

APPENDIX C

AIR POLLUTANT EMISSIONS ASSESSMENT

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CONSTRUCTION AIR POLLUTANT EMISSION ESTIMATES

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June 7, 2013

Mr. Mohammed S. Alrai
Executive Vice President
Regenerate Power LLC
1050 Doyle Street
Menlo Park, CA 94025

Re: Air Pollutant Emission Assessment, Seville Solar Farm Complex Construction, Imperial County, California

Dear Mr. Alrai:

Environmental Management Associates, Inc. (EMA) has prepared this assessment of the emissions of following seven air pollutants from the construction of the Seville Solar Farm Complex, Imperial County, California (Complex): criteria air pollutants particulate matter smaller than 10 microns in aerodynamic diameter (PM_{10}), particulate matter smaller than 2.5 microns in aerodynamic diameter ($PM_{2.5}$), carbon monoxide (CO), nitrogen oxides (NO_x) and sulfur dioxide (SO_2); and criteria air pollutant precursor reactive organic gases (ROGs); as well as greenhouse gases (GHG), such as carbon dioxide (CO_2) and methane (CH_4).

The Imperial County Air Pollution Control District “CEQA Air Quality Handbook” (November 2007) provides guidance to assist Imperial County CEQA Lead Agencies in making a determination on the type of environmental document to prepare.

Table 4 of the Handbook (“Thresholds of Significance for Construction Activities”) “is intended to serve as a guide for project developers and interested parties in determining the recommended type of mitigation measures.” (page 19). Table 1 provides the “Thresholds of Significance for Construction Activities” listed in Table 4 of the Handbook.

Table 1: ICAPCD “Thresholds of Significance for Construction Activities”

Air Pollutant	ROG	NO_x	CO	PM_{10}
Threshold (<lbs/day)	75.00	100.00	550.00	150.00

The ICAPCD construction activities table does not present “significance thresholds” for $PM_{2.5}$, SO_2 or GHG.

To conduct this analysis, EMA utilized information from the Complex Project Description prepared by Regenerate Power LLC (Regenerate) for the Conditional Use Permit applications to the Imperial County Planning and Development Services Department (ICPDSD), and the Seville

Solar Farm Complex Supplemental Project Description prepared by Regenerate (provided as Attachment A to this letter report).

Air pollutant emissions for most of the Complex construction activities were estimated using the California Emission Estimator Model (CalEEMod) (version 2011.1.1). CalEEMod is a computer program developed by ENVIRON International Corporation in collaboration with the South Coast Air Quality Management District (SCAQMD) that can be used to estimate air pollution emissions for various land uses, area sources, construction projects, and project operations. The program also produces estimates of air pollution emissions from vehicle travel. Mitigation measures can also be specified and their emission reductions calculated.

Other Complex construction activity air pollutant emissions were calculated using the U.S. Environmental Protection Agency's (USEPA's) "AP-42, Compilation of Air Pollutant Emission Factors." AP-42 has been published since 1972 as the primary compilation of EPA's air pollutant emission factor information. It contains emission factors and process information for more than 200 air pollution source categories. The emission factors have been developed and compiled from source test data, material balance studies, and engineering estimates. The latest emissions factors are available from the USEPA's website.

Seville Solar Farm Complex would consist of the construction, operation and reclamation of up to five individual solar photovoltaic (PV) energy generation projects (Seville Solar Farm Project One - Five). Each of the five projects would be built on different lots. Seville Solar Farm Projects One - Three would each be built on lots of approximately 185 acres (Lot 1, Lot 2 and Lot 3, respectively). Seville Solar Farm Projects Four and Five would each be built on lots of slightly larger than 300 acres (Lot 4 totals approximately 319 acres, and Lot 5 totals approximately 307 acres).

Construction of each of the projects is expected to consist of the following eight activities (CalEEMod "phases"): Complex internal access road construction; demolition; site preparation; grading; solar panel installation; building erection; electrical substation construction; and gentie power line construction. Each of the five projects would be constructed independently, and construction of one project is not expected to overlap the construction of another project. However, construction of the first project to be built would overlap construction of infrastructure common to all projects within the Complex (construction of a new access road off State Highway 78, construction of an Imperial Irrigation District (IID) 92 kV transmission line; and construction of an IID switching station).

Construction of each of the three smaller projects (Seville Solar Farm Projects One – Three built on Lots 1 – 3, respectively) is estimated to take approximately 5 months. The schedule presented in Table 6 includes the likely phasing of the various construction activities for each of these three projects. Construction of each of the two larger projects (Seville Solar Farm Projects Four and Five built on Lot 4 and Lot 5, respectively) would each take approximately 8 months. The schedule presented in Table 7 includes the likely phasing of the various construction activities for each of these two projects. Because of the similarities in size, location and scheduling between each of the three small projects and both of the two larger projects, this assessment

calculates estimated air pollutant emissions for the average “Small Project” (Seville Solar Farm Projects One – Three) and the average “Large Project” (Seville Solar Farm Projects Four – Five), as well as the “Common Infrastructure” activities.

Each construction activity has the potential to produce air pollutant emissions which vary in both the specific type and quantity emitted. Although the CalEEMod model is capable of calculating air pollutant emissions across many of these construction activities for a number of different projects, its default project types do not include a “solar photovoltaic farm” project. Thus, in order to best utilize the capabilities of the CalEEMod model (and AP-42), EMA has calculated the daily air pollutant emissions from each of the “Small Project” and the “Large Project” construction activities in eight separate CalEEMod models and three calculations using AP-42 emission factors. Three separate CalEEMod models and two calculations using AP-42 emission factors were utilized to calculate the daily air pollutant emissions from construction of the “Common Infrastructure” activities.

Table 2 outlines the three CalEEMod models and two AP-42 emissions factors used to calculate the daily air pollutant emissions from the “common infrastructure” construction activities. Table 3, Table 4, Table 5 outline the eight CalEEMod models and three AP-42 emission factors used to calculate the daily air pollutant emissions from the “Small Project” and the “Large Project” construction activities. Table 2, Table 3, Table 4, and Table 5 also identify the project construction activities, air pollutant sources, daily air pollutant emissions, type of model used, the name of the model run specific to each activity and the Attachment to this letter report in which the input and output files for each specific model are located.

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Table 2: CalEEMod Air Pollutant Emissions Calculation Models – “Common Infrastructure” Activities

Project Phase(s)	New Access Road Construction				Switch Station Construction				Transmission Line Construction					
Air Pollutant Source	Grading	On-Site Equipment	Off-Site Traffic		Grading	On-Site Equipment	Off-Site Traffic		On-Site Equipment	Off-Site Traffic				
Air Pollutant Emissions	Fugitive Dust	Combustion Emissions	Fugitive Dust	Combustion Emissions	Fugitive Dust	Combustion Emissions	Fugitive Dust	Combustion Emissions	Combustion Emissions	Fugitive Dust	Combustion Emissions			
Model Using	AP-42	CalEEMod				AP-42	CalEEMod				CalEEMod			
Model Name	CalEEMod Seville – New Access Rd Constrc V02.xls				CalEEMod Seville – Switch Station Constrc V02.xls				CalEEMod Seville – Transmission Line Constrc V02.xls					
Attachment	Attach. V	Attachment B			Attach. V	Attachment C			Attachment D					

Table 3: CalEEMod and AP-42 Air Pollutant Emissions Calculation Models – Solar Farm Construction Activities

Project Phase(s)	Complex Internal Road Construction				Demolition				Site Preparation										
Air Pollutant Source	Grading	On-Site Equipment	Off-Site Traffic		On-Site Equipment	Off-Site Traffic			On-Site Equipment	Off-Site Traffic									
Air Pollutant Emissions	Fugitive Dust	Combustion Emissions	Fugitive Dust	Combustion Emissions	Combustion Emissions	Fugitive Dust	Combustion Emissions		Combustion Emissions	Fugitive Dust	Combustion Emissions								
Model Using	AP-42	CalEEMod				CalEEMod				CalEEMod									
Model Name	CalEEMod Seville – Internal Rd Constrc Small Prj V02.xls CalEEMod Seville – Internal Rd Constrc Large Prj V03.xls				CalEEMod Seville – Demolition Small Prj V02.xls CalEEMod Seville – Demolition Large Prj V03.xls				CalEEMod Seville – Site Preparation Small Prj V02.xls CalEEMod Seville – Site Preparation Large Prj V03.xls										
Attachment	Attach. V	Attachment E/ Attachment M			Attachment F/ Attachment N				Attachment G/ Attachment O										

Table 4: CalEEMod and AP-42 Air Pollutant Emissions Calculation Models – Solar Farm Construction Activities (continued)

Project Phase(s)	Grading				Solar Panel Installation				Building Erection					
Air Pollutant Source	Grading	On-Site Equipment	Off-Site Traffic		On-Site Equipment	Off-Site Traffic			On-Site Equipment	Off-Site Traffic				
Air Pollutant Emissions	Fugitive Dust	Combustion Emissions	Fugitive Dust	Combustion Emissions	Combustion Emissions	Fugitive Dust	Combustion Emissions	Fugitive Dust	Combustion Emissions	Fugitive Dust	Combustion Emissions			
Model Using	AP-42	CalEEMod				CalEEMod				CalEEMod				
Model Name	CalEEMod Seville – Grading Small Prj V02.xls CalEEMod Seville – Grading Large Prj V03.xls				CalEEMod Seville – Panel Installation Small Prj V02.xls CalEEMod Seville – Panel Installation Large Prj V03.xls				CalEEMod Seville – Building Erection Small Prj V02.xls CalEEMod Seville – Building Erection Large Prj V03.xls					
Attachment	Attach. V	Attachment H/ Attachment P			Attachment I/ Attachment Q				Attach. V	Attachment J/ Attachment R				

Table 5: CalEEMod and AP-42 Air Pollutant Emissions Calculation Models – Solar Farm Construction Activities (continued)

Project Phase(s)	Substation Construction			GenTie Power Line Construction		
Air Pollutant Source	On-Site Equipment	Off-Site Traffic		On-Site Equipment	Off-Site Traffic	
Air Pollutant Emissions	Combustion Emissions	Fugitive Dust	Combustion Emissions	Combustion Emissions	Fugitive Dust	Combustion Emissions
Model Using	CalEEMod			CalEEMod		
Model Name	CalEEMod Seville – Substation Construc Small Prj V02.xls CalEEMod Seville – Substation Construc Large Prj V02.xls			CalEEMod Seville – GenTie Construc Small Prj V02.xls CalEEMod Seville – GenTie Construc Large Prj V03.xls		
Attachment	Attachment K/ Attachment S			Attachment L/ Attachment T		

Nineteen attachments (Attachments B through T) are included with this letter report, each of which describes the CalEEMod calculations and results for each construction activity of each project type. Calculations and results for the three “Common Infrastructure” construction activities are presented in Attachments B through D; the eight average “Small Project” construction activities are presented in Attachments E through L; and the eight average “Large Project” construction activities are presented in Attachments M through T.

Each of these nineteen attachments contain a “Remarks” summary (see Attachments B-1 through T-1). “Remarks” are typically used in CalEEMod to explain non-default inputs. For the current modeling this “remarks” summary replaces the “remarks” sections of each CalEEMod model to provide more space to both identify non-default inputs and to explain how CalEEMod is used to calculate emissions for the current project. When CalEEMod model defaults were retained and no further explanation was necessary, no “remarks” were recorded.

As CalEEMod does not have a land use category for a solar photovoltaic farm, the “user defined industrial” land use category was selected as a surrogate. Where applicable, CalEEMod defaults were retained as the model inputs. However, CalEEMod defaults were replaced with project-specific information where available (such as the number of worker-commute and truck traffic, and the percentage of off-site roads to be traveled by off-site traffic which were paved and unpaved). Defaults were also replaced if applicable project information was available in the Supplemental Project Description provided by the Regenerate. Examples of this latter information include the mix of construction equipment expected to be used. In each of the nineteen CalEEMod construction activities models, emissions from only the stated construction phase were calculated by deleting all of the other CalEEMod construction phases.

All construction activity CalEEMod models assumed that the construction contractor would use diesel powered construction equipment using engines with certified NO_x emissions rated as Tier 3 or better to reduce NO_x emissions. The CalEEMod models with grading assumed on-site watering three times daily during the grading activities. All worker, vendor and haul truck trips were assumed to be restricted to 25 mph on the onsite unpaved Complex roads. Onsite, unpaved roads in the CalEEMod models assume watering three times daily.

Attachments B through T also contain the CalEEMod-generated reports of the model outputs for each activity – one each for the summer months (Attachments B-2 through T-2), for the winter months (Attachments B-3 through T-3), and for the annual (or phase) time period (Attachments B-4 through T-4). All of the output reports contain calculated daily air pollution emissions for both “unmitigated” and “mitigated” activities. “Unmitigated” emissions are those calculated by CalEEMod when none of the air pollutant mitigation measures contained within the CalEEMod program are selected. “Mitigated” emissions are those calculated by CalEEMod after the application of the air pollutant mitigation measures described above which are contained within, and can be calculated by, CalEEMod.

CalEEMod staff has confirmed that the air pollutant emission factors used by the current version of CalEEMod for Tier 2 and Tier 3 engines are incorrect for NO_x, ROG and TOG (“total organic gas”) emissions. To correctly calculate the air pollutant emissions from construction equipment

mitigated through the use of either Tier 2 or Tier 3 engines, CalEEMod staff recommends completing these calculations in a spreadsheet using the correct emission factors (as contained in a spreadsheet provided by CalEEMod staff). Corrected Tier 3 mitigated CalEEMod construction equipment air pollutant emission calculations are provided in Attachment U for each construction phase.

Attachment V-1 contains tables summarizing the specific daily air pollutant emissions calculated for each construction phase of the average “Small Project.” Attachment V-2 contains these same tables for the average “Large Project,” and Attachment V-3 contains the tables for each of the “Common Infrastructure” activities. In addition to the tables summarizing the specific daily air pollutant emissions calculated by CalEEMod (as corrected through the calculations in Attachment U), these attachments also present the calculations of the fugitive dust generated on-site daily from the grading activity (using the grading and dozing emissions factors in AP-42) and from the delivery of the solar panels and the on-site traffic during panel installation, as calculated using the unpaved roads emissions factors in AP-42 (using the silt and moisture defaults from CalEEMod and assuming the watering of the on-site unpaved roads).

In order to determine the daily project-wide construction air pollutant emissions, the daily air pollutant emissions presented in Attachment V must be summed across each construction activity which would be occurring at the same time. Table 6 identifies the “Small Project” construction activities and how they are expected to overlap in time, based on the information presented in the Supplemental Project Description. Table 8 identifies the “Large Project” construction activities and how they are expected to overlap in time, based on the information presented in the Supplemental Project Description.

Attachment W-1 presents tables providing the winter and summer unmitigated and mitigated daily air pollution emissions (from Attachment V) summed by applicable construction activities across the six time periods outlined in Table 6 for the “Small Project” without the “Common Infrastructure” activities included; Attachment W-2 presents these same tables for the “Small Project” with the “Common Infrastructure” activities included. Attachment X-1 presents tables providing the winter and summer unmitigated and mitigated daily air pollution emissions (from Attachment V) summed by applicable construction activities across the nine time periods outlined in Table 8 for the “Large Project” without the “Common Infrastructure” activities included; Attachment X-2 presents these same tables for the “Large Project” with the “Common Infrastructure” activities included.

Attachment W and Attachment X also compare the daily construction activities air pollution emissions summed by activities across all applicable time periods against the daily construction activities emission thresholds listed in Table 1. Attachment W and Attachment X show that the unmitigated daily emissions (both winter and summer) of CO and ROG during construction of each of the five solar farm projects were calculated to be below the construction thresholds for the air pollutants.

Table 6: Anticipated Construction Schedule for Lots 1 through 3

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8					
	Week #																																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		
Complex Internal Roads			X	X																														
Demolition			X	X																														
Site Preparation			X	X																														
Grading				X	X	X	X	X	X																									
Solar Panel Installation										X	X	X	X	X	X	X	X	X	X	X	X													
Building Erection										X	X	X	X	X	X	X	X	X	X	X	X													
Substation Construction							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X													
GenTie Power Line Constrc							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X													
New Access Road	X	X																																
Switch Station Construction			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X														
Transmission Line Construction			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X														

Table 7: Anticipated Construction Schedule for Lots 4 and 5

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8						
	Week #																																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32			
Complex Internal Roads			X	X																															
Demolition			X	X																															
Site Preparation			X	X																															
Grading			X	X	X	X	X	X	X	X																									
Solar Panel Installation														X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Building Erection														X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Substation Construction							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
GenTie Power Line Constrc													X	X	X	X	X	X	X	X															
New Access Road	X	X																																	
Switch Station Construction			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X															
Transmission Line Construction			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X															

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Mr. Mohammed S. Alrai

June 7, 2013

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Attachment W and Attachment X also show that the unmitigated daily PM₁₀ and NO_x emissions (both winter and summer) during some construction time periods are above the applicable ICAPCD thresholds. Although the use of "Tier 3" engines in the on-site, off-road equipment reduces the calculated project NO_x emissions, and the onsite watering three times daily of the actively disturbed areas reduces the project PM₁₀ emissions, the mitigated daily NO_x and PM₁₀ emission rates still exceed the applicable ICAPCD construction emission thresholds.

Please do not hesitate to contact us if you have any questions or require any additional information. EMA appreciates this opportunity to be of service to Regenerate Power, LLC.

Sincerely:

ENVIRONMENTAL MANAGEMENT ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "Dwight L. Carey". The signature is fluid and cursive, with a large, stylized 'D' at the beginning.

