Total	1.9216	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0392	0.3992	1.1000e- 003	0.1232	9.0000e- 004	0.1241	0.0327	8.3000e- 004	0.0335		109.2931	109.2931	3.0100e- 003		109.3683
Total	0.0614	0.0392	0.3992	1.1000e- 003	0.1232	9.0000e- 004	0.1241	0.0327	8.3000e- 004	0.0335		109.2931	109.2931	3.0100e- 003		109.3683

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 25 Date: 12/10/2020 3:32 PM

#### SPR 2020-16 - Madera County, Winter

3.6 Architectural Coating - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	26.9632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817	1	0.0817	0.0817		281.4481	281.4481	0.0183	1 1 1 1	281.9062
Total	27.1677	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	       	0.0000
Worker	0.1268	0.0811	0.8249	2.2700e- 003	0.2547	1.8700e- 003	0.2565	0.0676	1.7200e- 003	0.0693		225.8724	225.8724	6.2100e- 003	       	226.0278
Total	0.1268	0.0811	0.8249	2.2700e- 003	0.2547	1.8700e- 003	0.2565	0.0676	1.7200e- 003	0.0693		225.8724	225.8724	6.2100e- 003		226.0278

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 25 Date: 12/10/2020 3:32 PM

#### SPR 2020-16 - Madera County, Winter

3.6 Architectural Coating - 2022 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	26.9632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817	1 1 1	0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	27.1677	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1268	0.0811	0.8249	2.2700e- 003	0.2547	1.8700e- 003	0.2565	0.0676	1.7200e- 003	0.0693		225.8724	225.8724	6.2100e- 003		226.0278
Total	0.1268	0.0811	0.8249	2.2700e- 003	0.2547	1.8700e- 003	0.2565	0.0676	1.7200e- 003	0.0693		225.8724	225.8724	6.2100e- 003		226.0278

# 4.0 Operational Detail - Mobile

#### SPR 2020-16 - Madera County, Winter

## **4.1 Mitigation Measures Mobile**

Improve Destination Accessibility
Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Mitigated	0.3330	3.1699	3.6647	0.0148	0.9797	0.0138	0.9935	0.2626	0.0130	0.2756		1,513.244 9	1,513.244 9	0.1170		1,516.170 2
Unmitigated	0.3438	3.2761	3.8584	0.0158	1.0523	0.0147	1.0670	0.2821	0.0139	0.2959		1,608.529 4	1,608.529 4	0.1197	       	1,611.522 2

## **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	168.00	168.00	168.00	490,478	456,635
Total	168.00	168.00	168.00	490,478	456,635

## **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
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
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No		7.30	7.30	59.00	0.00	41.00	92	5	3

## SPR 2020-16 - Madera County, Winter

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.530844	0.031753	0.165023	0.117863	0.020860	0.005456	0.014179	0.100253	0.002735	0.001704	0.007139	0.001243	0.000949
Unrefrigerated Warehouse-No Rail	0.530844	0.031753	0.165023	0.117863	0.020860	0.005456	0.014179	0.100253	0.002735	0.001704	0.007139	0.001243	0.000949

# 5.0 Energy Detail

Historical Energy Use: N

## **5.1 Mitigation Measures Energy**

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
NaturalGas Mitigated	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189
NaturalGas Unmitigated	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 25 Date: 12/10/2020 3:32 PM

#### SPR 2020-16 - Madera County, Winter

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	day		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	i i i	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4953.42	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369	Γ ! ! !	0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189
Total		0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day					lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4.95342	0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189
Total		0.0534	0.4856	0.4079	2.9100e- 003		0.0369	0.0369		0.0369	0.0369		582.7558	582.7558	0.0112	0.0107	586.2189

#### 6.0 Area Detail

## **6.1 Mitigation Measures Area**

## SPR 2020-16 - Madera County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day					lb/day					
Mitigated	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869
Unmitigated	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869

# 6.2 Area by SubCategory Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.1477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.2365		       			0.0000	0.0000	1   	0.0000	0.0000			0.0000			0.0000
Landscaping	3.5400e- 003	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004	1 1 1 1	1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869
Total	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 25 Date: 12/10/2020 3:32 PM

#### SPR 2020-16 - Madera County, Winter

# 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day					lb/day					
Architectural Coating	0.1477					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.2365					0.0000	0.0000		0.0000	0.0000		;	0.0000			0.0000
Landscaping	3.5400e- 003	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869
Total	2.3878	3.5000e- 004	0.0381	0.0000		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		0.0815	0.0815	2.2000e- 004		0.0869

## 7.0 Water Detail

## 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

## 10.0 Stationary Equipment

#### **Fire Pumps and Emergency Generators**

## SPR 2020-16 - Madera County, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						
Equipment Type	Number					

# 11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 29 Date: 12/17/2020 9:43 AM

SPR 2020-16 - Madera County, Annual

#### **SPR 2020-16**

#### Madera County, Annual

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	100.00	1000sqft	2.30	100,000.00	0
Parking Lot	272.44	1000sqft	6.25	272,438.00	0

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.9Precipitation Freq (Days)51Climate Zone3Operational Year2005

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 641.35
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

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

Project Characteristics -

Land Use -

Construction Phase - Site is vacant without structures or trees. No demolition phase.

Grading - Assumes project site will be balanced.

Architectural Coating - Architectural coating phase to occur in 2022--Year 2022 regulations of SJVAPCD Rule 4601 apply.

Area Coating - Reapplication of architectural coating phase to occur in 2022 or later--Year 2022 regulations of SJVAPCD Rule 4601 apply.