Dwight L. Carey, D.Env.
Principal

Attachments:

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ATTACHMENT A

**SEVILLE SOLAR FARM COMPLEX
SUPPLEMENTAL PROJECT DESCRIPTION**

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SEVILLE SOLAR FARM COMPLEX SUPPLEMENTAL PROJECT DESCRIPTION

JUNE 2013

Regenerate Power, LLC (Regenerate) is proposing to develop the Seville Solar Farm Complex (Complex), a group of solar photovoltaic (PV) energy generation facilities located in Imperial County, California. The Complex would consist of the construction, operation and reclamation of up to five solar energy projects (Seville Solar Farm Project One - Five) on portions of the Allegretti Farm property (Property), including a new access road from Highway 78 and internal access roads, an Imperial Irrigation District (IID) electrical switch station, electrical substations for each of the five projects, and internal solar development transmission lines to the substations and switch station (see the “Seville Solar Farm Complex Project Description”). The Complex would also include the construction for, and operation by, the IID of approximately 0.75 miles of new 92 kV transmission line on the Allegretti Farms property and 2.25 miles of new overbuilt 92 kV transmission “off property” for interconnection to the existing IID Anza Substation. This Supplemental Project Description has been prepared to provide additional information to supplement that provided in the Seville Solar Farm Complex Project Description for use in estimating the air pollutant emissions during construction and operation of each of the five projects that make up the Seville Solar Farm Complex.

Each of the Complex’s projects would each be built on different lots. Seville Solar Farm Project One - Three would each be built on lots of approximately 185 acres (Lot 1, Lot 2 and Lot 3). Seville Solar Farm Project Four would be built on Lot 4, totaling approximately 319 acres. Seville Solar Farm Project Five would be built on Lot 5, totaling 307 acres. The lands on which the projects would be built have historically been farmed, although the acreage under active agricultural production has declined to a very small portion of these lands. The principal access to the Project property would be via State Highway 78 (a paved state highway) and other paved roads. A new, private access road from the north off of State Highway 78 would be constructed on the property (unpaved but stabilized road). Internal to the Property, a network of private roads would provide construction, operations and maintenance access to all Property lots and Complex components (unpaved but stabilized roads). No unpaved public roads would be traveled by traffic accessing the Project.

Each of the projects would be constructed independently, and construction is not expected to overlap the construction of another project. Construction of the 185-acre projects (Lot 1, Lot 2 and Lot 3) is estimated to each take approximately 5 months. The schedule presented in Table 1 includes the likely phasing of the various construction activities for each of these projects. Construction of the two larger projects (on Lot 4 and Lot 5) would each take approximately 8 months. The schedule presented in Table 2 includes the likely phasing of the various construction activities for each of these projects. In addition to the construction activities specific to each solar project, the first project built would overlap the construction of the new access road off State Highway 78 and the construction of the IID 92 kV transmission line and switch station. Table 3 presents the likely schedule for the construction of these Complex components.

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SEVILLE SOLAR FARM COMPLEX
SUPPLEMENTAL PROJECT DESCRIPTION
JUNE 2013

Table 1 – Anticipated Construction Schedule for Lots 1 through 3

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8				
	Week #																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
Complex Internal Roads			X	X																													
Demolition			X	X																													
Site Preparation			X	X																													
Grading			X	X	X	X	X																										
Solar Panel Installation								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
Building Erection								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X										
Substation Construction					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
GenTie Power Line Constrc					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
Operations																	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 2– Anticipated Construction Schedule for Lots 4 and 5

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8				
	Week #																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
Complex Internal Roads			X	X																													
Demolition			X	X																													
Site Preparation			X	X																													
Grading			X	X	X	X	X	X																									
Solar Panel Installation									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Building Erection									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
Substation Construction					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
GenTie Power Line Constrc							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
Operations																	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

SEVILLE SOLAR FARM COMPLEX
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Table 3 - Anticipated Construction Schedule for the Common Infrastructure

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8				
	Week #																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
New Access Road	X	X																															
Switch Station Construction			X	X	X	X	X	X	X	X	X	X	X	X	X																		
Transmission Line Construction			X	X	X	X	X	X	X	X	X	X	X	X	X																		

SEVILLE SOLAR FARM COMPLEX
SUPPLEMENTAL PROJECT DESCRIPTION
JUNE 2013

Construction of the first project would commence with the building of the new, private access road off of State Highway 78, which would be utilized as the primary access to all of the Property lots (see Table 3). This new 24-foot wide access road would be approximately 0.80 miles long and is expected to require light site preparation, grading, and compacting. These access road construction activities are expected to require two weeks to complete. These grading activities are expected to occur over approximately three acres; the total cumulative acreage disturbed from grading is approximately eighteen acres (approximately six passes over the three acre area). An estimated 30 worker trips and 12 haul truck trips would be completed daily over an average of 0.5 miles of unpaved private road during this phase of construction. The equipment expected to be used during the construction of the new 0.8 mile access road is provided in Table 4.

Table 4– Anticipated New Access Road Construction Equipment

Equipment Type	Amount	Daily Usage (Hours)
Graders	2	6
Water Trucks (Off-Highway Trucks)	1	6
Rollers	2	4
Rubber Tired Dozer	1	6
Scrapers	1	8

Construction of the IID switch station would commence once construction of the new access road is complete (see Table 3). Construction of the IID switch station would likely require up to an estimated three and a half months to complete. The light grading activities are expected to occur over approximately five and a half acres; the total cumulative acreage disturbed from grading is approximately twenty-two acres (approximately four passes over the five and a half acre area). An estimated 10 worker trips and four haul truck trips per day over an average of 0.80 miles of unpaved private road would be required for construction of the switch station. The equipment anticipated to be used during the IID switch station construction is provided in Table 5.

Table 5– Anticipated Switch Station Construction Equipment

Equipment Type	Amount	Daily Usage (Hours)
Aerial Lifts	2	6
Cranes	1	6
Grader	1	8
Tractor/Loader/Backhoe	1	6

IID transmission line construction would occur simultaneously with the switch station construction. Approximately 0.75 miles of new 92 kV transmission line would be constructed on the Allegretti Farms property and 2.25 miles of new overbuilt 92 kV transmission line would be constructed “off property” for interconnection to the existing IID Anza Substation. Transmission line construction is expected to require approximately three and a half months and an estimated twelve worker trips and two haul truck trips daily over an average of 0.80 miles of unpaved private road during this phase of construction. The equipment anticipated to be used during construction of the transmission line is provided in Table 6.

SEVILLE SOLAR FARM COMPLEX
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Table 6– Anticipated Transmission Line Equipment

Equipment Type	Amount	Daily Usage (Hours)
Aerial Lifts	3	4
Crawler Tractors	2	4

Project-related construction would start with the building of those portions of the Complex internal road network required to access the individual lot being developed for construction, operation and maintenance access. This analysis assumes that each project would construct a one-mile portion of this 24-foot wide common use road. Because they are being constructed over existing farm roads, construction of each internal road segment is expected to require only light site preparation, light grading, and compacting. The light grading activities are expected to occur over approximately three and a half acres; the total cumulative acreage disturbed from grading is approximately seven acres (approximately two passes over the three and a half acre area). These internal road construction activities for each project are expected to require two weeks and an estimated 30 worker trips and 6 haul truck trips daily over an average of 1.2 miles of unpaved private road for Lots 4 and 5 and 2.0 miles for Lots 1 through 3. The equipment expected to be used during the construction of the one mile of common internal road is provided in Table 7.

Table 7– Anticipated Complex Internal Road Network Construction Equipment

Equipment Type	Amount	Daily Usage (Hours)
Graders	1	6
Water Trucks (Off-Highway Trucks)	1	6
Rollers	2	4
Tractors/Loaders/Backhoes	1	6

Demolition activities are expected to consist of the removal of most existing structures on the five lots, including the sheds and trailers in Lot 5, the concrete-lined ditch in Lots 1-3, and the reservoir structures in Lots 2 and 3. The demolition phase is conservatively expected to require for each project two weeks and an estimated 8 worker trips and 6 haul truck trips daily traveling an average of 1.2 miles of unpaved private road for Lots 4 and 5 and 2.0 miles for Lots 1 through 3. The equipment expected to be used during the demolition phase is provided in Table 8.

Table 8– Anticipated Demolition Equipment

Equipment Type	Amount	Daily Usage (Hours)
Tractors/Loaders/Backhoes	2	8

Site preparation is expected to consist of removal of the north-south vegetation windbreaks in Lots 4 and 5; the east-west vegetation windbreak in Lots 1 – 4; removal of other large vegetation in each of the lots. The site preparation phase is conservatively expected to require for each project two weeks and an estimated 8 worker trips and 6 haul truck trips daily traveling an average of 1.2 miles of unpaved private road for Lots 4 and 5 and 2.0 miles for Lots 1 through 3. The equipment expected to be used during the site preparation phase is provided in Table 9.

Table 9– Anticipated Site Preparation Equipment

Equipment Type	Amount	Daily Usage (Hours)
Tractors/Loaders/Backhoes	3	8

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Construction activities for each project would primarily involve grading of the lot to establish internal access roads, pads for electrical equipment (inverters and step-up transformers), site drainage and an on-site storm water retention basin; trenching for underground electrical collection lines; and the installation of solar equipment (piles, racks and panels), above ground transmission line, and the project electrical substation.

Grading activities for Lots 1 through 3 are expected to total approximately four passes over the 185-acre Project area, or a total of approximately 740 acres of grading for each lot. The grading phase for these lots is expected to require approximately five weeks and an estimated 30 worker trips and four delivery truck trips daily traveling an average of 2.0 miles. Grading activities for Lots 4 and 5 are expected to total approximately four passes over the 319-acre Project area, or a total of approximately 1,276 acres of grading for each lot. The grading phase for these lots is expected to require approximately seven weeks and an estimated 30 worker trips and four haul truck trips daily traveling an average of 1.2 miles. The equipment expected to be used during the grading phases for each parcel is provided in Table 10.

Table 10– Anticipated Grading Equipment

Equipment Type	Amount	Daily Usage (Hours)
Graders	2	6
Water Trucks (Off-Highway Trucks)	2	7
Rubber Tired Dozers	1	5
Scrapers	2	8
Tractors/Loaders/Backhoes	2	8

During grading, the Project would be watering actively disturbed on-site areas at least three times a day as necessary to reduce fugitive dust emissions. In addition, or as an alternative, the Project has proposed the use of other dust suppression methods and materials accepted by the Imperial County Air Pollution Control District (ICAPCD) or the California Air Resources Board (CARB).

Solar panel installation would commence once grading is complete. Approximately 10 vendor truck trips per day (typical eighteen wheelers and similar sized trucks) would deliver piles, solar panels, DC-to-AC inverters, work benches, poles, wires, cables, fencing, concrete, and other equipment and supplies to the Project site laydown area or directly to the active work area. Solar panel installation is expected to take about 3 months for Lots 1 through 3 and five and a half months for Lots 4 and 5. Solar panel installation is expected to generate 230 worker trips per day traveling an average of approximately 2.0 miles of unpaved private road for Lots 1 through 3 and an average of 1.2 miles of unpaved private road for Lots 4 and 5. On-site parking would be provided for all construction workers. The Project would be watering at least three times a day and/or stabilize the private, unpaved internal roads utilized to access each area as necessary to reduce fugitive dust emissions. During this construction period, crews of laborers would commence their work at a point on the perimeter or from another point within the site, and continue their work until their assigned area is complete. Work crews would typically carry out tasks such as planting the panel support piles in the ground, mounting the panels on the support frames, and connecting wires and cables between panels and electrical equipment. Trenching would be required to bury conduits that carry electrical cables.

The equipment anticipated to be used during solar panel installation for each of the five projects is provided in Table 11. Regenerate will require the construction contractor to use construction equipment using diesel engines with certified NOx emissions rated as Tier 3 or better. During solar panel installation

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the on-road delivery trucks may be driving an estimated three miles per day on-site to deliver solar panel construction materials directly to the active work locations. During panel installation, the Project would be watering actively disturbed on-site areas at least three times a day.

Table 11– Solar Panel Installation Equipment

Equipment Type	Amount	Daily Usage (Hours)
Generator Sets	5	8
Water Trucks (Off-Highway Trucks)	1	6
Other General Industrial Equipment	1	6
Trenchers	2	6
Skid Steer Loaders	2	7

Other workers would build the onsite buildings and auxiliary facilities in parallel with the installation of the solar arrays. Each of the five projects is expected to include the construction of an operations and maintenance building (small office, material and equipment storage, an electrical/array control room and restrooms). Additional auxiliary facilities, including a firewater tank and a garage and/or emergency response facilities, are also expected to be constructed by each project. Building erection would likely require an estimated three months to complete for each project. An estimated 20 worker trips, 2 vendor truck trips and four haul truck trips per day traveling an average of approximately 2.0 miles of unpaved private road for Lots 1 through 3 and an average of 1.2 miles of unpaved private road for Lots 4 and 5 would be required for building erection. The equipment anticipated to be used during building erection is provided in Table 12.

Table 12– Anticipated Building Erection Equipment

Equipment Type	Amount	Daily Usage (Hours)
Aerial Lifts	2	6
Concrete Pump (Other Construction Equipment)	1	4
Cranes	1	6
Other General Industrial Equipment	1	6
Rollers	1	4
Tractor/Loader/Backhoe	1	6

The electrical substation associated with each project would be built in parallel with the grading and installation of the solar arrays. Each project would build its own less than one-acre substation in the northwest corner of Section 23, immediately south of the new IID switch station. Construction of each substation would likely require an estimated four months to complete. An estimated 10 worker trips and four haul truck trips per day would be required for construction of each substation, each traveling an average of approximately 0.8 miles of unpaved private road. The substation equipment is expected to be pre-painted and not require painting (coating) on site. The equipment anticipated to be used during substation construction is provided in Table 13.

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Table 13– Anticipated Substation Construction Equipment

Equipment Type	Amount	Daily Usage (Hours)
Aerial Lifts	2	6
Cranes	1	6
Other General Industrial Equipment	1	8
Tractor/Loader/Backhoe	1	6

Construction of each project gentie transmission line would also occur simultaneously with construction of the project substation and IID switch station and transmission line. An average of approximately 1.2 miles of new transmission line would be constructed within the common utility corridor for the projects constructed on Lots 1 through 3, and an average of approximately 0.4 miles of new transmission line would be constructed within the common utility corridor for the projects constructed on Lots 4 and 5. If constructed for any of the solar projects on Lots 1 through 3, construction of each gentie line would be expected to take approximately 3 months and an estimated 12 worker trips and 2 vendor trips daily traveling an average of approximately 2.0 miles of unpaved private road. If constructed for either of the solar projects on Lots 4 or 5, construction of each gentie line would be expected to take approximately 2 months and an estimated 12 worker trips and 2 vendor trips daily traveling an average of approximately 1.2 miles of unpaved private road. The equipment anticipated to be used during construction of the gentie power line is provided in Table 14.

Table 14– Anticipated GenTie Line Equipment

Equipment Type	Amount	Daily Usage (Hours)
Aerial Lifts	3	4
Crawler Tractors	2	4

Regenerate will require the contractor to use construction equipment using diesel engines with certified NOx emissions rated as Tier 3 or better. During any Project grading, the Project would be watering actively disturbed on-site areas at least three times a day as necessary to reduce fugitive dust emissions. Also, any actively disturbed onsite, unpaved roads would be watered at least three times a day as necessary to reduce fugitive dust emissions and a twenty-five mph speed limit will be enforced.

Once the IID transmission line and switch station, plus any project's substation and gentie power line, have been constructed, those solar panels installed for that project will begin delivering power through the IID system and operation of that project will have begun. Each solar project is expected to have a small, regular, on-site staff consisting of one maintenance personnel as needed. Additional workers may occasionally be required to maintain the common access roads and storm water diversion berms, clean the solar panels, and/or perform specific maintenance activities (like weed abatement) on the property. During the Project operations phase, up to five worker trips could occur daily.

Periodic washing of the PV modules could be needed to remove dust in order to maintain power generation efficiency. The amount of water needed for this purpose for each project is conservatively estimated at six to ten acre feet per washing (depending on the project size and water required for dust control during panel washing), with up to five washings per year, or a total of from up to 30 to 50 acre feet per year. This water would be obtained from ground water wells located on the property. Each washing is expected to take one to two weeks to complete. During solar panel washing fugitive dust may

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be created by the water trucks driving an estimated 2 miles per day on-site to deliver the wash water. Dust would be controlled during operations by the periodic application and maintenance of soil binders to exposed soil surfaces. The equipment anticipated to be used during construction of the gentle power line is provided in Table 15.

Table 15- Anticipated Operations Equipment

Equipment Type	Amount	Daily Usage (Hours)
Water Trucks (Off-Highway Trucks)	1	6

Each of the three smaller solar projects may consume an estimated 250 kW-hrs of electrical energy daily from the IID power system to operate the solar panel trackers, the on-site security system and the solar facility monitoring and control system. Each of the two larger projects may use an estimated 400 kW-hrs for the same purposes. Very little general waste is expected to be generated during normal operations. Table 16, Table 17, Table 18 summarize the expected number of worker, vendor truck and haul truck trips, respectively, expected per day for each phase of the project construction for Lots 1 through 3. Table 19, Table 20, Table 21 summarize the expected number of worker, vendor truck and haul truck trips, respectively, expected per day for each phase of the project construction for Lots 4 and 5. Table 22, Table 23, and Table 24 summarize the expected number of worker, vendor truck and haul truck trips, respectively, expected per day for the common infrastructure phases of the project construction.

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Table 16– Anticipated Worker Trips During Project Construction for Lots 1 through 3

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8							
	Week #				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
	Complex Internal Roads		30	30																																
Demolition		8	8																																	
Site Preparation		8	8																																	
Grading		30	30	30	30	30																														
Solar Panel Installation									230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230			
Building Erection									20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20		
Substation Construction						10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10			
GenTie Power Line Constrc						12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
Total One-Way Worker Trips	0	0	46	76	52	52	52	52	272	272	272	272	272	272	272	272	272	272	272	272	272	260	260	260	260	260	0	0	0	0	0	0	0	0		

Table 17– Anticipated Vendor Truck Trips During Project Construction for Lots 1 through 3

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8							
	Week #				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
	Complex Internal Roads		0	0																																
Demolition		0	0																																	
Site Preparation		0	0																																	
Grading			0	0	0	0	0	0																												
Solar Panel Installation									10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10		
Building Erection									2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Substation Construction						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
GenTie Power Line Constrc						2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2			
Total One-Way Vendor Trips	0	0	0	0	2	2	2	2	14	14	14	14	14	14	14	14	14	14	14	14	12	12	12	12	0	0	0	0	0	0	0	0	0	0		

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Table 18 - Anticipated Haul Truck Trips During Project Construction for Lots 1 through 3

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8				
	Week #																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
Complex Internal Roads			6	6																													
Demolition			6	6																													
Site Preparation			6	6																													
Grading				4	4	4	4	4																									
Solar Panel Installation									0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Building Erection									4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4							
Substation Construction						4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4								
GenTie Power Line Constrc					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
Total One-Way Haul Trips	0	0	18	22	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	0	0	0	0	0	0	0		

Table 19 – Anticipated Worker Trips During Project Construction for Lots 4 and 5

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8				
	Week #																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
Complex Internal Roads			30	30																													
Demolition			8	8																													
Site Preparation			8	8																													
Grading			30	30	30	30	30	30	30																								
Solar Panel Installation										230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230		
Building Erection										20	20	20	20	20	20	20	20	20	20	20	20	20	20	20									
Substation Construction					10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10									
GenTie Power Line Constrc									12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Total One-Way Worker Trips	0	0	46	76	40	40	40	52	52	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272			

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Table 20 - Anticipated Vendor Truck Trips During Project Construction for Lots 4 and 5

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8						
	Week #																																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32			
Complex Internal Roads			0	0																															
Demolition			0	0																															
Site Preparation			0	0																															
Grading			0	0	0	0	0	0	0	0																									
Solar Panel Installation											10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10		
Building Erection											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Substation Construction			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
GenTie Power Line Constrc											2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Total One-Way Vendor Trips	0	2	2	12	12	12	12	12	12	10																									

Table 21 - Anticipated Haul Truck Trips During Project Construction for Lots 4 and 5

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8						
	Week #																																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32			
Complex Internal Roads			6	6																															
Demolition			6	6																															
Site Preparation			6	6																															
Grading			4	4	4	4	4	4	4	4																									
Solar Panel Installation											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Building Erection											4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Substation Construction						2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
GenTie Power Line Constrc						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total One-Way Trips	0	0	18	22	6	0																													

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Table 22 – Anticipated Worker Trips During Project Construction for the Common Infrastructure

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8				
	Week #																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
New Access Road	30	30																															
Switch Station Construction			10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10													
Transmission Line Construction			12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12													
Total One-Way Trips	30	30	22	0																													

Table 23 - Anticipated Vendor Truck Trips During Project Construction for the Common Infrastructure

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8			
	Week #																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
New Access Road	0	0																														
Switch Station Construction			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
Transmission Line Construction			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
Total One-Way Trips	0																															

Table 24 - Anticipated Haul Truck Trips During Project Construction for the Common Infrastructure

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8			
	Week #																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
New Access Road	12	12																														
Switch Station Construction			4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4													
Transmission Line Construction			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2													
Total One-Way Trips	12	12	6	0																												

ATTACHMENT B

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODELS:
“CALEEMOD SEVILLE – NEW ACCESS RD CONSTRUC V02.xls”

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ATTACHMENT B-1

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL “REMARKS”
MODEL “CALEEMOD SEVILLE – NEW ACCESS RD CONSTRUC V02.xls”

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“Remarks” for Seville Solar Farm Complex CalEEMod Models

“Remarks” are typically used in CalEEMod to explain non-default inputs. For the current modeling this document replaces the “remarks” section of the referenced CalEEMod model to provide more space to both identify non-default inputs and to explain how CalEEMod is used to calculate emissions for the current project. When defaults were retained and no further explanation was necessary, no “remarks” are recorded below.

Model Title: Seville – New Access Road Construction CalEEMod Seville – New Access Rd Constrc V02.xls

Project Characteristics Tab

- **Project Characteristics** –Imperial County; Rural; Operational Year 2014; Utility Company IID

Land Use Tab

- **Land Use** - This model calculates the emissions from equipment and traffic associated with Seville Solar Farm Complex new access road construction. The ‘User Defined Industrial’ land use subtype represents the Seville Solar Farm Complex. For this model in particular the ‘User Defined Industrial’ ‘Lot Acreage’ is the acreage associated with the new access road. ‘Lot Acreage’ totals to 3 acres.

Construction Tabs

- **Construction Phase** - This model calculates the emissions from the new access road grading/construction equipment, and the worker, vendor and haul traffic associated with grading/construction of the new access road. All other phases except grading are deleted.
 - Grading- 4/1/2014 – 4/15/2014
- **Off-road Equipment (Grading)** – New access road grading/construction equipment emissions are calculated in this model. Default equipment is altered to reflect the equipment below.

Equipment Type	Amount	Daily Usage (Hours)
Graders	2	6
Water Trucks (Off-Highway Trucks)	1	6
Rollers	2	4
Rubber Tired Dozer	1	6
Scrapers	1	8

- **Trips and VMT** – Only new access road grading/construction trips and VMT emissions are calculated in this model. New access road grading/construction require 30 worker and 12 haul trips/day.
- **On-road Fugitive Dust** –Traffic is expected to access the project area via State Highway 78 (a paved state highway). Approximately 0.5 miles of unpaved roads would be traveled by traffic accessing the construction area.
 - CalEEMod default worker trip length= 10.2 miles
 - % Paved Worker = 1-(0.5 miles unpaved roads to Project / 10.2 miles)=95.1% paved
 - CalEEMod default vendor trip length= 11.9 miles
 - % Paved Vendor= 1-(0.5 miles unpaved roads to Project / 11.9 miles)=95.8% paved
 - CalEEMod default haul trip length= 20 miles
 - % Paved Haul= 1-(0.5 miles unpaved roads to Project / 20 miles)=97.5% paved
- **Demolition** - Demolition emissions are calculated in a separate CalEEMod Model.
- **Dust from Material Movement** - Grading fugitive dust emissions are not calculated in CalEEMod. Grading fugitive dust emissions are calculated using AP-42 emission factors (see Supplemental Project Description and Attachment V). Default grading ‘dust from material movement’ acreage has been zeroed out.

- **Architectural Coating** No coating is required for this project (see Supplemental Project Description).

Operational Tabs

- **Vehicle Trips** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Road Dust** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Woodstoves** - Operations – Area - Each solar project is expected to have a small, regular, on site staff. The project operations calculated with CalEEMod consist of the on-site emissions from the operations/maintenance building. There will also be operational emissions that are associated with worker trips/day; vendor trips/day; and haul trips/day; water truck used during panel washing; outdoor water use during panel washing; and water/wastewater consumption emissions which are all calculated using CalEEMod. Operational on-site fugitive dust and electrical energy emissions will be calculated using AP-42 and CalEEMod emissions factors, respectfully (see Supplemental Project Description).
- **Consumer Products** - Operations - Area - See response in “Woodstoves” tab above.
- **Area Coating** - Operations - Area - See response in “Woodstoves” tab above.
- **Landscape Equipment** - Operations - Area - See response in “Woodstoves” tab above.
- **Energy Use** - Operations –Annual electrical energy use emissions are calculated using the CalEEMod intensity factor for the Imperial Irrigation District (IID).
- **Water And Wastewater** - Operations - Water and Wastewater - See response in “Woodstoves” tab above.
- **Solid Waste** - Operations - Solid Waste - See response in “Woodstoves” tab above.

Vegetation Tabs

- **Land Use Change** – N/A
- **Sequestration** – N/A

Mitigation Tabs

- **Construction Off-road Equipment Mitigation** - On-site watering will occur 3 times a day (unpaved roads and during grading); all equipment is Tier 3; reduced speed on unpaved roads (25 mph).
- **Mobile Land Use Mitigation** – N/A
- **Mobile Commute Mitigation** – N/A
- **Area Mitigation** – N/A
- **Energy Mitigation** – N/A
- **Water Mitigation** – N/A
- **Waste Mitigation** - N/A

ATTACHMENT B-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL OUTPUTS - SUMMER
MODEL “CALEEMOD SEVILLE – NEW ACCESS RD CONSTRUC V02.xls”

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Seville Solar Farm - New Access Road Construction

Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	3	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	8.30	63.85	36.42	0.07	36.04	2.88	38.93	5.58	2.88	8.47	0.00	8,071.90	0.00	0.73	0.00	8,087.29
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	5.94	36.54	42.91	0.07	14.67	2.37	17.04	3.45	2.37	5.82	0.00	8,071.90	0.00	0.73	0.00	8,087.29
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.13	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	3.13	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.13	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	3.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.52	0.00	4.52	2.48	0.00	2.48						0.00
Off-Road	7.89	63.05	32.70	0.07		2.86	2.86		2.86	2.86	7,739.56			0.71		7,754.38
Total	7.89	63.05	32.70	0.07	4.52	2.86	7.38	2.48	2.86	5.34	7,739.56			0.71		7,754.38

3.2 Grading - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.03	0.43	0.17	0.00	9.11	0.01	9.12	0.88	0.01	0.90	78.21		0.00			78.24	
Vendor	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	
Worker	0.38	0.37	3.54	0.00	22.42	0.01	22.43	2.22	0.01	2.23	254.13		0.03			254.67	
Total	0.41	0.80	3.71	0.00	31.53	0.02	31.55	3.10	0.02	3.13	332.34		0.03			332.91	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					4.52	0.00	4.52	2.48	0.00	2.48						0.00	
Off-Road	5.53	35.74	39.19	0.07		2.35	2.35		2.35	2.35	0.00	7,739.56		0.71		7,754.38	
Total	5.53	35.74	39.19	0.07	4.52	2.35	6.87	2.48	2.35	4.83	0.00	7,739.56		0.71		7,754.38	

3.2 Grading - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.03	0.43	0.17	0.00	3.00	0.01	3.01	0.27	0.01	0.29	78.21		0.00			78.24
Vendor	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
Worker	0.38	0.37	3.54	0.00	7.16	0.01	7.17	0.69	0.01	0.70	254.13		0.03			254.67
Total	0.41	0.80	3.71	0.00	10.16	0.02	10.18	0.96	0.02	0.99	332.34		0.03			332.91

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
NaturalGas Unmitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
User Defined Industrial	0	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
Total		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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.13	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
Unmitigated	3.13	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.33						0.00	0.00		0.00	0.00					0.00	
Consumer Products	2.80						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	3.13	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.33						0.00	0.00		0.00	0.00					0.00	
Consumer Products	2.80						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	3.13	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ATTACHMENT B-3

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL OUTPUTS - WINTER
MODEL “CALEEMOD SEVILLE – NEW ACCESS RD CONSTRUC V02.xls”

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Seville Solar Farm - New Access Road Construction

Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	3	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	8.24	63.85	35.86	0.07	36.04	2.88	38.93	5.58	2.88	8.47	0.00	8,057.71	0.00	0.73	0.00	8,073.06
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	5.88	36.54	42.35	0.07	14.67	2.37	17.04	3.45	2.37	5.82	0.00	8,057.71	0.00	0.73	0.00	8,073.06
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.13	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	3.13	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.13	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	3.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.52	0.00	4.52	2.48	0.00	2.48						0.00
Off-Road	7.89	63.05	32.70	0.07		2.86	2.86		2.86	2.86	7,739.56			0.71		7,754.38
Total	7.89	63.05	32.70	0.07	4.52	2.86	7.38	2.48	2.86	5.34	7,739.56			0.71		7,754.38

3.2 Grading - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.04	0.44	0.19	0.00	9.11	0.01	9.12	0.88	0.01	0.90	77.68		0.00			77.72	
Vendor	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	
Worker	0.31	0.36	2.97	0.00	22.42	0.01	22.43	2.22	0.01	2.23	240.47		0.02			240.97	
Total	0.35	0.80	3.16	0.00	31.53	0.02	31.55	3.10	0.02	3.13	318.15		0.02			318.69	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					4.52	0.00	4.52	2.48	0.00	2.48						0.00	
Off-Road	5.53	35.74	39.19	0.07		2.35	2.35		2.35	2.35	0.00	7,739.56		0.71		7,754.38	
Total	5.53	35.74	39.19	0.07	4.52	2.35	6.87	2.48	2.35	4.83	0.00	7,739.56		0.71		7,754.38	

3.2 Grading - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.04	0.44	0.19	0.00	3.00	0.01	3.01	0.27	0.01	0.29	77.68		0.00			77.72
Vendor	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
Worker	0.31	0.36	2.97	0.00	7.16	0.01	7.17	0.69	0.01	0.70	240.47		0.02			240.97
Total	0.35	0.80	3.16	0.00	10.16	0.02	10.18	0.96	0.02	0.99	318.15		0.02			318.69

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day											lb/day					
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.13	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
Unmitigated	3.13	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.33						0.00	0.00		0.00	0.00					0.00	
Consumer Products	2.80						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	3.13	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.33						0.00	0.00		0.00	0.00					0.00	
Consumer Products	2.80						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	3.13	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ATTACHMENT B-4

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL “CALEEMOD SEVILLE – NEW ACCESS RD CONSTRUC V02.xls”

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Seville Solar Farm - New Access Road Construction

Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	3	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.05	0.41	0.23	0.00	0.23	0.02	0.25	0.04	0.02	0.05	0.00	47.60	47.60	0.00	0.00	47.69
Total	0.05	0.41	0.23	0.00	0.23	0.02	0.25	0.04	0.02	0.05	0.00	47.60	47.60	0.00	0.00	47.69

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.04	0.24	0.28	0.00	0.09	0.02	0.11	0.02	0.02	0.04	0.00	47.60	47.60	0.00	0.00	47.69
Total	0.04	0.24	0.28	0.00	0.09	0.02	0.11	0.02	0.02	0.04	0.00	47.60	47.60	0.00	0.00	47.69

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr												MT/yr				
Area	0.57	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	
Energy	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	
Mobile	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	
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	0.57	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	

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.57	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
Energy	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
Mobile	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	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					0.03	0.00	0.03	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	
Off-Road	0.05	0.41	0.21	0.00		0.02	0.02		0.02	0.02	0.00	45.63	45.63	0.00	0.00	45.71	
Total	0.05	0.41	0.21	0.00	0.03	0.02	0.05	0.02	0.02	0.04	0.00	45.63	45.63	0.00	0.00	45.71	

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	0.00	0.00	0.00	0.00	0.06	0.00	0.06	0.01	0.00	0.01	0.00	0.46	0.46	0.00	0.00	0.46	
Vendor	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	
Worker	0.00	0.00	0.02	0.00	0.14	0.00	0.14	0.01	0.00	0.01	0.00	1.51	1.51	0.00	0.00	1.51	
Total	0.00	0.00	0.02	0.00	0.20	0.00	0.20	0.02	0.00	0.02	0.00	1.97	1.97	0.00	0.00	1.97	

3.2 Grading - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.03	0.00	0.03	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.04	0.23	0.25	0.00		0.02	0.02		0.02	0.02	0.00	45.63	45.63	0.00	0.00	45.71
Total	0.04	0.23	0.25	0.00	0.03	0.02	0.05	0.02	0.02	0.04	0.00	45.63	45.63	0.00	0.00	45.71

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.46
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.04	0.00	0.05	0.00	0.00	0.00	0.00	1.51	1.51	0.00	0.00	1.51
Total	0.00	0.00	0.02	0.00	0.06	0.00	0.07	0.00	0.00	0.00	0.00	1.97	1.97	0.00	0.00	1.97

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.00	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	
Unmitigated	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	
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Unmitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
User Defined Industrial	0	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
Total		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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	tons/yr											MT/yr					
User Defined Industrial	0	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	
Total		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	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.57	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.57	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.06						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	0.51						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	0.57	0.00	0.00	0.00			0.00	0.00		0.00							

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	0.06						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	0.51						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	0.57	0.00	0.00	0.00			0.00	0.00		0.00							

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

9.0 Vegetation

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ATTACHMENT C

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODELS:
“CALEEMOD SEVILLE – SWITCH STATION CONSTRUC V02.xls”

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ATTACHMENT C-1

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL “REMARKS”
MODEL “CALEEMOD SEVILLE – SWITCH STATION CONSTRUC V02.xls”

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“Remarks” for Seville Solar Farm Complex CalEEMod Models

“Remarks” are typically used in CalEEMod to explain non-default inputs. For the current modeling this document replaces the “remarks” section of the referenced CalEEMod model to provide more space to both identify non-default inputs and to explain how CalEEMod is used to calculate emissions for the current project. When defaults were retained and no further explanation was necessary, no “remarks” are recorded below.

Model Title: Seville – Switch Station Construction CalEEMod Seville – Switch Station Constrc V02.xls

Project Characteristics Tab

- **Project Characteristics** –Imperial County; Rural; Operational Year 2014; Utility Company IID

Land Use Tab

- **Land Use** - This model calculates the emissions from equipment and traffic associated with Seville Solar Farm Complex switch station area grading and switch station construction. The ‘User Defined Industrial’ land use subtype represents the Seville Solar Farm Complex. For this model in particular the ‘User Defined Industrial’ ‘Lot Acreage’ is the acreage associated with the switch station. ‘Lot Acreage’ totals to 5.5 acres.

Construction Tabs

- **Construction Phase** - This model calculates the emissions from the switch station grading/construction equipment, and the worker, vendor and haul traffic associated with construction of the switch station and grading of the switch station area. All other phases except grading are deleted.
 - Grading- 4/16/2014 – 7/31/2014
- **Off-road Equipment (Grading)** – The switch station grading/construction equipment emissions are calculated in this model. Default equipment is altered to reflect the equipment below.

Equipment Type	Amount	Daily Usage (Hours)
Aerial Lifts	2	6
Cranes	1	6
Grader	1	8
Tractor/Loader/Backhoe	1	6

- **Trips and VMT** – Only switch station grading/construction trips and VMT emissions are calculated in this model. Switch station grading/construction require 10 worker and 4 haul trips/day.
- **On-road Fugitive Dust** –Traffic is expected to access the project area via State Highway 78 (a paved state highway) and along the new, private access road from the north off of State Highway 78 (unpaved but stabilized road). Approximately 0.8 miles of unpaved roads would be traveled by traffic accessing the construction area.
 - CalEEMod default worker trip length= 10.2 miles
 - % Paved Worker = 1-(0.8 miles unpaved roads to Project / 10.2 miles)=92.2% paved
 - CalEEMod default vendor trip length= 11.9 miles
 - % Paved Vendor= 1-(0.8 miles unpaved roads to Project / 11.9 miles)=93.3% paved
 - CalEEMod default haul trip length= 20 miles
 - % Paved Haul= 1-(0.8 miles unpaved roads to Project / 20 miles)=96% paved
- **Demolition** - Demolition emissions are calculated in a separate CalEEMod Model.
- **Dust from Material Movement** - Grading fugitive dust emissions from the switch station grading are not calculated in CalEEMod. Grading fugitive dust emissions are calculated using AP-42 emission factors (see Supplemental Project Description and Attachment V). Default grading ‘dust from material movement’ acreage has been zeroed out.