Mobile Land Use Mitigation -

Energy Mitigation - "Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades." (https://www.energy.ca.gov/sites/default/files/2020-03/Title\_24\_2019\_Building\_Standards\_FAQ\_ada.pdf)

Page 2 of 29

Date: 12/17/2020 9:43 AM

SPR 2020-16 - Madera County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	100

# 2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 3 of 29 Date: 12/17/2020 9:43 AM

# SPR 2020-16 - Madera County, Annual

# 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
2006	1.5576	8.2969	7.2733	0.0601	0.3470	0.5266	0.8737	0.1352	0.5234	0.6586	0.0000	703.9093	703.9093	0.1397	0.0000	707.4028
2007	0.3512	0.4669	0.2723	3.0400e- 003	3.6600e- 003	0.0303	0.0340	9.7000e- 004	0.0303	0.0313	0.0000	30.6263	30.6263	5.9100e- 003	0.0000	30.7741
Maximum	1.5576	8.2969	7.2733	0.0601	0.3470	0.5266	0.8737	0.1352	0.5234	0.6586	0.0000	703.9093	703.9093	0.1397	0.0000	707.4028

# **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					tor	ıs/yr							M	T/yr		
2006	1.5576	8.2969	7.2733	0.0601	0.3470	0.5266	0.8737	0.1352	0.5234	0.6586	0.0000	703.9089	703.9089	0.1397	0.0000	707.4024
2007	0.3512	0.4669	0.2723	3.0400e- 003	3.6600e- 003	0.0303	0.0340	9.7000e- 004	0.0303	0.0313	0.0000	30.6263	30.6263	5.9100e- 003	0.0000	30.7740
Maximum	1.5576	8.2969	7.2733	0.0601	0.3470	0.5266	0.8737	0.1352	0.5234	0.6586	0.0000	703.9089	703.9089	0.1397	0.0000	707.4024
	ROG	NOx	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

D 0000 40 M 1 0 1 4

Date: 12/17/2020 9:43 AM

SPR 2020-16 - Madera County, Annual

Page 4 of 29

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2006	3-31-2006	2.3162	2.3162
2	4-1-2006	6-30-2006	2.4904	2.4904
3	7-1-2006	9-30-2006	2.5177	2.5177
4	10-1-2006	12-31-2006	2.5341	2.5341
5	1-1-2007	3-31-2007	0.7845	0.7845
		Highest	2.5341	2.5341

# 2.2 Overall Operational

# **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	Γ/yr		
Area	0.4357	5.0000e- 005	4.3600e- 003	0.0000		2.0000e- 005	2.0000e- 005	 	2.0000e- 005	2.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	3.0000e- 005	0.0000	7.4300e- 003
Energy	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003	       	6.7400e- 003	6.7400e- 003	0.0000	397.3870	397.3870	0.0155	4.5800e- 003	399.1394
Mobile	0.3527	1.9882	3.7563	0.0143	0.1866	0.0462	0.2329	0.0503	0.0441	0.0944	0.0000	319.9070	319.9070	0.0514	0.0000	321.1922
Waste	r, 					0.0000	0.0000	1       	0.0000	0.0000	19.0812	0.0000	19.0812	1.1277	0.0000	47.2727
Water	T,					0.0000	0.0000	1         	0.0000	0.0000	7.3365	36.4016	43.7381	0.7552	0.0181	68.0211
Total	0.7982	2.0769	3.8351	0.0148	0.1866	0.0530	0.2396	0.0503	0.0509	0.1012	26.4177	753.7022	780.1199	1.9497	0.0227	835.6328

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 29 Date: 12/17/2020 9:43 AM

# SPR 2020-16 - Madera County, Annual

2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ıs/yr							МТ	/yr		
Area	0.4357	5.0000e- 005	4.3600e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	3.0000e- 005	0.0000	7.4300e- 003
Energy	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	397.3870	397.3870	0.0155	4.5800e- 003	399.1394
Mobile	0.3492	1.9600	3.7012	0.0141	0.1829	0.0454	0.2284	0.0493	0.0434	0.0927	0.0000	314.1721	314.1721	0.0509	0.0000	315.4432
Waste	) 	     	i			0.0000	0.0000		0.0000	0.0000	19.0812	0.0000	19.0812	1.1277	0.0000	47.2727
Water		       				0.0000	0.0000		0.0000	0.0000	7.3365	36.4016	43.7381	0.7552	0.0181	68.0211
Total	0.7946	2.0487	3.7800	0.0146	0.1829	0.0522	0.2351	0.0493	0.0501	0.0994	26.4177	747.9673	774.3849	1.9492	0.0227	829.8838

	ROG	NOx	СО	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	0.44	1.36	1.44	1.55	2.00	1.45	1.88	1.99	1.45	1.72	0.00	0.76	0.74	0.03	0.00	0.69

# 3.0 Construction Detail

#### **Construction Phase**

Page 6 of 29

Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2006	1/13/2006	5	10	
2	Grading	Grading	1/14/2006	2/10/2006	5	20	
3	Building Construction	Building Construction	2/11/2006	12/29/2006	5	230	
4	Paving	Paving	12/30/2006	1/26/2007	5	20	
5	Architectural Coating	Architectural Coating	1/27/2007	2/23/2007	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 6.25

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 16,346 (Architectural Coating – sqft)

OffRoad Equipment

Page 7 of 29

Date: 12/17/2020 9:43 AM

SPR 2020-16 - Madera County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

# **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	156.00	61.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

CalEEMod Version: CalEEMod.2016.3.2 Page 8 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

3.2 Site Preparation - 2006

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0467	0.3496	0.1316	2.2500e- 003		0.0216	0.0216		0.0216	0.0216	0.0000	20.0023	20.0023	3.8000e- 003	0.0000	20.0974
Total	0.0467	0.3496	0.1316	2.2500e- 003	0.0903	0.0216	0.1119	0.0497	0.0216	0.0712	0.0000	20.0023	20.0023	3.8000e- 003	0.0000	20.0974

#### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5600e- 003	1.4400e- 003	0.0140	1.0000e- 005	7.2000e- 004	2.0000e- 005	7.4000e- 004	1.9000e- 004	2.0000e- 005	2.1000e- 004	0.0000	0.7774	0.7774	1.1000e- 004	0.0000	0.7802
Total	1.5600e- 003	1.4400e- 003	0.0140	1.0000e- 005	7.2000e- 004	2.0000e- 005	7.4000e- 004	1.9000e- 004	2.0000e- 005	2.1000e- 004	0.0000	0.7774	0.7774	1.1000e- 004	0.0000	0.7802

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 29 Date: 12/17/2020 9:43 AM

# SPR 2020-16 - Madera County, Annual

3.2 Site Preparation - 2006

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0467	0.3496	0.1316	2.2500e- 003		0.0216	0.0216		0.0216	0.0216	0.0000	20.0023	20.0023	3.8000e- 003	0.0000	20.0974
Total	0.0467	0.3496	0.1316	2.2500e- 003	0.0903	0.0216	0.1119	0.0497	0.0216	0.0712	0.0000	20.0023	20.0023	3.8000e- 003	0.0000	20.0974