- **Architectural Coating** – No coating is required for this project (see Supplemental Project Description).

Operational Tabs

- **Vehicle Trips** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Road Dust** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Woodstoves** - Operations – Area - Each solar project is expected to have a small, regular, on site staff. The project operations calculated with CalEEMod consist of the on-site emissions from the operations/maintenance building. There will also be operational emissions that are associated with worker trips/day; vendor trips/day; and haul trips/day; water truck used during panel washing; outdoor water use during panel washing; and water/wastewater consumption emissions which are all calculated using CalEEMod. Operational on-site fugitive dust and electrical energy emissions will be calculated using AP-42 and CalEEMod emissions factors, respectfully (see Supplemental Project Description).
- **Consumer Products** - Operations - Area - See response in “Woodstoves” tab above.
- **Area Coating** - Operations - Area - See response in “Woodstoves” tab above.
- **Landscape Equipment** - Operations - Area - See response in “Woodstoves” tab above.
- **Energy Use** - Operations –Annual electrical energy use emissions are calculated using the CalEEMod intensity factor for the Imperial Irrigation District (IID).
- **Water And Wastewater** - Operations - Water and Wastewater - See response in “Woodstoves” tab above.
- **Solid Waste** - Operations - Solid Waste - See response in “Woodstoves” tab above.

Vegetation Tabs

- **Land Use Change** – N/A
- **Sequestration** – N/A

Mitigation Tabs

- **Construction Off-road Equipment Mitigation** - On-site watering will occur 3 times a day (unpaved roads and during grading); all equipment is Tier 3; reduced speed on unpaved roads (25 mph).
- **Mobile Land Use Mitigation** – N/A
- **Mobile Commute Mitigation** – N/A
- **Area Mitigation** – N/A
- **Energy Mitigation** – N/A
- **Water Mitigation** – N/A
- **Waste Mitigation** - N/A

ATTACHMENT C-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL OUTPUTS - SUMMER
MODEL “CALEEMOD SEVILLE – SWITCH STATION CONSTRUC V02.xls”

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Seville Solar Farm - Switch Station Construc Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	5.5	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	2.82	18.63	12.84	0.02	16.62	1.02	17.64	1.64	1.02	2.66	0.00	2,294.43	0.00	0.25	0.00	2,299.67
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	2.19	11.40	14.42	0.02	5.27	0.91	6.18	0.51	0.91	1.42	0.00	2,294.43	0.00	0.25	0.00	2,299.67
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.73	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	5.73	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.73	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	5.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.70	18.49	11.65	0.02		1.02	1.02		1.02	1.02	2,206.03		0.24			2,211.10
Total	2.70	18.49	11.65	0.02		1.02	1.02		1.02	1.02	2,206.03		0.24			2,211.10

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.02	0.01	0.00	4.80	0.00	4.80	0.47	0.00	0.47	3.68		0.00			3.69
Vendor	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
Worker	0.13	0.12	1.18	0.00	11.82	0.00	11.83	1.17	0.00	1.18	84.71		0.01			84.89
Total	0.13	0.14	1.19	0.00	16.62	0.00	16.63	1.64	0.00	1.65	88.39		0.01			88.58

3.2 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.06	11.26	13.23	0.02		0.91	0.91		0.91	0.91	0.00	2,206.03		0.24		2,211.10
Total	2.06	11.26	13.23	0.02		0.91	0.91		0.91	0.91	0.00	2,206.03		0.24		2,211.10

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.02	0.01	0.00	1.54	0.00	1.54	0.14	0.00	0.15		3.68		0.00		3.69
Vendor	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
Worker	0.13	0.12	1.18	0.00	3.72	0.00	3.73	0.36	0.00	0.37		84.71		0.01		84.89
Total	0.13	0.14	1.19	0.00	5.26	0.00	5.27	0.50	0.00	0.52		88.39		0.01		88.58

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day											lb/day					
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.73	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	5.73	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.61						0.00	0.00		0.00	0.00					0.00	
Consumer Products	5.13						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	5.74	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.61						0.00	0.00		0.00	0.00					0.00	
Consumer Products	5.13						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	5.74	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

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ATTACHMENT C-3

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL OUTPUTS - WINTER
MODEL “CALEEMOD SEVILLE – SWITCH STATION CONSTRUC V02.xls”

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Seville Solar Farm - Switch Station Construc Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	5.5	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	2.80	18.63	12.65	0.02	16.62	1.02	17.64	1.64	1.02	2.66	0.00	2,289.85	0.00	0.25	0.00	2,295.08
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	2.17	11.40	14.23	0.02	5.27	0.91	6.18	0.51	0.91	1.42	0.00	2,289.85	0.00	0.25	0.00	2,295.08
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.73	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	5.73	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.73	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	5.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.70	18.49	11.65	0.02		1.02	1.02		1.02	1.02	2,206.03		0.24			2,211.10
Total	2.70	18.49	11.65	0.02		1.02	1.02		1.02	1.02	2,206.03		0.24			2,211.10

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.02	0.01	0.00	4.80	0.00	4.80	0.47	0.00	0.47	3.66		0.00			3.66
Vendor	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
Worker	0.10	0.12	0.99	0.00	11.82	0.00	11.83	1.17	0.00	1.18	80.16		0.01			80.32
Total	0.10	0.14	1.00	0.00	16.62	0.00	16.63	1.64	0.00	1.65	83.82		0.01			83.98

3.2 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.06	11.26	13.23	0.02		0.91	0.91		0.91	0.91	0.00	2,206.03		0.24		2,211.10
Total	2.06	11.26	13.23	0.02		0.91	0.91		0.91	0.91	0.00	2,206.03		0.24		2,211.10

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.02	0.01	0.00	1.54	0.00	1.54	0.14	0.00	0.15		3.66		0.00		3.66
Vendor	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
Worker	0.10	0.12	0.99	0.00	3.72	0.00	3.73	0.36	0.00	0.37		80.16		0.01		80.32
Total	0.10	0.14	1.00	0.00	5.26	0.00	5.27	0.50	0.00	0.52		83.82		0.01		83.98

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day											lb/day					
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.73	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	5.73	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.61						0.00	0.00		0.00	0.00					0.00	
Consumer Products	5.13						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	5.74	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.61						0.00	0.00		0.00	0.00					0.00	
Consumer Products	5.13						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	5.74	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

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ATTACHMENT C-4

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL “CALEEMOD SEVILLE – SWITCH STATION CONSTRUC V02.xls”

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Seville Solar Farm - Switch Station Construc Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	5.5	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.13	0.86	0.59	0.00	0.74	0.05	0.79	0.07	0.05	0.12	0.00	95.75	95.75	0.01	0.00	95.97
Total	0.13	0.86	0.59	0.00	0.74	0.05	0.79	0.07	0.05	0.12	0.00	95.75	95.75	0.01	0.00	95.97

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.10	0.52	0.66	0.00	0.23	0.04	0.28	0.02	0.04	0.06	0.00	95.75	95.75	0.01	0.00	95.97
Total	0.10	0.52	0.66	0.00	0.23	0.04	0.28	0.02	0.04	0.06	0.00	95.75	95.75	0.01	0.00	95.97

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	1.05	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
Energy	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
Mobile	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	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.05	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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	1.05	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	
Energy	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	
Mobile	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	
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.12	0.85	0.54	0.00		0.05	0.05		0.05	0.05	0.00	92.03	92.03	0.01	0.00	92.25
Total	0.12	0.85	0.54	0.00		0.05	0.05		0.05	0.05	0.00	92.03	92.03	0.01	0.00	92.25

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	0.00	0.00	0.00	0.00	0.21	0.00	0.21	0.02	0.00	0.02	0.00	0.15	0.15	0.00	0.00	0.15
Vendor	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
Worker	0.00	0.01	0.05	0.00	0.53	0.00	0.53	0.05	0.00	0.05	0.00	3.56	3.56	0.00	0.00	3.57
Total	0.00	0.01	0.05	0.00	0.74	0.00	0.74	0.07	0.00	0.07	0.00	3.71	3.71	0.00	0.00	3.72

3.2 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.09	0.52	0.61	0.00		0.04	0.04		0.04	0.04	0.00	92.03	92.03	0.01	0.00	92.25	
Total	0.09	0.52	0.61	0.00		0.04	0.04		0.04	0.04	0.00	92.03	92.03	0.01	0.00	92.25	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.07	0.00	0.07	0.01	0.00	0.01	0.00	0.15	0.15	0.00	0.00	0.15	
Vendor	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	
Worker	0.00	0.01	0.05	0.00	0.17	0.00	0.17	0.02	0.00	0.02	0.00	3.56	3.56	0.00	0.00	3.57	
Total	0.00	0.01	0.05	0.00	0.24	0.00	0.24	0.03	0.00	0.03	0.00	3.71	3.71	0.00	0.00	3.72	

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.00	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	
Unmitigated	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	
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Electricity Mitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Unmitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	tons/yr											MT/yr					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	tons/yr											MT/yr					
User Defined Industrial	0	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	
Total		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	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.05	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	1.05	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.11					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.94					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	1.05	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

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	0.11					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.94					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	1.05	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

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

9.0 Vegetation

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ATTACHMENT D

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODELS:

“CALEEMOD SEVILLE – TRANSMISSION LINE CONSTRUC V02.xls”

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ATTACHMENT D-1

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL “REMARKS”
MODEL “CALEEMOD SEVILLE – TRANSMISSION LINE CONSTRUC V02.xls”

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“Remarks” for Seville Solar Farm Complex CalEEMod Models

“Remarks” are typically used in CalEEMod to explain non-default inputs. For the current modeling this document replaces the “remarks” section of the referenced CalEEMod model to provide more space to both identify non-default inputs and to explain how CalEEMod is used to calculate emissions for the current project. When defaults were retained and no further explanation was necessary, no “remarks” are recorded below.

Model Title: Seville – Transmission Line Construction CalEEMod Seville – Transmission Line Constrc V02.xls

Project Characteristics Tab

- **Project Characteristics** –Imperial County; Rural; Operational Year 2014; Utility Company IID

Land Use Tab

- **Land Use** - This model calculates the emissions from equipment and traffic associated with construction of the IID 92 kV transmission line for the Seville Solar Farm Complex. The ‘User Defined Industrial’ land use subtype represents the Seville Solar Farm Complex. For this model in particular the ‘User Defined Industrial’ ‘Lot Acreage’ is the acreage associated with the IID 92 kV transmission line. ‘Lot Acreage’ totals to 2 acres.

Construction Tabs

- **Construction Phase** - This model calculates the emissions from the transmission line construction equipment, and the worker, vendor and haul traffic associated with construction of the transmission line. All other phases except building construction are deleted.
 - Building Construction- 4/16/2014 – 7/31/2014
- **Off-road Equipment (Building Construction)** – The transmission line construction equipment emissions are calculated in this model. Default equipment is altered to reflect the equipment below.

Equipment Type	Amount	Daily Usage (Hours)
Aerial Lifts	3	4
Crawler Tractors	2	4

- **Trips and VMT** – Only transmission line construction trips and VMT emissions are calculated in this model. Transmission line construction requires 12 worker and 2 haul trips/day.
- **On-road Fugitive Dust** –Traffic is expected to access the project area via State Highway 78 (a paved state highway) and along the new, private access road from the north off of State Highway 78 (unpaved but stabilized road). Approximately 0.8 miles of unpaved roads would be traveled by traffic accessing the construction area.
 - CalEEMod default worker trip length= 10.2 miles
 - % Paved Worker = $1-(0.8 \text{ miles unpaved roads to Project} / 10.2 \text{ miles})=92.2\% \text{ paved}$
 - CalEEMod default vendor trip length= 11.9 miles
 - % Paved Vendor= $1-(0.8 \text{ miles unpaved roads to Project} / 11.9 \text{ miles})=93.3\% \text{ paved}$
 - CalEEMod default haul trip length= 20 miles
 - % Paved Haul= $1-(0.8 \text{ miles unpaved roads to Project} / 20 \text{ miles})=96\% \text{ paved}$
- **Demolition** - Demolition emissions are calculated in a separate CalEEMod Model.
- **Dust from Material Movement** - Grading fugitive dust emissions are calculated in a separate CalEEMod model and Attachment V. (see Supplemental Project Description and Attachment V).
- **Architectural Coating** – No coating is required for this project (see Supplemental Project Description).

Operational Tabs

- **Vehicle Trips** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Road Dust** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Woodstoves** - Operations – Area - Each solar project is expected to have a small, regular, on site staff. The project operations calculated with CalEEMod consist of the on-site emissions from the operations/maintenance building. There will also be operational emissions that are associated with worker trips/day; vendor trips/day; and haul trips/day; water truck used during panel washing; outdoor water use during panel washing; and water/wastewater consumption emissions which are all calculated using CalEEMod. Operational on-site fugitive dust and electrical energy emissions will be calculated using AP-42 and CalEEMod emissions factors, respectfully (see Supplemental Project Description).
- **Consumer Products** - Operations - Area - See response in “Woodstoves” tab above.
- **Area Coating** - Operations - Area - See response in “Woodstoves” tab above.
- **Landscape Equipment** - Operations - Area - See response in “Woodstoves” tab above.
- **Energy Use** - Operations –Annual electrical energy use emissions are calculated using the CalEEMod intensity factor for the Imperial Irrigation District (IID).
- **Water And Wastewater** - Operations - Water and Wastewater - See response in “Woodstoves” tab above.
- **Solid Waste** - Operations - Solid Waste - See response in “Woodstoves” tab above.

Vegetation Tabs

- **Land Use Change** – N/A
- **Sequestration** – N/A

Mitigation Tabs

- **Construction Off-road Equipment Mitigation** - On-site watering will occur 3 times a day (unpaved roads); all equipment is Tier 3; reduced speed on unpaved roads (25 mph).
- **Mobile Land Use Mitigation** – N/A
- **Mobile Commute Mitigation** – N/A
- **Area Mitigation** – N/A
- **Energy Mitigation** – N/A
- **Water Mitigation** – N/A
- **Waste Mitigation** - N/A

ATTACHMENT D-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL OUTPUTS - SUMMER
MODEL “CALEEMOD SEVILLE – TRANSMISSION LINE CONSTRUC V02.xls”

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Seville Solar Farm - Transmission Line Construction

Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	2	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	1.75	8.08	7.27	0.01	16.59	0.67	17.26	1.64	0.67	2.31	0.00	863.95	0.00	0.15	0.00	867.17
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	1.23	4.96	6.54	0.01	5.24	0.47	5.71	0.51	0.47	0.98	0.00	863.95	0.00	0.15	0.00	867.17
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.09	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	2.09	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.09	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.60	7.92	5.85	0.01		0.67	0.67		0.67	0.67	760.45		0.14			763.46
Total	1.60	7.92	5.85	0.01		0.67	0.67		0.67	0.67	760.45		0.14			763.46

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.01	0.00	0.00	2.40	0.00	2.40	0.24	0.00	0.24	1.84		0.00			1.84
Vendor	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
Worker	0.15	0.15	1.42	0.00	14.19	0.00	14.19	1.41	0.00	1.41	101.65		0.01			101.87
Total	0.15	0.16	1.42	0.00	16.59	0.00	16.59	1.65	0.00	1.65	103.49		0.01			103.71

3.2 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.08	4.80	5.12	0.01		0.46	0.46		0.46	0.46	0.00	760.45		0.14		763.46
Total	1.08	4.80	5.12	0.01		0.46	0.46		0.46	0.46	0.00	760.45		0.14		763.46

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.01	0.00	0.00	0.77	0.00	0.77	0.07	0.00	0.07		1.84		0.00		1.84
Vendor	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
Worker	0.15	0.15	1.42	0.00	4.47	0.00	4.47	0.44	0.00	0.44		101.65		0.01		101.87
Total	0.15	0.16	1.42	0.00	5.24	0.00	5.24	0.51	0.00	0.51		103.49		0.01		103.71

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
NaturalGas Unmitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
User Defined Industrial	0	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
Total		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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	2.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.22						0.00	0.00		0.00	0.00					0.00	
Consumer Products	1.86						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	2.08	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.22						0.00	0.00		0.00	0.00					0.00	
Consumer Products	1.86						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	2.08	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

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ATTACHMENT D-3

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL OUTPUTS - WINTER
MODEL “CALEEMOD SEVILLE – TRANSMISSION LINE CONSTRUC V02.xls”

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Seville Solar Farm - Transmission Line Construction

Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	2	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	1.72	8.07	7.05	0.01	16.59	0.67	17.26	1.64	0.67	2.31	0.00	858.47	0.00	0.15	0.00	861.68
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	1.21	4.95	6.31	0.01	5.24	0.47	5.71	0.51	0.47	0.98	0.00	858.47	0.00	0.15	0.00	861.68
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.09	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	2.09	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.09	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.60	7.92	5.85	0.01		0.67	0.67		0.67	0.67	760.45		0.14			763.46
Total	1.60	7.92	5.85	0.01		0.67	0.67		0.67	0.67	760.45		0.14			763.46

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.01	0.00	0.00	2.40	0.00	2.40	0.24	0.00	0.24	1.83		0.00			1.83
Vendor	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
Worker	0.13	0.14	1.19	0.00	14.19	0.00	14.19	1.41	0.00	1.41	96.19		0.01			96.39
Total	0.13	0.15	1.19	0.00	16.59	0.00	16.59	1.65	0.00	1.65	98.02		0.01			98.22

3.2 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.08	4.80	5.12	0.01		0.46	0.46		0.46	0.46	0.00	760.45		0.14		763.46
Total	1.08	4.80	5.12	0.01		0.46	0.46		0.46	0.46	0.00	760.45		0.14		763.46