# **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5600e- 003	1.4400e- 003	0.0140	1.0000e- 005	7.2000e- 004	2.0000e- 005	7.4000e- 004	1.9000e- 004	2.0000e- 005	2.1000e- 004	0.0000	0.7774	0.7774	1.1000e- 004	0.0000	0.7802
Total	1.5600e- 003	1.4400e- 003	0.0140	1.0000e- 005	7.2000e- 004	2.0000e- 005	7.4000e- 004	1.9000e- 004	2.0000e- 005	2.1000e- 004	0.0000	0.7774	0.7774	1.1000e- 004	0.0000	0.7802

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

3.3 Grading - 2006
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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0685	0.5106	0.1981	3.5100e- 003		0.0320	0.0320		0.0320	0.0320	0.0000	31.2046	31.2046	5.5800e- 003	0.0000	31.3441
Total	0.0685	0.5106	0.1981	3.5100e- 003	0.0655	0.0320	0.0975	0.0337	0.0320	0.0656	0.0000	31.2046	31.2046	5.5800e- 003	0.0000	31.3441

# **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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e- 003	2.4100e- 003	0.0234	1.0000e- 005	1.1900e- 003	3.0000e- 005	1.2300e- 003	3.2000e- 004	3.0000e- 005	3.5000e- 004	0.0000	1.2957	1.2957	1.9000e- 004	0.0000	1.3004
Total	2.6000e- 003	2.4100e- 003	0.0234	1.0000e- 005	1.1900e- 003	3.0000e- 005	1.2300e- 003	3.2000e- 004	3.0000e- 005	3.5000e- 004	0.0000	1.2957	1.2957	1.9000e- 004	0.0000	1.3004

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 29 Date: 12/17/2020 9:43 AM

# SPR 2020-16 - Madera County, Annual

3.3 Grading - 2006

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0685	0.5106	0.1981	3.5100e- 003		0.0320	0.0320	       	0.0320	0.0320	0.0000	31.2046	31.2046	5.5800e- 003	0.0000	31.3441
Total	0.0685	0.5106	0.1981	3.5100e- 003	0.0655	0.0320	0.0975	0.0337	0.0320	0.0656	0.0000	31.2046	31.2046	5.5800e- 003	0.0000	31.3441

### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e- 003	2.4100e- 003	0.0234	1.0000e- 005	1.1900e- 003	3.0000e- 005	1.2300e- 003	3.2000e- 004	3.0000e- 005	3.5000e- 004	0.0000	1.2957	1.2957	1.9000e- 004	0.0000	1.3004
Total	2.6000e- 003	2.4100e- 003	0.0234	1.0000e- 005	1.1900e- 003	3.0000e- 005	1.2300e- 003	3.2000e- 004	3.0000e- 005	3.5000e- 004	0.0000	1.2957	1.2957	1.9000e- 004	0.0000	1.3004

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

# 3.4 Building Construction - 2006 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.8643	4.7662	2.3446	0.0350		0.4002	0.4002		0.4002	0.4002	0.0000	302.2902	302.2902	0.0705	0.0000	304.0537
Total	0.8643	4.7662	2.3446	0.0350		0.4002	0.4002		0.4002	0.4002	0.0000	302.2902	302.2902	0.0705	0.0000	304.0537

#### **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					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2636	2.3787	1.7692	0.0176	0.0464	0.0690	0.1154	0.0134	0.0660	0.0794	0.0000	193.3709	193.3709	0.0372	0.0000	194.3009
Worker	0.3105	0.2880	2.7924	1.7600e- 003	0.1429	3.8900e- 003	0.1468	0.0380	3.6000e- 003	0.0416	0.0000	154.9682	154.9682	0.0223	0.0000	155.5261
Total	0.5741	2.6667	4.5616	0.0194	0.1893	0.0729	0.2622	0.0514	0.0696	0.1210	0.0000	348.3391	348.3391	0.0595	0.0000	349.8270

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

# 3.4 Building Construction - 2006 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					ton	s/yr							MT	/yr		
Off-Road	0.8643	4.7662	2.3446	0.0350		0.4002	0.4002	 	0.4002	0.4002	0.0000	302.2898	302.2898	0.0705	0.0000	304.0533
Total	0.8643	4.7662	2.3446	0.0350		0.4002	0.4002		0.4002	0.4002	0.0000	302.2898	302.2898	0.0705	0.0000	304.0533

# **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2636	2.3787	1.7692	0.0176	0.0464	0.0690	0.1154	0.0134	0.0660	0.0794	0.0000	193.3709	193.3709	0.0372	0.0000	194.3009
Worker	0.3105	0.2880	2.7924	1.7600e- 003	0.1429	3.8900e- 003	0.1468	0.0380	3.6000e- 003	0.0416	0.0000	154.9682	154.9682	0.0223	0.0000	155.5261
Total	0.5741	2.6667	4.5616	0.0194	0.1893	0.0729	0.2622	0.0514	0.0696	0.1210	0.0000	348.3391	348.3391	0.0595	0.0000	349.8270

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

3.5 Paving - 2006
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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000			 		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### **Unmitigated 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

3.5 Paving - 2006

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

### **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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

3.5 Paving - 2007
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0579	0.4167	0.1800	2.7000e- 003		0.0264	0.0264		0.0264	0.0264	0.0000	24.0995	24.0995	4.7200e- 003	0.0000	24.2176
Paving	8.1900e- 003		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0661	0.4167	0.1800	2.7000e- 003		0.0264	0.0264		0.0264	0.0264	0.0000	24.0995	24.0995	4.7200e- 003	0.0000	24.2176

#### **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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e- 003	2.4100e- 003	0.0234	1.0000e- 005	1.1900e- 003	3.0000e- 005	1.2300e- 003	3.2000e- 004	3.0000e- 005	3.5000e- 004	0.0000	1.2957	1.2957	1.9000e- 004	0.0000	1.3004
Total	2.6000e- 003	2.4100e- 003	0.0234	1.0000e- 005	1.1900e- 003	3.0000e- 005	1.2300e- 003	3.2000e- 004	3.0000e- 005	3.5000e- 004	0.0000	1.2957	1.2957	1.9000e- 004	0.0000	1.3004

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

3.5 Paving - 2007

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0579	0.4167	0.1800	2.7000e- 003		0.0264	0.0264		0.0264	0.0264	0.0000	24.0995	24.0995	4.7200e- 003	0.0000	24.2175
, ,	8.1900e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0661	0.4167	0.1800	2.7000e- 003		0.0264	0.0264		0.0264	0.0264	0.0000	24.0995	24.0995	4.7200e- 003	0.0000	24.2175

# **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					ton	s/yr							MT	<sup>-</sup> /yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e- 003	2.4100e- 003	0.0234	1.0000e- 005	1.1900e- 003	3.0000e- 005	1.2300e- 003	3.2000e- 004	3.0000e- 005	3.5000e- 004	0.0000	1.2957	1.2957	1.9000e- 004	0.0000	1.3004
Total	2.6000e- 003	2.4100e- 003	0.0234	1.0000e- 005	1.1900e- 003	3.0000e- 005	1.2300e- 003	3.2000e- 004	3.0000e- 005	3.5000e- 004	0.0000	1.2957	1.2957	1.9000e- 004	0.0000	1.3004

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

# 3.6 Architectural Coating - 2007 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.2696					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
On House	7.5200e- 003	0.0428	0.0208	3.0000e- 004	 	3.8400e- 003	3.8400e- 003		3.8400e- 003	3.8400e- 003	0.0000	2.5533	2.5533	6.2000e- 004	0.0000	2.5686
Total	0.2772	0.0428	0.0208	3.0000e- 004		3.8400e- 003	3.8400e- 003		3.8400e- 003	3.8400e- 003	0.0000	2.5533	2.5533	6.2000e- 004	0.0000	2.5686

#### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3600e- 003	4.9800e- 003	0.0483	3.0000e- 005	2.4700e- 003	7.0000e- 005	2.5400e- 003	6.6000e- 004	6.0000e- 005	7.2000e- 004	0.0000	2.6778	2.6778	3.9000e- 004	0.0000	2.6875
Total	5.3600e- 003	4.9800e- 003	0.0483	3.0000e- 005	2.4700e- 003	7.0000e- 005	2.5400e- 003	6.6000e- 004	6.0000e- 005	7.2000e- 004	0.0000	2.6778	2.6778	3.9000e- 004	0.0000	2.6875

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

# 3.6 Architectural Coating - 2007 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					ton	s/yr							MT	/yr		
Archit. Coating	0.2696					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5200e- 003	0.0428	0.0208	3.0000e- 004		3.8400e- 003	3.8400e- 003	       	3.8400e- 003	3.8400e- 003	0.0000	2.5533	2.5533	6.2000e- 004	0.0000	2.5686
Total	0.2772	0.0428	0.0208	3.0000e- 004		3.8400e- 003	3.8400e- 003		3.8400e- 003	3.8400e- 003	0.0000	2.5533	2.5533	6.2000e- 004	0.0000	2.5686

# **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3600e- 003	4.9800e- 003	0.0483	3.0000e- 005	2.4700e- 003	7.0000e- 005	2.5400e- 003	6.6000e- 004	6.0000e- 005	7.2000e- 004	0.0000	2.6778	2.6778	3.9000e- 004	0.0000	2.6875
Total	5.3600e- 003	4.9800e- 003	0.0483	3.0000e- 005	2.4700e- 003	7.0000e- 005	2.5400e- 003	6.6000e- 004	6.0000e- 005	7.2000e- 004	0.0000	2.6778	2.6778	3.9000e- 004	0.0000	2.6875

# 4.0 Operational Detail - Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

# **4.1 Mitigation Measures Mobile**

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.3492	1.9600	3.7012	0.0141	0.1829	0.0454	0.2284	0.0493	0.0434	0.0927	0.0000	314.1721	314.1721	0.0509	0.0000	315.4432
Unmitigated	0.3527	1.9882	3.7563	0.0143	0.1866	0.0462	0.2329	0.0503	0.0441	0.0944	0.0000	319.9070	319.9070	0.0514	0.0000	321.1922

# **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	168.00	168.00	168.00	490,478	480,668
Total	168.00	168.00	168.00	490,478	480,668

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

### 4.4 Fleet Mix

Page 21 of 29

Date: 12/17/2020 9:43 AM

# SPR 2020-16 - Madera County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Parking Lot	0.406248	0.060884	0.165176	0.186546	0.051013	0.007949	0.016561	0.088777	0.003025	0.001372	0.008068	0.001532	0.002848
Unrefrigerated Warehouse-No Rail	0.406248	0.060884	0.165176	0.186546	0.051013	0.007949	0.016561	0.088777	0.003025	0.001372	0.008068	0.001532	0.002848

# 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	Category tons/yr										MT	/yr				
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	300.9052	300.9052	0.0136	2.8200e- 003	302.0843
Electricity Unmitigated	fi 11 11 11			, ! ! !		0.0000	0.0000	, ! ! !	0.0000	0.0000	0.0000	300.9052	300.9052	0.0136	2.8200e- 003	302.0843
NaturalGas Mitigated	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003	, ! ! !	6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551
Unmitigated	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003	y : : :	6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 29 Date: 12/17/2020 9:43 AM

# SPR 2020-16 - Madera County, Annual

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							МТ	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.808e +006	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551
Total		9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551

# **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.808e +006	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003	r	6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551
Total		9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Parking Lot	95353.3	27.7394	1.2500e- 003	2.6000e- 004	27.8481
Unrefrigerated Warehouse-No Rail	939000	273.1659	0.0124	2.5600e- 003	274.2362
Total		300.9052	0.0136	2.8200e- 003	302.0843

#### **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Parking Lot	95353.3	27.7394	1.2500e- 003	2.6000e- 004	27.8481
Unrefrigerated Warehouse-No Rail		273.1659	0.0124	2.5600e- 003	274.2362
Total		300.9052	0.0136	2.8200e- 003	302.0843

#### 6.0 Area Detail

# **6.1 Mitigation Measures Area**

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 29 Date: 12/17/2020 9:43 AM

# SPR 2020-16 - Madera County, Annual

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr					MT/yr					
Mitigated	0.4357	5.0000e- 005	4.3600e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	3.0000e- 005	0.0000	7.4300e- 003
Unmitigated	0.4357	5.0000e- 005	4.3600e- 003	0.0000	i i	2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	3.0000e- 005	0.0000	7.4300e- 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												МТ	-/yr			
Architectural Coating	0.0270					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4082		,			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.6000e- 004	5.0000e- 005	4.3600e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	3.0000e- 005	0.0000	7.4300e- 003
Total	0.4357	5.0000e- 005	4.3600e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	3.0000e- 005	0.0000	7.4300e- 003