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.01	0.00	0.00	0.77	0.00	0.77	0.07	0.00	0.07		1.83		0.00		1.83
Vendor	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
Worker	0.13	0.14	1.19	0.00	4.47	0.00	4.47	0.44	0.00	0.44		96.19		0.01		96.39
Total	0.13	0.15	1.19	0.00	5.24	0.00	5.24	0.51	0.00	0.51		98.02		0.01		98.22

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
NaturalGas Unmitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
User Defined Industrial	0	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
Total		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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	2.09	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.22						0.00	0.00		0.00	0.00					0.00	
Consumer Products	1.86						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	2.08	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.22						0.00	0.00		0.00	0.00					0.00	
Consumer Products	1.86						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	2.08	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

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ATTACHMENT D-4

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “COMMON INFRASTRUCTURE” ACTIVITIES

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL “CALEEMOD SEVILLE – TRANSMISSION LINE CONSTRUC V02.xls”

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Seville Solar Farm - Transmission Line Construction

Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	2	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.08	0.37	0.33	0.00	0.74	0.03	0.77	0.07	0.03	0.10	0.00	36.08	36.08	0.01	0.00	36.21
Total	0.08	0.37	0.33	0.00	0.74	0.03	0.77	0.07	0.03	0.10	0.00	36.08	36.08	0.01	0.00	36.21

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.06	0.23	0.30	0.00	0.23	0.02	0.25	0.02	0.02	0.04	0.00	36.08	36.08	0.01	0.00	36.21
Total	0.06	0.23	0.30	0.00	0.23	0.02	0.25	0.02	0.02	0.04	0.00	36.08	36.08	0.01	0.00	36.21

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.38	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
Energy	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
Mobile	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	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.38	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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.38	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
Energy	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
Mobile	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	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.07	0.36	0.27	0.00		0.03	0.03		0.03	0.03	0.00	31.73	31.73	0.01	0.00	31.85
Total	0.07	0.36	0.27	0.00		0.03	0.03		0.03	0.03	0.00	31.73	31.73	0.01	0.00	31.85

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	0.00	0.00	0.00	0.00	0.11	0.00	0.11	0.01	0.00	0.01	0.00	0.08	0.08	0.00	0.00	0.08
Vendor	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
Worker	0.01	0.01	0.06	0.00	0.63	0.00	0.63	0.06	0.00	0.06	0.00	4.28	4.28	0.00	0.00	4.28
Total	0.01	0.01	0.06	0.00	0.74	0.00	0.74	0.07	0.00	0.07	0.00	4.36	4.36	0.00	0.00	4.36

3.2 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.05	0.22	0.24	0.00		0.02	0.02		0.02	0.02	0.00	31.73	31.73	0.01	0.00	31.85
Total	0.05	0.22	0.24	0.00		0.02	0.02		0.02	0.02	0.00	31.73	31.73	0.01	0.00	31.85

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.08
Vendor	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
Worker	0.01	0.01	0.06	0.00	0.20	0.00	0.20	0.02	0.00	0.02	0.00	4.28	4.28	0.00	0.00	4.28
Total	0.01	0.01	0.06	0.00	0.23	0.00	0.23	0.02	0.00	0.02	0.00	4.36	4.36	0.00	0.00	4.36

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr												MT/yr					
Mitigated	0.00	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	0.00	
Unmitigated	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	0.00	
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Electricity Mitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Unmitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	tons/yr											MT/yr					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	tons/yr											MT/yr					
User Defined Industrial	0	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	
Total		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	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.38	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.38	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.04						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	0.34						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	0.38	0.00	0.00	0.00			0.00	0.00		0.00							

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	0.04						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	0.34						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	0.38	0.00	0.00	0.00			0.00	0.00		0.00							

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

9.0 Vegetation

ATTACHMENT E

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODELS:

“CALEEMOD SEVILLE – INTERNAL RD CONSTRUC SMALL PRJ V02.xls”

ATTACHMENT E-1

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL “REMARKS”

MODEL “CALEEMOD SEVILLE – INTERNAL RD CONSTRUC SMALL PRJ V02.xls”

“Remarks” for Seville Solar Farm Complex CalEEMod Models

“Remarks” are typically used in CalEEMod to explain non-default inputs. For the current modeling this document replaces the “remarks” section of the referenced CalEEMod model to provide more space to both identify non-default inputs and to explain how CalEEMod is used to calculate emissions for the current project. When defaults were retained and no further explanation was necessary, no “remarks” are recorded below.

Model Title: Seville – Internal Rd Network Construction CalEEMod Seville – Internal Rd Construc Small Prj V02.xls

Project Characteristics Tab

- **Project Characteristics** –Imperial County; Rural; Operational Year 2014; Utility Company IID

Land Use Tab

- **Land Use** - This model calculates the emissions from equipment and traffic associated with the grading and construction of the internal road network for the Seville Solar Farm Complex. The ‘User Defined Industrial’ land use subtype represents the Seville Solar Farm. For this model in particular the ‘User Defined Industrial’ ‘Lot Acreage’ is the acreage associated with a one mile portion of the internal common use road for which each of the five Seville Solar Farm lots would construct. ‘Lot Acreage’ for this portion of the internal road network for the Seville Solar Farm “Small Project” Lot totals to 3.5 acres.

Construction Tabs

- **Construction Phase** - This model calculates the emissions from the internal road network grading/construction equipment, and the worker, vendor and haul traffic associated with grading/construction of the portion of the internal road network. All other phases except grading are deleted.
 - Grading - 4/16/2014 – 4/30/2014
- **Off-road Equipment (Grading)** – Internal road network grading/construction equipment emissions are calculated in this model. Default equipment is altered to reflect the equipment below.

Equipment Type	Amount	Daily Usage (Hours)
Graders	1	6
Water Trucks (Off-Highway Trucks)	1	6
Rollers	2	4
Tractors/Loaders/Backhoes	1	6

- **Trips and VMT** – Only internal road network grading/construction trips and VMT emissions are calculated in this model. Grading requires 30 worker and 6 haul trips/day.
- **On-road Fugitive Dust** –Traffic is expected to access the project area via State Highway 78 (a paved state highway) and a new, private access road from the north off of State Highway 78 on the property (unpaved but stabilized road). Approximately 2.0 miles of unpaved roads would be traveled by traffic accessing the “Small Project” area.
 - CalEEMod default worker trip length= 10.2 miles
 - % Paved Worker = 1-(2.0 miles unpaved roads to Project / 10.2 miles)=80.4% paved
 - CalEEMod default vendor trip length= 11.9 miles
 - % Paved Vendor= 1-(2.0 miles unpaved roads to Project / 11.9 miles)=83.2% paved
 - CalEEMod default haul trip length= 20 miles
 - % Paved Haul= 1-(2.0 miles unpaved roads to Project / 20 miles)=90% paved
- **Demolition** - Demolition emissions are calculated in a separate CalEEMod Model.
- **Dust from Material Movement** - Grading fugitive dust emissions are not calculated in CalEEMod. Grading fugitive dust emissions are calculated using AP-42 emission factors (see Supplemental Project

Description and Attachment V). Default grading ‘dust from material movement’ acreage has been zeroed out.

- **Architectural Coating** - No coating is required for this project (see Supplemental Project Description).

Operational Tabs

- **Vehicle Trips** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Road Dust** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Woodstoves** - Operations – Area - Each solar project is expected to have a small, regular, on site staff. The project operations calculated with CalEEMod consist of the on-site emissions from the operations/maintenance building. There will also be operational emissions that are associated with worker trips/day; vendor trips/day; and haul trips/day; water truck used during panel washing; outdoor water use during panel washing; and water/wastewater consumption emissions which are all calculated using CalEEMod. Operational on-site fugitive dust and electrical energy emissions will be calculated using AP-42 and CalEEMod emissions factors, respectfully (see Supplemental Project Description).
- **Consumer Products** - Operations - Area - See response in “Woodstoves” tab above.
- **Area Coating** - Operations - Area - See response in “Woodstoves” tab above.
- **Landscape Equipment** - Operations - Area - See response in “Woodstoves” tab above.
- **Energy Use** - Operations –Annual electrical energy use emissions are calculated using the CalEEMod intensity factor for the Imperial Irrigation District (IID).
- **Water And Wastewater** - Operations - Water and Wastewater - See response in “Woodstoves” tab above.
- **Solid Waste** - Operations - Solid Waste - See response in “Woodstoves” tab above.

Vegetation Tabs

- **Land Use Change** – N/A
- **Sequestration** – N/A

Mitigation Tabs

- **Construction Off-road Equipment Mitigation** - On-site watering will occur 3 times a day (unpaved roads and during grading); all equipment is Tier 3; reduced speed on unpaved roads (25 mph).
- **Mobile Land Use Mitigation** – N/A
- **Mobile Commute Mitigation** – N/A
- **Area Mitigation** – N/A
- **Energy Mitigation** – N/A
- **Water Mitigation** – N/A
- **Waste Mitigation** - N/A

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ATTACHMENT E-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - SUMMER
MODEL “CALEEMOD SEVILLE – INTERNAL RD CONSTRUC SMALL PRJ V02.xls”

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Seville Solar Farm - Internal Rd Network Construction

Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	3.6	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	3.57	23.69	17.01	0.03	106.36	1.30	107.66	10.59	1.30	11.88	0.00	3,447.31	0.00	0.31	0.00	3,453.82
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	2.75	15.56	21.01	0.03	33.09	1.15	34.23	3.27	1.15	4.42	0.00	3,447.31	0.00	0.31	0.00	3,453.82
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.75	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	3.75	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.75	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00
Off-Road	3.18	23.11	13.38	0.03		1.28	1.28		1.28	1.28		3,154.07		0.28		3,160.03
Total	3.18	23.11	13.38	0.03	0.00	1.28	1.28	0.00	1.28	1.28		3,154.07		0.28		3,160.03

3.2 Grading - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.02	0.22	0.08	0.00	17.79	0.01	17.80	1.76	0.01	1.77	39.10		0.00			39.12	
Vendor	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	
Worker	0.38	0.37	3.54	0.00	88.57	0.01	88.58	8.82	0.01	8.83	254.13		0.03			254.67	
Total	0.40	0.59	3.62	0.00	106.36	0.02	106.38	10.58	0.02	10.60	293.23		0.03			293.79	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00	
Off-Road	2.36	14.98	17.38	0.03		1.13	1.13		1.13	1.13	0.00	3,154.07		0.28		3,160.03	
Total	2.36	14.98	17.38	0.03	0.00	1.13	1.13	0.00	1.13	1.13	0.00	3,154.07		0.28		3,160.03	

3.2 Grading - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.02	0.22	0.08	0.00	5.57	0.01	5.58	0.54	0.01	0.55	39.10		0.00			39.12
Vendor	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
Worker	0.38	0.37	3.54	0.00	27.51	0.01	27.52	2.73	0.01	2.74	254.13		0.03			254.67
Total	0.40	0.59	3.62	0.00	33.08	0.02	33.10	3.27	0.02	3.29	293.23		0.03			293.79

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day											lb/day					
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.75	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	3.75	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.40						0.00	0.00		0.00	0.00					0.00	
Consumer Products	3.36						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	
Total	3.76	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.40						0.00	0.00		0.00	0.00					0.00	
Consumer Products	3.36						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	
Total	3.76	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ATTACHMENT E-3

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - WINTER
MODEL “CALEEMOD SEVILLE – INTERNAL RD CONSTRUC SMALL PRJ V02.xls”

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Seville Solar Farm - Internal Rd Network Construction

Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	3.6	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	3.51	23.68	16.44	0.03	106.36	1.30	107.66	10.59	1.30	11.88	0.00	3,433.39	0.00	0.31	0.00	3,439.85
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	2.69	15.56	20.44	0.03	33.09	1.15	34.23	3.27	1.15	4.42	0.00	3,433.39	0.00	0.31	0.00	3,439.85
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.75	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	3.75	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.75	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00
Off-Road	3.18	23.11	13.38	0.03		1.28	1.28		1.28	1.28		3,154.07		0.28		3,160.03
Total	3.18	23.11	13.38	0.03	0.00	1.28	1.28	0.00	1.28	1.28		3,154.07		0.28		3,160.03

3.2 Grading - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.02	0.22	0.09	0.00	17.79	0.01	17.80	1.76	0.01	1.77	38.84		0.00			38.86	
Vendor	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	
Worker	0.31	0.36	2.97	0.00	88.57	0.01	88.58	8.82	0.01	8.83	240.47		0.02			240.97	
Total	0.33	0.58	3.06	0.00	106.36	0.02	106.38	10.58	0.02	10.60	279.31		0.02			279.83	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00	
Off-Road	2.36	14.98	17.38	0.03		1.13	1.13		1.13	1.13	0.00	3,154.07		0.28		3,160.03	
Total	2.36	14.98	17.38	0.03	0.00	1.13	1.13	0.00	1.13	1.13	0.00	3,154.07		0.28		3,160.03	

3.2 Grading - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.02	0.22	0.09	0.00	5.57	0.01	5.58	0.54	0.01	0.55	38.84		0.00			38.86
Vendor	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
Worker	0.31	0.36	2.97	0.00	27.51	0.01	27.52	2.73	0.01	2.74	240.47		0.02			240.97
Total	0.33	0.58	3.06	0.00	33.08	0.02	33.10	3.27	0.02	3.29	279.31		0.02			279.83

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day											lb/day					
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.75	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	3.75	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.40						0.00	0.00		0.00	0.00					0.00	
Consumer Products	3.36						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	
Total	3.76	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.40						0.00	0.00		0.00	0.00					0.00	
Consumer Products	3.36						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	
Total	3.76	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ATTACHMENT E-4

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL “CALEEMOD SEVILLE – INTERNAL RD CONSTRUC SMALL PRJ V02.xls”

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Seville Solar Farm - Internal Rd Network Construction
Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	3.6	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2014	0.02	0.15	0.11	0.00	0.67	0.01	0.68	0.07	0.01	0.07	0.00	20.33	20.33	0.00	0.00	20.37	
Total	0.02	0.15	0.11	0.00	0.67	0.01	0.68	0.07	0.01	0.07	0.00	20.33	20.33	0.00	0.00	20.37	

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2014	0.02	0.10	0.13	0.00	0.21	0.01	0.22	0.02	0.01	0.03	0.00	20.33	20.33	0.00	0.00	20.37	
Total	0.02	0.10	0.13	0.00	0.21	0.01	0.22	0.02	0.01	0.03	0.00	20.33	20.33	0.00	0.00	20.37	

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.69	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
Energy	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
Mobile	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	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.69	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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.69	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	
Energy	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	
Mobile	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	
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.15	0.09	0.00		0.01	0.01		0.01	0.01	0.00	18.59	18.59	0.00	0.00	18.63
Total	0.02	0.15	0.09	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	18.59	18.59	0.00	0.00	18.63

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	0.00	0.00	0.00	0.00	0.11	0.00	0.11	0.01	0.00	0.01	0.00	0.23	0.23	0.00	0.00	0.23
Vendor	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
Worker	0.00	0.00	0.02	0.00	0.56	0.00	0.56	0.06	0.00	0.06	0.00	1.51	1.51	0.00	0.00	1.51
Total	0.00	0.00	0.02	0.00	0.67	0.00	0.67	0.07	0.00	0.07	0.00	1.74	1.74	0.00	0.00	1.74

3.2 Grading - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Off-Road	0.02	0.10	0.11	0.00		0.01	0.01		0.01	0.01	0.00	18.59	18.59	0.00	0.00	18.63	
Total	0.02	0.10	0.11	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	18.59	18.59	0.00	0.00	18.63	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.00	0.00	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23	
Vendor	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	
Worker	0.00	0.00	0.02	0.00	0.17	0.00	0.17	0.02	0.00	0.02	0.00	1.51	1.51	0.00	0.00	1.51	
Total	0.00	0.00	0.02	0.00	0.21	0.00	0.21	0.02	0.00	0.02	0.00	1.74	1.74	0.00	0.00	1.74	

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.00	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	
Unmitigated	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	
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Unmitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
User Defined Industrial	0	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
Total		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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	tons/yr											MT/yr					
User Defined Industrial	0	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	
Total		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	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.69	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
Unmitigated	0.69	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.07						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	0.61						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	0.68	0.00	0.00	0.00			0.00	0.00		0.00							

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	0.07						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	0.61						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	0.68	0.00	0.00	0.00			0.00	0.00		0.00							

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

9.0 Vegetation

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ATTACHMENT F

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODELS:
“CALEEMOD SEVILLE – DEMOLITION SMALL PRJ V02.xls”

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ATTACHMENT F-1

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL “REMARKS”

MODEL “CALEEMOD SEVILLE – DEMOLITION SMALL PRJ V02.xls”

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“Remarks” for Seville Solar Farm Complex CalEEMod Models

“Remarks” are typically used in CalEEMod to explain non-default inputs. For the current modeling this document replaces the “remarks” section of the referenced CalEEMod model to provide more space to both identify non-default inputs and to explain how CalEEMod is used to calculate emissions for the current project. When defaults were retained and no further explanation was necessary, no “remarks” are recorded below.

Model Title: Seville – Demolition CalEEMod Seville – Demolition Small Prj V02.xls

Project Characteristics Tab

- **Project Characteristics** –Imperial County; Rural; Operational Year 2014; Utility Company IID

Land Use Tab

- **Land Use** - This model calculates the emissions from equipment and traffic associated with demolition on the Seville Solar Farm “Small Project” lot. The ‘User Defined Industrial’ land use subtype represents the Seville Solar Farm. For this model in particular the ‘User Defined Industrial’ ‘Lot Acreage’ is the acreage associated with one of the 185-acre Seville Solar Farm “Small Project” Lots (Lot1, Lot 2 or Lot 3). ‘Lot Acreage’ for one Seville Solar Farm “Small Project” Lot totals to 185 acres.

Construction Tabs

- **Construction Phase** - This model calculates the emissions from the demolition fugitive dust, demolition equipment, and the worker, vendor and haul traffic associated with demolition. All other phases except demolition are deleted.
 - Demolition - 4/16/2014 – 4/30/2014
- **Off-road Equipment (Demolition)** – Demolition equipment emissions are calculated for a 185-acre “Small Project” lot in this model. Default equipment is altered to reflect the equipment below.

Equipment Type	Amount	Daily Usage (Hours)
Tractors/Loaders/Backhoes	2	8

- **Trips and VMT** – Only demolition trips and VMT emissions are calculated for a 185-acre “Small Project” lot in this model. Demolition requires 8 worker and 6 haul trips/day.
- **On-road Fugitive Dust** –Traffic is expected to access the project area via State Highway 78 (a paved state highway) and a new, private access road from the north off of State Highway 78 on the property (unpaved but stabilized road). Approximately 2.0 miles of unpaved roads would be traveled by traffic accessing the “Small Project” area.
 - CalEEMod default worker trip length= 10.2 miles
 - % Paved Worker = 1-(2.0 miles unpaved roads to Project / 10.2 miles)=80.4% paved
 - CalEEMod default vendor trip length= 11.9 miles
 - % Paved Vendor= 1-(2.0 miles unpaved roads to Project / 11.9 miles)=83.2% paved
 - CalEEMod default haul trip length= 20 miles
 - % Paved Haul= 1-(2.0 miles unpaved roads to Project / 20 miles)=90% paved
- **Demolition** - Demolition fugitive dust emissions are calculated in this model. The tons of debris hauled is equal to 6 haul trucks per day in on-road fugitive dust (above).
- **Dust from Material Movement** - Grading emissions are calculated in a separate CalEEMod model and Attachment V. (see Supplemental Project Description and Attachment V)
- **Architectural Coating** - No coating is required for this project (see Supplemental Project Description).

Operational Tabs

- **Vehicle Trips** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Road Dust** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Woodstoves** - Operations – Area - Each solar project is expected to have a small, regular, on site staff. The project operations calculated with CalEEMod consist of the on-site emissions from the operations/maintenance building. There will also be operational emissions that are associated with worker trips/day; vendor trips/day; and haul trips/day; water truck used during panel washing; outdoor water use during panel washing; and water/wastewater consumption emissions which are all calculated using CalEEMod. Operational on-site fugitive dust and electrical energy emissions will be calculated using AP-42 and CalEEMod emissions factors, respectfully (see Supplemental Project Description).
- **Consumer Products** - Operations - Area - See response in “Woodstoves” tab above.
- **Area Coating** - Operations - Area - See response in “Woodstoves” tab above.
- **Landscape Equipment** - Operations - Area - See response in “Woodstoves” tab above.
- **Energy Use** - Operations –Annual electrical energy use emissions are calculated using the CalEEMod intensity factor for the Imperial Irrigation District (IID).
- **Water And Wastewater** - Operations - Water and Wastewater - See response in “Woodstoves” tab above.
- **Solid Waste** - Operations - Solid Waste - See response in “Woodstoves” tab above.

Vegetation Tabs

- **Land Use Change** – N/A
- **Sequestration** – N/A

Mitigation Tabs

- **Construction Off-road Equipment Mitigation** - On-site watering will occur 3 times a day (unpaved roads); all equipment is Tier 3; reduced speed on unpaved roads (25 mph).
- **Mobile Land Use Mitigation** – N/A
- **Mobile Commute Mitigation** – N/A
- **Area Mitigation** – N/A
- **Energy Mitigation** – N/A
- **Water Mitigation** – N/A
- **Waste Mitigation** - N/A

ATTACHMENT F-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - SUMMER
MODEL “CALEEMOD SEVILLE – DEMOLITION SMALL PRJ V02.xls”

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Seville Solar Farm - Demolition
Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	1.13	7.10	6.62	0.01	41.41	0.55	41.95	4.12	0.55	4.66	0.00	933.02	0.00	0.10	0.00	935.07
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	0.84	4.67	6.41	0.01	12.91	0.45	13.36	1.27	0.45	1.72	0.00	933.02	0.00	0.10	0.00	935.07
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.01	6.79	5.59	0.01		0.54	0.54		0.54	0.54	826.15			0.09		828.04
Total	1.01	6.79	5.59	0.01		0.54	0.54		0.54	0.54	826.15			0.09		828.04

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.02	0.22	0.08	0.00	17.79	0.01	17.80	1.76	0.01	1.77	39.10			0.00		39.12
Vendor	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
Worker	0.10	0.10	0.95	0.00	23.62	0.00	23.62	2.35	0.00	2.36	67.77			0.01		67.91
Total	0.12	0.32	1.03	0.00	41.41	0.01	41.42	4.11	0.01	4.13	106.87			0.01		107.03

3.2 Demolition - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.73	4.36	5.38	0.01		0.44	0.44		0.44	0.44	0.00	826.15		0.09		828.04
Total	0.73	4.36	5.38	0.01		0.44	0.44		0.44	0.44	0.00	826.15		0.09		828.04

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.02	0.22	0.08	0.00	5.57	0.01	5.58	0.54	0.01	0.55		39.10		0.00		39.12
Vendor	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
Worker	0.10	0.10	0.95	0.00	7.34	0.00	7.34	0.73	0.00	0.73		67.77		0.01		67.91
Total	0.12	0.32	1.03	0.00	12.91	0.01	12.92	1.27	0.01	1.28		106.87		0.01		107.03

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day											lb/day					
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

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ATTACHMENT F-3

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - WINTER
MODEL “CALEEMOD SEVILLE – DEMOLITION SMALL PRJ V02.xls”

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Seville Solar Farm - Demolition

Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	1.11	7.10	6.48	0.01	41.41	0.55	41.95	4.12	0.55	4.66	0.00	929.11	0.00	0.10	0.00	931.15
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	0.83	4.68	6.26	0.01	12.91	0.45	13.36	1.27	0.45	1.72	0.00	929.11	0.00	0.10	0.00	931.15
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.01	6.79	5.59	0.01		0.54	0.54		0.54	0.54	826.15		0.09		828.04	
Total	1.01	6.79	5.59	0.01		0.54	0.54		0.54	0.54	826.15		0.09		828.04	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.02	0.22	0.09	0.00	17.79	0.01	17.80	1.76	0.01	1.77	38.84		0.00		38.86	
Vendor	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	
Worker	0.08	0.10	0.79	0.00	23.62	0.00	23.62	2.35	0.00	2.36	64.13		0.01		64.26	
Total	0.10	0.32	0.88	0.00	41.41	0.01	41.42	4.11	0.01	4.13	102.97		0.01		103.12	

3.2 Demolition - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.73	4.36	5.38	0.01		0.44	0.44		0.44	0.44	0.00	826.15		0.09		828.04
Total	0.73	4.36	5.38	0.01		0.44	0.44		0.44	0.44	0.00	826.15		0.09		828.04

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.02	0.22	0.09	0.00	5.57	0.01	5.58	0.54	0.01	0.55		38.84		0.00		38.86
Vendor	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
Worker	0.08	0.10	0.79	0.00	7.34	0.00	7.34	0.73	0.00	0.73		64.13		0.01		64.26
Total	0.10	0.32	0.88	0.00	12.91	0.01	12.92	1.27	0.01	1.28		102.97		0.01		103.12

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day											lb/day					
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00	
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00		0.00

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00	
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00		0.00

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

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ATTACHMENT F-4

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL “CALEEMOD SEVILLE – DEMOLITION SMALL PRJ V02.xls”

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Seville Solar Farm - Demolition
Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.01	0.05	0.04	0.00	0.26	0.00	0.26	0.03	0.00	0.03	0.00	5.50	5.50	0.00	0.00	5.51
Total	0.01	0.05	0.04	0.00	0.26	0.00	0.26	0.03	0.00	0.03	0.00	5.50	5.50	0.00	0.00	5.51

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.01	0.03	0.04	0.00	0.08	0.00	0.08	0.01	0.00	0.01	0.00	5.50	5.50	0.00	0.00	5.51
Total	0.01	0.03	0.04	0.00	0.08	0.00	0.08	0.01	0.00	0.01	0.00	5.50	5.50	0.00	0.00	5.51

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	35.20	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
Energy	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
Mobile	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	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	35.20	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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Area	35.20	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	
Energy	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	
Mobile	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	
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	35.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.87	4.87	0.00	0.00	4.88
Total	0.01	0.04	0.04	0.00		0.00	0.00		0.00	0.00	0.00	4.87	4.87	0.00	0.00	4.88

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	0.00	0.00	0.00	0.00	0.11	0.00	0.11	0.01	0.00	0.01	0.00	0.23	0.23	0.00	0.00	0.23
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.15	0.00	0.15	0.01	0.00	0.01	0.00	0.40	0.40	0.00	0.00	0.40
Total	0.00	0.00	0.01	0.00	0.26	0.00	0.26	0.02	0.00	0.02	0.00	0.63	0.63	0.00	0.00	0.63

3.2 Demolition - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.87	4.87	0.00	0.00	4.88
Total	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00	0.00	4.87	4.87	0.00	0.00	4.88

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.40	0.40	0.00	0.00	0.40
Total	0.00	0.00	0.01	0.00	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.63	0.63	0.00	0.00	0.63

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.00	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	
Unmitigated	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	
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Electricity Mitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Unmitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	tons/yr											MT/yr					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	tons/yr											MT/yr					
User Defined Industrial	0	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	
Total		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	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	35.20	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	35.20	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	3.73						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	31.47						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	35.20	0.00	0.00	0.00			0.00	0.00		0.00							

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	3.73						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	31.47						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	35.20	0.00	0.00	0.00			0.00	0.00		0.00							

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

9.0 Vegetation

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ATTACHMENT G

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODELS:

“CALEEMOD SEVILLE – SITE PREPARATION SMALL PRJ V02.xls”

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ATTACHMENT G-1

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL “REMARKS”

MODEL “CALEEMOD SEVILLE – SITE PREPARATION SMALL PRJ V02.xls”

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“Remarks” for Seville Solar Farm Complex CalEEMod Models

“Remarks” are typically used in CalEEMod to explain non-default inputs. For the current modeling this document replaces the “remarks” section of the referenced CalEEMod model to provide more space to both identify non-default inputs and to explain how CalEEMod is used to calculate emissions for the current project. When defaults were retained and no further explanation was necessary, no “remarks” are recorded below.

Model Title: Seville – Site Preparation CalEEMod Seville – Site Preparation Small Prj V02.xls

Project Characteristics Tab

- **Project Characteristics** –Imperial County; Rural; Operational Year 2014; Utility Company IID

Land Use Tab

- **Land Use** - This model calculates the emissions from equipment and traffic associated with site preparation on the Seville Solar Farm “Small Project” lot. The ‘User Defined Industrial’ land use subtype represents the Seville Solar Farm. For this model in particular the ‘User Defined Industrial’ ‘Lot Acreage’ is the acreage associated with one of the 185-acre Seville Solar Farm “Small Project” Lots (Lot1, Lot 2 or Lot 3). ‘Lot Acreage’ for one Seville Solar Farm “Small Project” Lot totals to 185 acres.

Construction Tabs

- **Construction Phase** - This model calculates the emissions from the site preparation fugitive dust, site preparation equipment, and the worker, vendor and haul traffic associated with site preparation. All other phases except site preparation are deleted.
 - Site Preparation - 4/16/2014 – 4/30/2014
- **Off-road Equipment (Site Preparation)** – Site preparation equipment emissions are calculated for a 185-acre “Small Project” lot in this model. Default equipment is altered to reflect the equipment below.

Equipment Type	Amount	Daily Usage (Hours)
Tractors/Loaders/Backhoes	3	8

- **Trips and VMT** – Only site preparation trips and VMT emissions are calculated for a 185-acre “Small Project” lot in this model. Site preparation requires 8 worker and 6 haul trips/day.
- **On-road Fugitive Dust** –Traffic is expected to access the project area via State Highway 78 (a paved state highway) and a new, private access road from the north off of State Highway 78 on the property (unpaved but stabilized road). Approximately 2.0 miles of unpaved roads would be traveled by traffic accessing the “Small Project” area.
 - CalEEMod default worker trip length= 10.2 miles
 - % Paved Worker = $1-(2.0 \text{ miles unpaved roads to Project} / 10.2 \text{ miles})=80.4\%$ paved
 - CalEEMod default vendor trip length= 11.9 miles
 - % Paved Vendor= $1-(2.0 \text{ miles unpaved roads to Project} / 11.9 \text{ miles})=83.2\%$ paved
 - CalEEMod default haul trip length= 20 miles
 - % Paved Haul= $1-(2.0 \text{ miles unpaved roads to Project} / 20 \text{ miles})=90\%$ paved
- **Demolition** - Demolition emissions are calculated in a separate CalEEMod Model.
- **Dust from Material Movement** - Grading emissions are calculated in a separate CalEEMod model and Attachment V. (see Supplemental Project Description and Attachment V). Site preparation emissions are calculated in this CalEEMod Model.
- **Architectural Coating** - No coating is required for this project (see Supplemental Project Description).

Operational Tabs

- **Vehicle Trips** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Road Dust** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Woodstoves** - Operations – Area - Each solar project is expected to have a small, regular, on site staff. The project operations calculated with CalEEMod consist of the on-site emissions from the operations/maintenance building. There will also be operational emissions that are associated with worker trips/day; vendor trips/day; and haul trips/day; water truck used during panel washing; outdoor water use during panel washing; and water/wastewater consumption emissions which are all calculated using CalEEMod. Operational on-site fugitive dust and electrical energy emissions will be calculated using AP-42 and CalEEMod emissions factors, respectfully (see Supplemental Project Description).
- **Consumer Products** - Operations - Area - See response in “Woodstoves” tab above.
- **Area Coating** - Operations - Area - See response in “Woodstoves” tab above.
- **Landscape Equipment** - Operations - Area - See response in “Woodstoves” tab above.
- **Energy Use** - Operations –Annual electrical energy use emissions are calculated using the CalEEMod intensity factor for the Imperial Irrigation District (IID).
- **Water And Wastewater** - Operations - Water and Wastewater - See response in “Woodstoves” tab above.
- **Solid Waste** - Operations - Solid Waste - See response in “Woodstoves” tab above.

Vegetation Tabs

- **Land Use Change** – N/A
- **Sequestration** – N/A

Mitigation Tabs

- **Construction Off-road Equipment Mitigation** - On-site watering will occur 3 times a day (unpaved roads); all equipment is Tier 3; reduced speed on unpaved roads (25 mph).
- **Mobile Land Use Mitigation** – N/A
- **Mobile Commute Mitigation** – N/A
- **Area Mitigation** – N/A
- **Energy Mitigation** – N/A
- **Water Mitigation** – N/A
- **Waste Mitigation** - N/A

ATTACHMENT G-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - SUMMER
MODEL “CALEEMOD SEVILLE – SITE PREPARATION SMALL PRJ V02.xls”

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Seville Solar Farm - Site Preparation

Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	1.64	10.50	9.42	0.01	41.41	0.81	42.22	4.12	0.81	4.93	0.00	1,346.09	0.00	0.14	0.00	1,349.09
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	1.21	6.86	9.10	0.01	12.91	0.66	13.57	1.27	0.66	1.94	0.00	1,346.09	0.00	0.14	0.00	1,349.09
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	192.90	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	

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	192.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00
Off-Road	1.52	10.19	8.39	0.01		0.80	0.80		0.80	0.80	1,239.22			0.14		1,242.06
Total	1.52	10.19	8.39	0.01	0.00	0.80	0.80	0.00	0.80	0.80	1,239.22			0.14		1,242.06

3.2 Site Preparation - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.02	0.22	0.08	0.00	17.79	0.01	17.80	1.76	0.01	1.77	39.10	0.00	0.00	0.00	39.12	
Vendor	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	
Worker	0.10	0.10	0.95	0.00	23.62	0.00	23.62	2.35	0.00	2.36	67.77	0.01	0.01	0.01	67.91	
Total	0.12	0.32	1.03	0.00	41.41	0.01	41.42	4.11	0.01	4.13	106.87		0.01	0.01		107.03

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00
Off-Road	1.09	6.54	8.07	0.01		0.65	0.65		0.65	0.65	0.00	1,239.22		0.14		1,242.06
Total	1.09	6.54	8.07	0.01	0.00	0.65	0.65	0.00	0.65	0.65	0.00	1,239.22		0.14		1,242.06

3.2 Site Preparation - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.02	0.22	0.08	0.00	5.57	0.01	5.58	0.54	0.01	0.55	39.10		0.00			39.12
Vendor	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
Worker	0.10	0.10	0.95	0.00	7.34	0.00	7.34	0.73	0.00	0.73	67.77		0.01			67.91
Total	0.12	0.32	1.03	0.00	12.91	0.01	12.92	1.27	0.01	1.28	106.87		0.01			107.03

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day											lb/day					
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ATTACHMENT G-3

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - WINTER
MODEL “CALEEMOD SEVILLE – SITE PREPARATION SMALL PRJ V02.xls”

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Seville Solar Farm - Site Preparation

Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	1.62	10.50	9.28	0.01	41.41	0.81	42.22	4.12	0.81	4.93	0.00	1,342.18	0.00	0.14	0.00	1,345.17
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	1.19	6.86	8.95	0.01	12.91	0.66	13.57	1.27	0.66	1.94	0.00	1,342.18	0.00	0.14	0.00	1,345.17
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	192.90	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	192.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00
Off-Road	1.52	10.19	8.39	0.01		0.80	0.80		0.80	0.80	1,239.22			0.14		1,242.06
Total	1.52	10.19	8.39	0.01	0.00	0.80	0.80	0.00	0.80	0.80	1,239.22			0.14		1,242.06

3.2 Site Preparation - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.02	0.22	0.09	0.00	17.79	0.01	17.80	1.76	0.01	1.77	38.84		0.00			38.86
Vendor	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
Worker	0.08	0.10	0.79	0.00	23.62	0.00	23.62	2.35	0.00	2.36	64.13		0.01			64.26
Total	0.10	0.32	0.88	0.00	41.41	0.01	41.42	4.11	0.01	4.13	102.97		0.01			103.12

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00
Off-Road	1.09	6.54	8.07	0.01		0.65	0.65		0.65	0.65	0.00	1,239.22		0.14		1,242.06
Total	1.09	6.54	8.07	0.01	0.00	0.65	0.65	0.00	0.65	0.65	0.00	1,239.22		0.14		1,242.06