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

# 6.2 Area by SubCategory Mitigated

	ROG	NOx	СО	SO2	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	ory tons/yr									MT	-/yr					
Architectural Coating	0.0270					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4082					0.0000	0.0000	1   	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.6000e- 004	5.0000e- 005	4.3600e- 003	0.0000		2.0000e- 005	2.0000e- 005	1   	2.0000e- 005	2.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	3.0000e- 005	0.0000	7.4300e- 003
Total	0.4357	5.0000e- 005	4.3600e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	3.0000e- 005	0.0000	7.4300e- 003

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 29 Date: 12/17/2020 9:43 AM

SPR 2020-16 - Madera County, Annual

	Total CO2	CH4	N2O	CO2e
Category		MT	-/yr	
ga.oa	43.7381	0.7552	0.0181	68.0211
Unmitigated	43.7381	0.7552	0.0181	68.0211

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	√yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.125 / 0	43.7381	0.7552	0.0181	68.0211
Total		43.7381	0.7552	0.0181	68.0211

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 29 Date: 12/17/2020 9:43 AM

#### SPR 2020-16 - Madera County, Annual

7.2 Water by Land Use Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e				
Land Use	Mgal	MT/yr							
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000				
Unrefrigerated Warehouse-No Rail	23.125 / 0	43.7381	0.7552	0.0181	68.0211				
Total		43.7381	0.7552	0.0181	68.0211				

# 8.0 Waste Detail

# **8.1 Mitigation Measures Waste**

# Category/Year

	Total CO2	CH4	N2O	CO2e							
	MT/yr										
gatea	19.0812	1.1277	0.0000	47.2727							
Jugu.ou	19.0812	1.1277	0.0000	47.2727							

Date: 12/17/2020 9:43 AM

# SPR 2020-16 - Madera County, Annual

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed Total CO2 CH4			N2O	CO2e				
Land Use	tons	MT/yr							
Parking Lot	0	0.0000 0.0000		0.0000	0.0000				
Unrefrigerated Warehouse-No Rail	94	19.0812	1.1277	0.0000	47.2727				
Total		19.0812	1.1277	0.0000	47.2727				

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e				
Land Use	tons	MT/yr							
Parking Lot	0	0.0000 0.0000		0.0000	0.0000				
Unrefrigerated Warehouse-No Rail	94	19.0812 1.1277		0.0000	47.2727				
Total		19.0812	1.1277	0.0000	47.2727				

# 9.0 Operational Offroad

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

#### SPR 2020-16 - Madera County, Annual

# **10.0 Stationary Equipment**

#### **Fire Pumps and Emergency Generators**

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

#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
1-1 31 -		1		3	31.3

# **User Defined Equipment**

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

# 11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 30 Date: 12/10/2020 3:51 PM

#### SPR 2020-16 - Madera County, Annual

#### SPR 2020-16

#### **Madera County, Annual**

# 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	100.00	1000sqft	2.30	100,000.00	0
Parking Lot	272.44	1000sqft	6.25	272,438.00	0

### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.9Precipitation Freq (Days)51Climate Zone3Operational Year2030

Operational rear 203

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 290
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

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

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 30 Date: 12/10/2020 3:51 PM

#### SPR 2020-16 - Madera County, Annual

Project Characteristics - PG&E Intensity Factor

Land Use -

Construction Phase - Site is vacant without structures or trees. No demolition phase.

Grading - Assumes project site will be balanced.

Architectural Coating - Architectural coating phase to occur in 2022--Year 2022 regulations of SJVAPCD Rule 4601 apply.

Area Coating - Reapplication of architectural coating phase to occur in 2022 or later--Year 2022 regulations of SJVAPCD Rule 4601 apply.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - "Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades." (https://www.energy.ca.gov/sites/default/files/2020-03/Title\_24\_2019\_Building\_Standards\_FAQ\_ada.pdf)

Energy Use -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	Area_EF_Parking	150	100
tblLandUse	LandUseSquareFeet	272,440.00	272,438.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290

#### 2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 3 of 30 Date: 12/10/2020 3:51 PM

# SPR 2020-16 - Madera County, Annual

# 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	СО	SO2	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						
2021	0.3634	3.2707	2.8968	7.0100e- 003	0.3471	0.1359	0.4830	0.1353	0.1273	0.2625	0.0000	627.9405	627.9405	0.0973	0.0000	630.3738
2022	0.2917	0.1209	0.1689	2.8000e- 004	3.6000e- 003	6.2400e- 003	9.8400e- 003	9.6000e- 004	5.8100e- 003	6.7600e- 003	0.0000	24.6805	24.6805	6.4000e- 003	0.0000	24.8406
Maximum	0.3634	3.2707	2.8968	7.0100e- 003	0.3471	0.1359	0.4830	0.1353	0.1273	0.2625	0.0000	627.9405	627.9405	0.0973	0.0000	630.3738

# **Mitigated Construction**

	ROG	NOx	СО	SO2	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							
2021	0.3634	3.2707	2.8968	7.0100e- 003	0.3471	0.1359	0.4830	0.1353	0.1273	0.2625	0.0000	627.9401	627.9401	0.0973	0.0000	630.3735
2022	0.2917	0.1209	0.1689	2.8000e- 004	3.6000e- 003	6.2400e- 003	9.8400e- 003	9.6000e- 004	5.8100e- 003	6.7600e- 003	0.0000	24.6804	24.6804	6.4000e- 003	0.0000	24.8405
Maximum	0.3634	3.2707	2.8968	7.0100e- 003	0.3471	0.1359	0.4830	0.1353	0.1273	0.2625	0.0000	627.9401	627.9401	0.0973	0.0000	630.3735
	ROG	NOx	СО	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

Page 4 of 30

Date: 12/10/2020 3:51 PM

SPR 2020-16 - Madera County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.9622	0.9622
2	4-1-2021	6-30-2021	0.8845	0.8845
3	7-1-2021	9-30-2021	0.8942	0.8942
4	10-1-2021	12-31-2021	0.8931	0.8931
5	1-1-2022	3-31-2022	0.4146	0.4146
		Highest	0.9622	0.9622