3.2 Site Preparation - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.02	0.22	0.09	0.00	5.57	0.01	5.58	0.54	0.01	0.55	38.84		0.00			38.86
Vendor	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
Worker	0.08	0.10	0.79	0.00	7.34	0.00	7.34	0.73	0.00	0.73	64.13		0.01			64.26
Total	0.10	0.32	0.88	0.00	12.91	0.01	12.92	1.27	0.01	1.28	102.97		0.01			103.12

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
NaturalGas Unmitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
User Defined Industrial	0	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
Total		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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ATTACHMENT G-4

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL “CALEEMOD SEVILLE – SITE PREPARATION SMALL PRJ V02.xls”

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Seville Solar Farm - Site Preparation

Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2014	0.01	0.07	0.06	0.00	0.26	0.01	0.27	0.03	0.01	0.03	0.00	7.94	7.94	0.00	0.00	7.96	
Total	0.01	0.07	0.06	0.00	0.26	0.01	0.27	0.03	0.01	0.03	0.00	7.94	7.94	0.00	0.00	7.96	

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2014	0.01	0.04	0.06	0.00	0.08	0.00	0.09	0.01	0.00	0.01	0.00	7.94	7.94	0.00	0.00	7.96	
Total	0.01	0.04	0.06	0.00	0.08	0.00	0.09	0.01	0.00	0.01	0.00	7.94	7.94	0.00	0.00	7.96	

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	35.20	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
Energy	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
Mobile	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	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	35.20	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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Area	35.20	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	
Energy	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	
Mobile	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	
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	35.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.07	0.05	0.00		0.01	0.01		0.01	0.01	0.00	7.31	7.31	0.00	0.00	7.32
Total	0.01	0.07	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	7.31	7.31	0.00	0.00	7.32

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	0.00	0.00	0.00	0.00	0.11	0.00	0.11	0.01	0.00	0.01	0.00	0.23	0.23	0.00	0.00	0.23
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.15	0.00	0.15	0.01	0.00	0.01	0.00	0.40	0.40	0.00	0.00	0.40
Total	0.00	0.00	0.01	0.00	0.26	0.00	0.26	0.02	0.00	0.02	0.00	0.63	0.63	0.00	0.00	0.63

3.2 Site Preparation - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.04	0.05	0.00		0.00	0.00		0.00	0.00	0.00	7.31	7.31	0.00	0.00	7.32
Total	0.01	0.04	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.31	7.31	0.00	0.00	7.32

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23
Vendor	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
Worker	0.00	0.00	0.01	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.40	0.40	0.00	0.00	0.40
Total	0.00	0.00	0.01	0.00	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.63	0.63	0.00	0.00	0.63

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.00	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	
Unmitigated	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	
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Unmitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
User Defined Industrial	0	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
Total		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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	tons/yr											MT/yr					
User Defined Industrial	0	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	
Total		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	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	35.20	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	35.20	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	3.73						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	31.47						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	35.20	0.00	0.00	0.00			0.00	0.00		0.00							

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	3.73						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	31.47						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	35.20	0.00	0.00	0.00			0.00	0.00		0.00							

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

9.0 Vegetation

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ATTACHMENT H

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

**CalEEMod MODELS:
“CALEEMOD SEVILLE – GRADING SMALL PRJ V02.xls”**

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ATTACHMENT H-1
SEVILLE SOLAR FARM COMPLEX
SEVILLE SOLAR FARM “SMALL PROJECT”
CalEEMod MODEL “REMARKS”
MODEL “CALEEMOD SEVILLE – GRADING SMALL PRJ V02.xls”

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“Remarks” for Seville Solar Farm Complex CalEEMod Models

“Remarks” are typically used in CalEEMod to explain non-default inputs. For the current modeling this document replaces the “remarks” section of the referenced CalEEMod model to provide more space to both identify non-default inputs and to explain how CalEEMod is used to calculate emissions for the current project. When defaults were retained and no further explanation was necessary, no “remarks” are recorded below.

Model Title: Seville – Grading CalEEMod Seville – Grading Small Prj V02.xls

Project Characteristics Tab

- **Project Characteristics** –Imperial County; Rural; Operational Year 2014; Utility Company IID

Land Use Tab

- **Land Use** - This model calculates the emissions from equipment and traffic associated with grading a 185-acre Seville Solar Farm lot (“Small Project”). The ‘User Defined Industrial’ land use subtype represents the Seville Solar Farm. For this model in particular the ‘User Defined Industrial’ ‘Lot Acreage’ is the acreage associated with one of the 185-acre Seville Solar Farm “Small Project” Lots (Lot1, Lot 2 or Lot 3). ‘Lot Acreage’ for one Seville Solar Farm “Small Project” Lot totals to 185 acres.

Construction Tabs

- **Construction Phase** - This model calculates the emissions from the grading equipment, and the worker, vendor and haul traffic associated with grading a 185-acre “Small Project” lot. All other phases except grading are deleted.
 - Grading - 4/23/2014 – 5/31/2014
- **Off-road Equipment (Grading)** – Grading equipment emissions are calculated for a 185-acre “Small Project” lot in this model. Default equipment is altered to reflect the equipment below.

Equipment Type	Amount	Daily Usage (Hours)
Graders	2	6
Water Trucks (Off-Highway Trucks)	2	7
Rubber Tired Dozers	1	5
Scrapers	2	8
Tractors/Loaders/Backhoes	2	8

- **Trips and VMT** – Only grading trips and VMT emissions are calculated for a 185-acre “Small Project” lot in this model. Grading requires 30 worker and 4 haul trips/day.
- **On-road Fugitive Dust** –Traffic is expected to access the project area via State Highway 78 (a paved state highway) and a new, private access road from the north off of State Highway 78 on the property (unpaved but stabilized road). Approximately 2.0 miles of unpaved roads would be traveled by traffic accessing the “Small Project” area.
 - CalEEMod default worker trip length= 10.2 miles
 - % Paved Worker = 1-(2.0 miles unpaved roads to Project / 10.2 miles)=80.4% paved
 - CalEEMod default vendor trip length= 11.9 miles
 - % Paved Vendor= 1-(2.0 miles unpaved roads to Project / 11.9 miles)=83.2% paved
 - CalEEMod default haul trip length= 20 miles
 - % Paved Haul= 1-(2.0 miles unpaved roads to Project / 20 miles)=90% paved
- **Demolition** - Demolition emissions are calculated in a separate CalEEMod Model.
- **Dust from Material Movement** - Grading fugitive dust emissions are not calculated in CalEEMod. Grading fugitive dust emissions are calculated using AP-42 emission factors (see Supplemental Project

Description and Attachment V). Default grading ‘dust from material movement’ acreage has been zeroed out.

- **Architectural Coating** - No coating is required for this project (see Supplemental Project Description).

Operational Tabs

- **Vehicle Trips** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Road Dust** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Woodstoves** - Operations – Area - Each solar project is expected to have a small, regular, on site staff. The project operations calculated with CalEEMod consist of the on-site emissions from the operations/maintenance building. There will also be operational emissions that are associated with worker trips/day; vendor trips/day; and haul trips/day; water truck used during panel washing; outdoor water use during panel washing; and water/wastewater consumption emissions which are all calculated using CalEEMod. Operational on-site fugitive dust and electrical energy emissions will be calculated using AP-42 and CalEEMod emissions factors, respectfully (see Supplemental Project Description).
- **Consumer Products** - Operations - Area - See response in “Woodstoves” tab above.
- **Area Coating** - Operations - Area - See response in “Woodstoves” tab above.
- **Landscape Equipment** - Operations - Area - See response in “Woodstoves” tab above.
- **Energy Use** - Operations –Annual electrical energy use emissions are calculated using the CalEEMod intensity factor for the Imperial Irrigation District (IID).
- **Water And Wastewater** - Operations - Water and Wastewater - See response in “Woodstoves” tab above.
- **Solid Waste** - Operations - Solid Waste - See response in “Woodstoves” tab above.

Vegetation Tabs

- **Land Use Change** – N/A
- **Sequestration** – N/A

Mitigation Tabs

- **Construction Off-road Equipment Mitigation** - On-site watering will occur 3 times a day (unpaved roads and during grading); all equipment is Tier 3; reduced speed on unpaved roads (25 mph).
- **Mobile Land Use Mitigation** – N/A
- **Mobile Commute Mitigation** – N/A
- **Area Mitigation** – N/A
- **Energy Mitigation** – N/A
- **Water Mitigation** – N/A
- **Waste Mitigation** - N/A

ATTACHMENT H-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - SUMMER
MODEL “CALEEMOD SEVILLE – GRADING SMALL PRJ V02.xls”

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Seville Solar Farm - Grading

Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	12.31	96.59	51.28	0.12	104.19	4.16	108.36	12.07	4.16	16.23	0.00	12,835.83	0.00	1.09	0.00	12,858.72
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	9.37	58.52	65.55	0.12	39.74	3.73	43.47	5.63	3.73	9.36	0.00	12,835.83	0.00	1.09	0.00	12,858.72
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.45	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	172.45	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.45	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	172.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.76	0.00	3.76	2.07	0.00	2.07						0.00
Off-Road	11.93	96.17	47.72	0.11		4.15	4.15		4.15	4.15	12,571.73			1.06		12,594.08
Total	11.93	96.17	47.72	0.11	3.76	4.15	7.91	2.07	4.15	6.22	12,571.73			1.06		12,594.08

3.2 Grading - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.00	0.06	0.02	0.00	11.86	0.00	11.86	1.18	0.00	1.18		9.97		0.00		9.97	
Vendor	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	
Worker	0.38	0.37	3.54	0.00	88.57	0.01	88.58	8.82	0.01	8.83		254.13		0.03		254.67	
Total	0.38	0.43	3.56	0.00	100.43	0.01	100.44	10.00	0.01	10.01		264.10		0.03		264.64	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					3.76	0.00	3.76	2.07	0.00	2.07						0.00	
Off-Road	8.99	58.10	61.99	0.11		3.72	3.72		3.72	3.72	0.00	12,571.73		1.06		12,594.08	
Total	8.99	58.10	61.99	0.11	3.76	3.72	7.48	2.07	3.72	5.79	0.00	12,571.73		1.06		12,594.08	

3.2 Grading - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.06	0.02	0.00	4.27	0.00	4.27	0.42	0.00	0.42	9.97		0.00			9.97
Vendor	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
Worker	0.38	0.37	3.54	0.00	31.70	0.01	31.71	3.15	0.01	3.16	254.13		0.03			254.67
Total	0.38	0.43	3.56	0.00	35.97	0.01	35.98	3.57	0.01	3.58		264.10		0.03		264.64

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
NaturalGas Unmitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
User Defined Industrial	0	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
Total		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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	172.45	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	172.45	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.00						0.00	0.00		0.00	0.00					0.00	
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	172.45	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00		0.00

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.00						0.00	0.00		0.00	0.00					0.00	
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	172.45	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00		0.00

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ATTACHMENT H-3

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - WINTER
MODEL “CALEEMOD SEVILLE – GRADING SMALL PRJ V02.xls”

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Seville Solar Farm - Grading

Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	12.25	96.59	50.71	0.12	104.19	4.16	108.36	12.07	4.16	16.23	0.00	12,822.10	0.00	1.09	0.00	12,844.95
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	9.31	58.51	64.98	0.12	39.74	3.73	43.47	5.63	3.73	9.36	0.00	12,822.10	0.00	1.09	0.00	12,844.95
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.45	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	172.45	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	172.45	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Mobile	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
Total	172.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.76	0.00	3.76	2.07	0.00	2.07						0.00
Off-Road	11.93	96.17	47.72	0.11		4.15	4.15		4.15	4.15	12,571.73			1.06		12,594.08
Total	11.93	96.17	47.72	0.11	3.76	4.15	7.91	2.07	4.15	6.22	12,571.73			1.06		12,594.08

3.2 Grading - 2014

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.00	0.06	0.02	0.00	11.86	0.00	11.86	1.18	0.00	1.18		9.90		0.00		9.90	
Vendor	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	
Worker	0.31	0.36	2.97	0.00	88.57	0.01	88.58	8.82	0.01	8.83		240.47		0.02		240.97	
Total	0.31	0.42	2.99	0.00	100.43	0.01	100.44	10.00	0.01	10.01		250.37		0.02		250.87	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					3.76	0.00	3.76	2.07	0.00	2.07						0.00	
Off-Road	8.99	58.10	61.99	0.11		3.72	3.72		3.72	3.72	0.00	12,571.73		1.06		12,594.08	
Total	8.99	58.10	61.99	0.11	3.76	3.72	7.48	2.07	3.72	5.79	0.00	12,571.73		1.06		12,594.08	

3.2 Grading - 2014

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.06	0.02	0.00	4.27	0.00	4.27	0.42	0.00	0.42	9.90		0.00			9.90
Vendor	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
Worker	0.31	0.36	2.97	0.00	31.70	0.01	31.71	3.15	0.01	3.16	240.47		0.02			240.97
Total	0.31	0.42	2.99	0.00	35.97	0.01	35.98	3.57	0.01	3.58	250.37		0.02			250.87

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day											lb/day					
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	172.45	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	172.45	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.00						0.00	0.00		0.00						0.00	
Consumer Products	172.45						0.00	0.00		0.00						0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00			0.00		0.00	0.00	
Total	172.45	0.00	0.00	0.00			0.00	0.00		0.00			0.00		0.00	0.00	

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.00						0.00	0.00		0.00						0.00	
Consumer Products	172.45						0.00	0.00		0.00						0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00			0.00		0.00	0.00	
Total	172.45	0.00	0.00	0.00			0.00	0.00		0.00			0.00		0.00	0.00	

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ATTACHMENT H-4

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL “CALEEMOD SEVILLE – GRADING SMALL PRJ V02.xls”

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Seville Solar Farm - Grading

Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.21	1.64	0.87	0.00	1.72	0.07	1.79	0.20	0.07	0.27	0.00	197.93	197.93	0.02	0.00	198.29
Total	0.21	1.64	0.87	0.00	1.72	0.07	1.79	0.20	0.07	0.27	0.00	197.93	197.93	0.02	0.00	198.29

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.16	0.99	1.11	0.00	0.66	0.06	0.72	0.09	0.06	0.16	0.00	197.93	197.93	0.02	0.00	198.29
Total	0.16	0.99	1.11	0.00	0.66	0.06	0.72	0.09	0.06	0.16	0.00	197.93	197.93	0.02	0.00	198.29

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	31.47	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
Energy	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
Mobile	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	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	31.47	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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	31.47	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
Energy	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
Mobile	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	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	31.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.06	0.00	0.06	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.20	1.63	0.81	0.00		0.07	0.07		0.07	0.07	0.00	193.83	193.83	0.02	0.00	194.17
Total	0.20	1.63	0.81	0.00	0.06	0.07	0.13	0.04	0.07	0.11	0.00	193.83	193.83	0.02	0.00	194.17

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	0.00	0.00	0.00	0.00	0.19	0.00	0.19	0.02	0.00	0.02	0.00	0.15	0.15	0.00	0.00	0.15
Vendor	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
Worker	0.01	0.01	0.06	0.00	1.46	0.00	1.46	0.15	0.00	0.15	0.00	3.95	3.95	0.00	0.00	3.96
Total	0.01	0.01	0.06	0.00	1.65	0.00	1.65	0.17	0.00	0.17	0.00	4.10	4.10	0.00	0.00	4.11

3.2 Grading - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					0.06	0.00	0.06	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	
Off-Road	0.15	0.99	1.05	0.00		0.06	0.06		0.06	0.06	0.00	193.83	193.83	0.02	0.00	194.17	
Total	0.15	0.99	1.05	0.00	0.06	0.06	0.12	0.04	0.06	0.10	0.00	193.83	193.83	0.02	0.00	194.17	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.00	0.00	0.00	0.00	0.07	0.00	0.07	0.01	0.00	0.01	0.00	0.15	0.15	0.00	0.00	0.15	
Vendor	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	
Worker	0.01	0.01	0.06	0.00	0.52	0.00	0.52	0.05	0.00	0.05	0.00	3.95	3.95	0.00	0.00	3.96	
Total	0.01	0.01	0.06	0.00	0.59	0.00	0.59	0.06	0.00	0.06	0.00	4.10	4.10	0.00	0.00	4.11	

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.00	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	
Unmitigated	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	
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Unmitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
User Defined Industrial	0	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
Total		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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	tons/yr											MT/yr					
User Defined Industrial	0	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	
Total		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	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	31.47	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	31.47	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	0.00						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	31.47						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	31.47	0.00	0.00	0.00			0.00	0.00		0.00							

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	0.00						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Consumer Products	31.47						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Landscaping	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	
Total	31.47	0.00	0.00	0.00			0.00	0.00		0.00							

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

9.0 Vegetation

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ATTACHMENT I

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODELS:

“CALEEMOD SEVILLE – PANEL INSTALLATION SMALL PRJ V02.xls”

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ATTACHMENT I-1

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL “REMARKS”

MODEL “CALEEMOD SEVILLE – PANEL INSTALLATION SMALL PRJ V02.xls”

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“Remarks” for Seville Solar Farm Complex CalEEMod Models

“Remarks” are typically used in CalEEMod to explain non-default inputs. For the current modeling this document replaces the “remarks” section of the referenced CalEEMod model to provide more space to both identify non-default inputs and to explain how CalEEMod is used to calculate emissions for the current project. When defaults were retained and no further explanation was necessary, no “remarks” are recorded below.

Model Title: Seville – Solar Panel Installation CalEEMod Seville – Panel Installation Small Prj V02.xls

Project Characteristics Tab

- **Project Characteristics** –Imperial County; Rural; Operational Year 2014; Utility Company IID

Land Use Tab

- **Land Use** - This model calculates the emissions from equipment and traffic associated with solar panel installation on the Seville Solar Farm “Small Project” lot. The ‘User Defined Industrial’ land use subtype represents the Seville Solar Farm. For this model in particular the ‘User Defined Industrial’ ‘Lot Acreage’ is the acreage associated with one of the 185-acre Seville Solar Farm “Small Project” Lots (Lot 1, Lot 2 or Lot 3). ‘Lot Acreage’ for one Seville Solar Farm “Small Project” Lot totals to 185 acres.