# 2.2 Overall Operational

# **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.4354	3.0000e- 005	3.4100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0800e- 003		
Energy	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003	     	6.7400e- 003	6.7400e- 003	0.0000	232.5425	232.5425	0.0155	4.5800e- 003	234.2948		
Mobile	0.0403	0.3783	0.4210	2.4500e- 003	0.1854	1.3800e- 003	0.1868	0.0498	1.2900e- 003	0.0510	0.0000	227.3722	227.3722	0.0135	0.0000	227.7094		
Waste						0.0000	0.0000		0.0000	0.0000	19.0812	0.0000	19.0812	1.1277	0.0000	47.2727		
Water	II					0.0000	0.0000		0.0000	0.0000	7.3365	16.4597	23.7962	0.7552	0.0181	48.0792		
Total	0.4855	0.4670	0.4988	2.9800e- 003	0.1854	8.1300e- 003	0.1935	0.0498	8.0400e- 003	0.0578	26.4177	476.3810	502.7987	1.9118	0.0227	557.3633		

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 30 Date: 12/10/2020 3:51 PM

# SPR 2020-16 - Madera County, Annual

2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.4354	3.0000e- 005	3.4100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0800e- 003	
Energy	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	211.1317	211.1317	0.0133	4.1400e- 003	212.6985	
Mobile	0.0390	0.3698	0.3975	2.3000e- 003	0.1726	1.2900e- 003	0.1739	0.0463	1.2100e- 003	0.0475	0.0000	214.0980	214.0980	0.0132	0.0000	214.4279	
Waste	61 61 61		,			0.0000	0.0000		0.0000	0.0000	4.7703	0.0000	4.7703	0.2819	0.0000	11.8182	
Water	61 61 61	<del></del>	, : : : :			0.0000	0.0000		0.0000	0.0000	7.3365	16.4597	23.7962	0.7552	0.0181	48.0792	
Total	0.4842	0.4585	0.4753	2.8300e- 003	0.1726	8.0400e- 003	0.1806	0.0463	7.9600e- 003	0.0543	12.1068	441.6961	453.8029	1.0636	0.0223	487.0310	

	ROG	NOx	СО	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	0.27	1.82	4.71	5.03	6.90	1.11	6.65	6.89	1.00	6.09	54.17	7.28	9.74	44.37	1.94	12.62

# 3.0 Construction Detail

#### **Construction Phase**

Page 6 of 30

Date: 12/10/2020 3:51 PM

#### SPR 2020-16 - Madera County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2021	1/14/2021	5	10	
2	Grading	Grading	1/15/2021	2/11/2021	5	20	
3	Building Construction	Building Construction	2/12/2021	12/30/2021	5	230	
4	Paving	Paving	12/31/2021	1/27/2022	5	20	
5	Architectural Coating	Architectural Coating	1/28/2022	2/24/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 6.25

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 16,346 (Architectural Coating – sqft)

OffRoad Equipment

Page 7 of 30 SPR 2020-16 - Madera County, Annual

Date: 12/10/2020 3:51 PM

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	! 1	8.00	158	0.38
Building Construction	Cranes	! 1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	+	8.00	46	0.45

# **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	156.00	61.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

CalEEMod Version: CalEEMod.2016.3.2 Page 8 of 30 Date: 12/10/2020 3:51 PM

#### SPR 2020-16 - Madera County, Annual

3.2 Site Preparation - 2021

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	ry tons/yr											MT/yr							
Fugitive Dust	11 11 11				0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Off-Road	0.0194	0.2025	0.1058	1.9000e- 004		0.0102	0.0102		9.4000e- 003	9.4000e- 003	0.0000	16.7179	16.7179	5.4100e- 003	0.0000	16.8530			
Total	0.0194	0.2025	0.1058	1.9000e- 004	0.0903	0.0102	0.1006	0.0497	9.4000e- 003	0.0591	0.0000	16.7179	16.7179	5.4100e- 003	0.0000	16.8530			

# **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Worker	3.8000e- 004	2.4000e- 004	2.6700e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6399	0.6399	2.0000e- 005	0.0000	0.6404		
Total	3.8000e- 004	2.4000e- 004	2.6700e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6399	0.6399	2.0000e- 005	0.0000	0.6404		

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 30 Date: 12/10/2020 3:51 PM

## SPR 2020-16 - Madera County, Annual

3.2 Site Preparation - 2021

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0194	0.2025	0.1058	1.9000e- 004		0.0102	0.0102		9.4000e- 003	9.4000e- 003	0.0000	16.7178	16.7178	5.4100e- 003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e- 004	0.0903	0.0102	0.1006	0.0497	9.4000e- 003	0.0591	0.0000	16.7178	16.7178	5.4100e- 003	0.0000	16.8530

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e- 004	2.4000e- 004	2.6700e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6399	0.6399	2.0000e- 005	0.0000	0.6404
Total	3.8000e- 004	2.4000e- 004	2.6700e- 003	1.0000e- 005	7.2000e- 004	1.0000e- 005	7.2000e- 004	1.9000e- 004	1.0000e- 005	2.0000e- 004	0.0000	0.6399	0.6399	2.0000e- 005	0.0000	0.6404

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 30 Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

3.3 Grading - 2021
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e- 004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e- 003	0.0000	26.2644
Total	0.0229	0.2474	0.1586	3.0000e- 004	0.0655	0.0116	0.0771	0.0337	0.0107	0.0443	0.0000	26.0537	26.0537	8.4300e- 003	0.0000	26.2644

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e- 004	4.0000e- 004	4.4400e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.2000e- 003	3.2000e- 004	1.0000e- 005	3.3000e- 004	0.0000	1.0665	1.0665	3.0000e- 005	0.0000	1.0673
Total	6.3000e- 004	4.0000e- 004	4.4400e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.2000e- 003	3.2000e- 004	1.0000e- 005	3.3000e- 004	0.0000	1.0665	1.0665	3.0000e- 005	0.0000	1.0673

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 30 Date: 12/10/2020 3:51 PM

## SPR 2020-16 - Madera County, Annual

3.3 Grading - 2021

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0229	0.2474	0.1586	3.0000e- 004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e- 003	0.0000	26.2643
Total	0.0229	0.2474	0.1586	3.0000e- 004	0.0655	0.0116	0.0771	0.0337	0.0107	0.0443	0.0000	26.0537	26.0537	8.4300e- 003	0.0000	26.2643

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e- 004	4.0000e- 004	4.4400e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.2000e- 003	3.2000e- 004	1.0000e- 005	3.3000e- 004	0.0000	1.0665	1.0665	3.0000e- 005	0.0000	1.0673
Total	6.3000e- 004	4.0000e- 004	4.4400e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.2000e- 003	3.2000e- 004	1.0000e- 005	3.3000e- 004	0.0000	1.0665	1.0665	3.0000e- 005	0.0000	1.0673

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 30 Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

# 3.4 Building Construction - 2021 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.2186	2.0047	1.9062	3.1000e- 003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3829	266.3829	0.0643	0.0000	267.9895
Total	0.2186	2.0047	1.9062	3.1000e- 003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3829	266.3829	0.0643	0.0000	267.9895

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0254	0.7614	0.1802	1.9900e- 003	0.0464	2.3200e- 003	0.0487	0.0134	2.2200e- 003	0.0156	0.0000	188.4712	188.4712	0.0151	0.0000	188.8487
Worker	0.0750	0.0477	0.5314	1.4100e- 003	0.1429	1.1100e- 003	0.1440	0.0380	1.0300e- 003	0.0390	0.0000	127.5540	127.5540	3.7600e- 003	0.0000	127.6479
Total	0.1004	0.8091	0.7116	3.4000e- 003	0.1893	3.4300e- 003	0.1927	0.0514	3.2500e- 003	0.0546	0.0000	316.0251	316.0251	0.0189	0.0000	316.4966

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 30 Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

# 3.4 Building Construction - 2021 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
	0.2186	2.0047	1.9062	3.1000e- 003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3826	266.3826	0.0643	0.0000	267.9892
Total	0.2186	2.0047	1.9062	3.1000e- 003		0.1102	0.1102		0.1037	0.1037	0.0000	266.3826	266.3826	0.0643	0.0000	267.9892

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0254	0.7614	0.1802	1.9900e- 003	0.0464	2.3200e- 003	0.0487	0.0134	2.2200e- 003	0.0156	0.0000	188.4712	188.4712	0.0151	0.0000	188.8487
Worker	0.0750	0.0477	0.5314	1.4100e- 003	0.1429	1.1100e- 003	0.1440	0.0380	1.0300e- 003	0.0390	0.0000	127.5540	127.5540	3.7600e- 003	0.0000	127.6479
Total	0.1004	0.8091	0.7116	3.4000e- 003	0.1893	3.4300e- 003	0.1927	0.0514	3.2500e- 003	0.0546	0.0000	316.0251	316.0251	0.0189	0.0000	316.4966

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 30 Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

3.5 Paving - 2021
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	6.3000e- 004	6.4600e- 003	7.3300e- 003	1.0000e- 005		3.4000e- 004	3.4000e- 004		3.1000e- 004	3.1000e- 004	0.0000	1.0012	1.0012	3.2000e- 004	0.0000	1.0093
Paving	4.1000e- 004		] 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0400e- 003	6.4600e- 003	7.3300e- 003	1.0000e- 005	-	3.4000e- 004	3.4000e- 004		3.1000e- 004	3.1000e- 004	0.0000	1.0012	1.0012	3.2000e- 004	0.0000	1.0093

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 005	2.0000e- 005	2.2000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0533	0.0533	0.0000	0.0000	0.0534
Total	3.0000e- 005	2.0000e- 005	2.2000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0533	0.0533	0.0000	0.0000	0.0534

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 30 Date: 12/10/2020 3:51 PM

## SPR 2020-16 - Madera County, Annual

3.5 Paving - 2021

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.3000e- 004	6.4600e- 003	7.3300e- 003	1.0000e- 005		3.4000e- 004	3.4000e- 004		3.1000e- 004	3.1000e- 004	0.0000	1.0012	1.0012	3.2000e- 004	0.0000	1.0093
	4.1000e- 004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0400e- 003	6.4600e- 003	7.3300e- 003	1.0000e- 005		3.4000e- 004	3.4000e- 004		3.1000e- 004	3.1000e- 004	0.0000	1.0012	1.0012	3.2000e- 004	0.0000	1.0093

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 005	2.0000e- 005	2.2000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0533	0.0533	0.0000	0.0000	0.0534
Total	3.0000e- 005	2.0000e- 005	2.2000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0533	0.0533	0.0000	0.0000	0.0534

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 30 Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

3.5 Paving - 2022 Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Off-Road	0.0105	0.1057	0.1385	2.2000e- 004		5.4000e- 003	5.4000e- 003		4.9600e- 003	4.9600e- 003	0.0000	19.0262	19.0262	6.1500e- 003	0.0000	19.1800
Paving	7.7800e- 003		 		 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0183	0.1057	0.1385	2.2000e- 004		5.4000e- 003	5.4000e- 003		4.9600e- 003	4.9600e- 003	0.0000	19.0262	19.0262	6.1500e- 003	0.0000	19.1800

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e- 004	3.4000e- 004	3.8500e- 003	1.0000e- 005	1.1400e- 003	1.0000e- 005	1.1400e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	0.9766	0.9766	3.0000e- 005	0.0000	0.9772
Total	5.5000e- 004	3.4000e- 004	3.8500e- 003	1.0000e- 005	1.1400e- 003	1.0000e- 005	1.1400e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	0.9766	0.9766	3.0000e- 005	0.0000	0.9772

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 30 Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							M٦	Γ/yr		
- Cir rtoud	0.0105	0.1057	0.1385	2.2000e- 004		5.4000e- 003	5.4000e- 003		4.9600e- 003	4.9600e- 003	0.0000	19.0262	19.0262	6.1500e- 003	0.0000	19.1800
	7.7800e- 003	 	       			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0183	0.1057	0.1385	2.2000e- 004		5.4000e- 003	5.4000e- 003		4.9600e- 003	4.9600e- 003	0.0000	19.0262	19.0262	6.1500e- 003	0.0000	19.1800

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e- 004	3.4000e- 004	3.8500e- 003	1.0000e- 005	1.1400e- 003	1.0000e- 005	1.1400e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	0.9766	0.9766	3.0000e- 005	0.0000	0.9772
Total	5.5000e- 004	3.4000e- 004	3.8500e- 003	1.0000e- 005	1.1400e- 003	1.0000e- 005	1.1400e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	0.9766	0.9766	3.0000e- 005	0.0000	0.9772

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 30 Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

# 3.6 Architectural Coating - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
7 ii oriii. Codaiiig	0.2696					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	2.0500e- 003	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574
Total	0.2717	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e- 003	7.4000e- 004	8.3800e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.6000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.1245	2.1245	6.0000e- 005	0.0000	2.1259
Total	1.2000e- 003	7.4000e- 004	8.3800e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.6000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.1245	2.1245	6.0000e- 005	0.0000	2.1259

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 30 Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

# 3.6 Architectural Coating - 2022 Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.2696					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	2.0500e- 003	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574
Total	0.2717	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574

### **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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e- 003	7.4000e- 004	8.3800e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.6000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.1245	2.1245	6.0000e- 005	0.0000	2.1259
Total	1.2000e- 003	7.4000e- 004	8.3800e- 003	2.0000e- 005	2.4700e- 003	2.0000e- 005	2.4900e- 003	6.6000e- 004	2.0000e- 005	6.7000e- 004	0.0000	2.1245	2.1245	6.0000e- 005	0.0000	2.1259

# 4.0 Operational Detail - Mobile

### SPR 2020-16 - Madera County, Annual

## **4.1 Mitigation Measures Mobile**

Improve Destination Accessibility
Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0390	0.3698	0.3975	2.3000e- 003	0.1726	1.2900e- 003	0.1739	0.0463	1.2100e- 003	0.0475	0.0000	214.0980	214.0980	0.0132	0.0000	214.4279
Unmitigated	0.0403	0.3783	0.4210	2.4500e- 003	0.1854	1.3800e- 003	0.1868	0.0498	1.2900e- 003	0.0510	0.0000	227.3722	227.3722	0.0135	0.0000	227.7094

## **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	168.00	168.00	168.00	490,478	456,635
Total	168.00	168.00	168.00	490,478	456,635

## 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

### SPR 2020-16 - Madera County, Annual

Date: 12/10/2020 3:51 PM

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.570188	0.028691	0.167603	0.094255	0.011593	0.003852	0.013136	0.098790	0.002559	0.001500	0.006160	0.001107	0.000564
Unrefrigerated Warehouse-No Rail	0.570188	0.028691	0.167603	0.094255	0.011593	0.003852	0.013136	0.098790	0.002559	0.001500	0.006160	0.001107	0.000564

# 5.0 Energy Detail

Historical Energy Use: N

## **5.1 Mitigation Measures Energy**

Install High Efficiency Lighting

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	Category tons/yr										MT	/yr				
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	114.6499	114.6499	0.0115	2.3700e- 003	115.6434
Electricity Unmitigated	61 61 61 61		1 1 1 1	,		0.0000	0.0000	 	0.0000	0.0000	0.0000	136.0607	136.0607	0.0136	2.8200e- 003	137.2397
NaturalOas	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551
NaturalGas Unmitigated	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 30 Date: 12/10/2020 3:51 PM

## SPR 2020-16 - Madera County, Annual

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.808e +006	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551
Total		9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551

## **Mitigated**

	NaturalGa s 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					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.808e +006	9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551
Total		9.7500e- 003	0.0886	0.0745	5.3000e- 004		6.7400e- 003	6.7400e- 003		6.7400e- 003	6.7400e- 003	0.0000	96.4818	96.4818	1.8500e- 003	1.7700e- 003	97.0551

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 30 Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Parking Lot	95353.3	12.5429	1.2500e- 003	2.6000e- 004	12.6516
Unrefrigerated Warehouse-No Rail	939000	123.5177	0.0124	2.5600e- 003	124.5881
Total		136.0607	0.0136	2.8200e- 003	137.2397

### **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	/yr	
Parking Lot	00100.0	7.6512	7.7000e- 004	1.6000e- 004	7.7175
Unrefrigerated Warehouse-No Rail	813420	106.9987	0.0107	2.2100e- 003	107.9259
Total		114.6499	0.0115	2.3700e- 003	115.6434

### 6.0 Area Detail

## **6.1 Mitigation Measures Area**

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 30 Date: 12/10/2020 3:51 PM

## SPR 2020-16 - Madera County, Annual

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Mitigated	0.4354	3.0000e- 005	3.4100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0800e- 003
Unmitigated	0.4354	3.0000e- 005	3.4100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0800e- 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	0.0270					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4082					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.1000e- 004	3.0000e- 005	3.4100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0800e- 003
Total	0.4354	3.0000e- 005	3.4100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0800e- 003

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 30 Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

# 6.2 Area by SubCategory Mitigated

	ROG	NOx	СО	SO2	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											МТ	-/yr		
Architectural Coating	0.0270					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4082					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.1000e- 004	3.0000e- 005	3.4100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0800e- 003
Total	0.4354	3.0000e- 005	3.4100e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6500e- 003	6.6500e- 003	2.0000e- 005	0.0000	7.0800e- 003

## 7.0 Water Detail

## 7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 30 Date: 12/10/2020 3:51 PM

SPR 2020-16 - Madera County, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	-/yr	
gatou	23.7962	0.7552	0.0181	48.0792
Jgatou	23.7962	0.7552	0.0181	48.0792

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out	Total CO2	CH4	N2O	CO2e
	door Use				
Land Use	Mgal		MT	-/yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.125 / 0	23.7962	0.7552	0.0181	48.0792
Total		23.7962	0.7552	0.0181	48.0792

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 30 Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

7.2 Water by Land Use Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.125 / 0	23.7962	0.7552	0.0181	48.0792
Total		23.7962	0.7552	0.0181	48.0792

## 8.0 Waste Detail

## **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

SPR 2020-16 - Madera County, Annual

## Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	√yr	
willigated	4.7703	0.2819	0.0000	11.8182
Jgatea	19.0812	1.1277	0.0000	47.2727

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	√yr	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	94		1.1277	0.0000	47.2727
Total		19.0812	1.1277	0.0000	47.2727

Date: 12/10/2020 3:51 PM

### SPR 2020-16 - Madera County, Annual

## 8.2 Waste by Land Use

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.5	4.7703	0.2819	0.0000	11.8182
Total		4.7703	0.2819	0.0000	11.8182

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

### **Fire Pumps and Emergency Generators**

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

### **Boilers**

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

## **User Defined Equipment**

Equipment Type	Number

## 11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 30 Date: 12/10/2020 3:51 PM

SPR 2020-16 - Madera County, Annual

\_