Construction Tabs

- **Construction Phase** - This model calculates the emissions from the solar panel installation (building construction) equipment, and the worker, vendor and haul traffic associated with solar panel installation. All other phases except building construction are deleted.
 - Building Erection - 6/1/2014 – 8/31/2014
- **Off-road Equipment (Building Construction)** – Solar panel installation equipment emissions are calculated for a 185-acre “Small Project” lot in this model. Default equipment is altered to reflect the equipment below.

Equipment Type	Amount	Daily Usage (Hours)
Generator Sets	5	8
Water Trucks (Off-Highway Trucks)	1	6
Other General Industrial Equipment	1	6
Trenchers	2	6
Skid Steer Loaders	2	7

- **Trips and VMT** – Only solar panel installation trips and VMT emissions are calculated for a 185-acre “Small Project” lot in this model. Solar panel installation requires 230 worker and 10 vendor trips/day.
- **On-road Fugitive Dust** –Traffic is expected to access the project area via State Highway 78 (a paved state highway) and a new, private access road from the north off of State Highway 78 on the property (unpaved but stabilized road). Approximately 2.0 miles of unpaved roads would be traveled by traffic accessing the “Small Project” area.
 - CalEEMod default worker trip length= 10.2 miles
 - % Paved Worker = 1-(2.0 miles unpaved roads to Project / 10.2 miles)=80.4% paved
 - CalEEMod default vendor trip length= 11.9 miles
 - % Paved Vendor= 1-(2.0 miles unpaved roads to Project / 11.9 miles)=83.2% paved
 - CalEEMod default haul trip length= 20 miles
 - % Paved Haul= 1-(2.0 miles unpaved roads to Project / 20 miles)=90% paved
- **Demolition** - Demolition emissions are calculated in a separate CalEEMod Model.
- **Dust from Material Movement** - Grading emissions are calculated in a separate CalEEMod model and Attachment V. (see Supplemental Project Description and Attachment V)

- **Architectural Coating** - No coating is required for this project (see Supplemental Project Description).

Operational Tabs

- **Vehicle Trips** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Road Dust** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Woodstoves** - Operations – Area - Each solar project is expected to have a small, regular, on site staff. The project operations calculated with CalEEMod consist of the on-site emissions from the operations/maintenance building. There will also be operational emissions that are associated with worker trips/day; vendor trips/day; and haul trips/day; water truck used during panel washing; outdoor water use during panel washing; and water/wastewater consumption emissions which are all calculated using CalEEMod. Operational on-site fugitive dust and electrical energy emissions will be calculated using AP-42 and CalEEMod emissions factors, respectfully (see Supplemental Project Description).
- **Consumer Products** - Operations - Area - See response in “Woodstoves” tab above.
- **Area Coating** - Operations - Area - See response in “Woodstoves” tab above.
- **Landscape Equipment** - Operations - Area - See response in “Woodstoves” tab above.
- **Energy Use** - Operations –Annual electrical energy use emissions are calculated using the CalEEMod intensity factor for the Imperial Irrigation District (IID).
- **Water And Wastewater** - Operations - Water and Wastewater - See response in “Woodstoves” tab above.
- **Solid Waste** - Operations - Solid Waste - See response in “Woodstoves” tab above.

Vegetation Tabs

- **Land Use Change** – N/A
- **Sequestration** – N/A

Mitigation Tabs

- **Construction Off-road Equipment Mitigation** - On-site watering will occur 3 times a day (unpaved roads); all equipment is Tier 3; reduced speed on unpaved roads (25 mph).
- **Mobile Land Use Mitigation** – N/A
- **Mobile Commute Mitigation** – N/A
- **Area Mitigation** – N/A
- **Energy Mitigation** – N/A
- **Water Mitigation** – N/A
- **Waste Mitigation** - N/A

ATTACHMENT I-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - SUMMER
MODEL “CALEEMOD SEVILLE – PANEL INSTALLATION SMALL PRJ V02.xls”

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Seville Solar Farm - Panel Installation

Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	11.07	59.87	63.48	0.09	708.60	3.83	712.43	70.58	3.83	74.41	0.00	8,839.26	0.00	0.92	0.00	8,858.52
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	12.32	41.30	67.53	0.09	220.14	3.14	223.28	21.83	3.14	24.97	0.00	8,839.26	0.00	0.92	0.00	8,858.52
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	7.95	54.87	35.05	0.07		3.68	3.68		3.68	3.68	6,451.84		0.71			6,466.81
Total	7.95	54.87	35.05	0.07		3.68	3.68		3.68	3.68	6,451.84		0.71			6,466.81

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	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
Vendor	0.24	2.19	1.25	0.00	29.55	0.07	29.62	2.95	0.07	3.02	439.08		0.01			439.28
Worker	2.88	2.81	27.17	0.02	679.05	0.08	679.13	67.63	0.08	67.71	1,948.34		0.20			1,952.44
Total	3.12	5.00	28.42	0.02	708.60	0.15	708.75	70.58	0.15	70.73	2,387.42		0.21			2,391.72

3.2 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	9.20	36.30	39.10	0.07		2.99	2.99		2.99	2.99	0.00	6,451.84		0.71		6,466.81
Total	9.20	36.30	39.10	0.07		2.99	2.99		2.99	2.99	0.00	6,451.84		0.71		6,466.81

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	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
Vendor	0.24	2.19	1.25	0.00	9.20	0.07	9.27	0.92	0.07	0.99	439.08		0.01			439.28
Worker	2.88	2.81	27.17	0.02	210.94	0.08	211.02	20.91	0.08	20.99	1,948.34		0.20			1,952.44
Total	3.12	5.00	28.42	0.02	220.14	0.15	220.29	21.83	0.15	21.98	2,387.42		0.21			2,391.72

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day											lb/day					
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00	
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00	
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00			0.00		0.00	

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

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ATTACHMENT I-3

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - WINTER
MODEL “CALEEMOD SEVILLE – PANEL INSTALLATION SMALL PRJ V02.xls”

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Seville Solar Farm - Panel Installation

Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	10.59	59.83	59.16	0.09	708.60	3.83	712.43	70.58	3.83	74.41	0.00	8,731.67	0.00	0.90	0.00	8,750.63
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	11.85	41.26	63.21	0.09	220.14	3.14	223.28	21.83	3.14	24.97	0.00	8,731.67	0.00	0.90	0.00	8,750.63
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	7.95	54.87	35.05	0.07		3.68	3.68		3.68	3.68	6,451.84		0.71			6,466.81
Total	7.95	54.87	35.05	0.07		3.68	3.68		3.68	3.68	6,451.84		0.71			6,466.81

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	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
Vendor	0.25	2.22	1.32	0.00	29.55	0.07	29.62	2.95	0.07	3.02	436.21		0.01			436.41
Worker	2.40	2.74	22.78	0.02	679.05	0.08	679.13	67.63	0.08	67.71	1,843.61		0.18			1,847.41
Total	2.65	4.96	24.10	0.02	708.60	0.15	708.75	70.58	0.15	70.73	2,279.82		0.19			2,283.82

3.2 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	9.20	36.30	39.10	0.07		2.99	2.99		2.99	2.99	0.00	6,451.84		0.71		6,466.81
Total	9.20	36.30	39.10	0.07		2.99	2.99		2.99	2.99	0.00	6,451.84		0.71		6,466.81

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	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
Vendor	0.25	2.22	1.32	0.00	9.20	0.07	9.27	0.92	0.07	0.99	436.21		0.01			436.41
Worker	2.40	2.74	22.78	0.02	210.94	0.08	211.02	20.91	0.08	20.99	1,843.61		0.18			1,847.41
Total	2.65	4.96	24.10	0.02	220.14	0.15	220.29	21.83	0.15	21.98	2,279.82		0.19			2,283.82

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
NaturalGas Unmitigated	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
User Defined Industrial	0	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
Total		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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00	
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00		0.00

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00	
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00		0.00

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

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ATTACHMENT I-4

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL “CALEEMOD SEVILLE – PANEL INSTALLATION SMALL PRJ V02.xls”

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Seville Solar Farm - Panel Installation

Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.41	2.32	2.39	0.00	26.73	0.15	26.88	2.66	0.15	2.81	0.00	313.17	313.17	0.03	0.00	313.85
Total	0.41	2.32	2.39	0.00	26.73	0.15	26.88	2.66	0.15	2.81	0.00	313.17	313.17	0.03	0.00	313.85

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.46	1.60	2.55	0.00	8.30	0.12	8.43	0.82	0.12	0.95	0.00	313.17	313.17	0.03	0.00	313.85
Total	0.46	1.60	2.55	0.00	8.30	0.12	8.43	0.82	0.12	0.95	0.00	313.17	313.17	0.03	0.00	313.85

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	35.20	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
Energy	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
Mobile	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	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	35.20	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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Area	35.20	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	
Energy	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	
Mobile	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	
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	35.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.31	2.14	1.37	0.00		0.14	0.14		0.14	0.14	0.00	228.21	228.21	0.03	0.00	228.73
Total	0.31	2.14	1.37	0.00		0.14	0.14		0.14	0.14	0.00	228.21	228.21	0.03	0.00	228.73

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	0.00	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
Vendor	0.01	0.08	0.05	0.00	1.11	0.00	1.12	0.11	0.00	0.11	0.00	15.49	15.49	0.00	0.00	15.50
Worker	0.09	0.10	0.97	0.00	25.61	0.00	25.62	2.55	0.00	2.55	0.00	69.47	69.47	0.01	0.00	69.61
Total	0.10	0.18	1.02	0.00	26.72	0.00	26.74	2.66	0.00	2.66	0.00	84.96	84.96	0.01	0.00	85.11

3.2 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.36	1.42	1.52	0.00		0.12	0.12		0.12	0.12	0.00	228.21	228.21	0.03	0.00	228.73
Total	0.36	1.42	1.52	0.00		0.12	0.12		0.12	0.12	0.00	228.21	228.21	0.03	0.00	228.73

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	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
Vendor	0.01	0.08	0.05	0.00	0.35	0.00	0.35	0.03	0.00	0.04	0.00	15.49	15.49	0.00	0.00	15.50
Worker	0.09	0.10	0.97	0.00	7.96	0.00	7.96	0.79	0.00	0.79	0.00	69.47	69.47	0.01	0.00	69.61
Total	0.10	0.18	1.02	0.00	8.31	0.00	8.31	0.82	0.00	0.83	0.00	84.96	84.96	0.01	0.00	85.11

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr												MT/yr					
Mitigated	0.00	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	0.00	
Unmitigated	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	0.00	
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Unmitigated							0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
User Defined Industrial	0	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
Total		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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	tons/yr											MT/yr					
User Defined Industrial	0	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	
Total		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	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	35.20	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	35.20	0.00	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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	3.73						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	31.47						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	35.20	0.00	0.00	0.00			0.00	0.00		0.00							

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	3.73						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	31.47						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	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
Total	35.20	0.00	0.00	0.00			0.00	0.00		0.00							

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
User Defined Industrial	0 / 0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
User Defined Industrial	0					0.00	0.00	0.00	0.00
Total						0.00	0.00	0.00	0.00

9.0 Vegetation

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ATTACHMENT J

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODELS:

“CALEEMOD SEVILLE – BUILDING ERECTION SMALL PRJ V02.xls”

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ATTACHMENT J-1

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL “REMARKS”

MODEL “CALEEMOD SEVILLE – BUILDING ERECTION SMALL PRJ V02.xls”

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“Remarks” for Seville Solar Farm Complex CalEEMod Models

“Remarks” are typically used in CalEEMod to explain non-default inputs. For the current modeling this document replaces the “remarks” section of the referenced CalEEMod model to provide more space to both identify non-default inputs and to explain how CalEEMod is used to calculate emissions for the current project. When defaults were retained and no further explanation was necessary, no “remarks” are recorded below.

Model Title: Seville – Building Erection CalEEMod Seville – Building Erection Small Prj V02.xls

Project Characteristics Tab

- **Project Characteristics** –Imperial County; Rural; Operational Year 2014; Utility Company IID

Land Use Tab

- **Land Use** - This model calculates the emissions from equipment and traffic associated with building erection on the Seville Solar Farm “Small Project” lot. The ‘User Defined Industrial’ land use subtype represents the Seville Solar Farm. For this model in particular the ‘User Defined Industrial’ ‘Lot Acreage’ is the acreage associated with one of the 185-acre Seville Solar Farm “Small Project” Lots (Lot 1, Lot 2 or Lot 3). ‘Lot Acreage’ for one Seville Solar Farm “Small Project” Lot totals to 185 acres.

Construction Tabs

- **Construction Phase** - This model calculates the emissions from the building erection (building construction) equipment, and the worker, vendor and haul traffic associated with building erection. All other phases except building construction are deleted.
 - Building Construction - 6/1/2014 – 8/31/2014
- **Off-road Equipment (Building Construction)** – Building erection equipment emissions are calculated for a 185-acre “Small Project” lot in this model. Default equipment is altered to reflect the equipment below.

Equipment Type	Amount	Daily Usage (Hours)
Aerial Lifts	2	6
Concrete Pump (Other Construc Equipment)	1	4
Cranes	1	6
Other General Industrial Equipment	1	6
Rollers	1	4
Tractor/Loader/Backhoe	1	6

- **Trips and VMT** – Only building erection trips and VMT emissions are calculated for a 185-acre “Small Project” lot in this model. Building erection requires 20 worker, 2 vendor, and 4 haul trips/day.
- **On-road Fugitive Dust** –Traffic is expected to access the project area via State Highway 78 (a paved state highway) and a new, private access road from the north off of State Highway 78 on the property (unpaved but stabilized road). Approximately 2.0 miles of unpaved roads would be traveled by traffic accessing the “Small Project” area.
 - CalEEMod default worker trip length= 10.2 miles
 - % Paved Worker = 1-(2.0 miles unpaved roads to Project / 10.2 miles)=80.4% paved
 - CalEEMod default vendor trip length= 11.9 miles
 - % Paved Vendor= 1-(2.0 miles unpaved roads to Project / 11.9 miles)=83.2% paved
 - CalEEMod default haul trip length= 20 miles
 - % Paved Haul= 1-(2.0 miles unpaved roads to Project / 20 miles)=90% paved
- **Demolition** - Demolition emissions are calculated in a separate CalEEMod Model.
- **Dust from Material Movement** - Grading emissions are calculated in a separate CalEEMod model and Attachment V. (see Supplemental Project Description and Attachment V)

- **Architectural Coating** - No coating is required for this project (see Supplemental Project Description).

Operational Tabs

- **Vehicle Trips** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Vehicle Emission Factors** – Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Road Dust** - Operations - Mobile emissions are calculated in a separate CalEEMod Model
- **Woodstoves** - Operations – Area - Each solar project is expected to have a small, regular, on site staff. The project operations calculated with CalEEMod consist of the on-site emissions from the operations/maintenance building. There will also be operational emissions that are associated with worker trips/day; vendor trips/day; and haul trips/day; water truck used during panel washing; outdoor water use during panel washing; and water/wastewater consumption emissions which are all calculated using CalEEMod. Operational on-site fugitive dust and electrical energy emissions will be calculated using AP-42 and CalEEMod emissions factors, respectfully (see Supplemental Project Description).
- **Consumer Products** - Operations - Area - See response in “Woodstoves” tab above.
- **Area Coating** - Operations - Area - See response in “Woodstoves” tab above.
- **Landscape Equipment** - Operations - Area - See response in “Woodstoves” tab above.
- **Energy Use** - Operations –Annual electrical energy use emissions are calculated using the CalEEMod intensity factor for the Imperial Irrigation District (IID).
- **Water And Wastewater** - Operations - Water and Wastewater - See response in “Woodstoves” tab above.
- **Solid Waste** - Operations - Solid Waste - See response in “Woodstoves” tab above.

Vegetation Tabs

- **Land Use Change** – N/A
- **Sequestration** – N/A

Mitigation Tabs

- **Construction Off-road Equipment Mitigation** - On-site watering will occur 3 times a day (unpaved roads); all equipment is Tier 3; reduced speed on unpaved roads (25 mph).
- **Mobile Land Use Mitigation** – N/A
- **Mobile Commute Mitigation** – N/A
- **Area Mitigation** – N/A
- **Energy Mitigation** – N/A
- **Water Mitigation** – N/A
- **Waste Mitigation** - N/A

ATTACHMENT J-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - SUMMER
MODEL “CALEEMOD SEVILLE – BUILDING ERECTION SMALL PRJ V02.xls”

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Seville Solar Farm - Building Erection

Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	3.50	23.67	15.46	0.03	76.82	1.24	78.06	7.65	1.24	8.89	0.00	3,303.23	0.00	0.30	0.00	3,309.61
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	2.99	15.96	19.33	0.03	23.90	1.16	25.06	2.36	1.16	3.53	0.00	3,303.23	0.00	0.30	0.00	3,309.61
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.20	22.97	12.84	0.03		1.22	1.22		1.22	1.22	3,041.64		0.29			3,047.63
Total	3.20	22.97	12.84	0.03		1.22	1.22		1.22	1.22	3,041.64		0.29			3,047.63

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.02	0.01	0.00	11.86	0.00	11.86	1.17	0.00	1.18	4.34		0.00			4.35
Vendor	0.05	0.44	0.25	0.00	5.91	0.01	5.92	0.59	0.01	0.60	87.82		0.00			87.86
Worker	0.25	0.24	2.36	0.00	59.05	0.01	59.05	5.88	0.01	5.89	169.42		0.02			169.78
Total	0.30	0.70	2.62	0.00	76.82	0.02	76.83	7.64	0.02	7.67	261.58		0.02			261.99

3.2 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.69	15.25	16.70	0.03		1.14	1.14		1.14	1.14	0.00	3,041.64		0.29		3,047.63
Total	2.69	15.25	16.70	0.03		1.14	1.14		1.14	1.14	0.00	3,041.64		0.29		3,047.63

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.02	0.01	0.00	3.71	0.00	3.71	0.36	0.00	0.36		4.34		0.00		4.35
Vendor	0.05	0.44	0.25	0.00	1.84	0.01	1.85	0.18	0.01	0.20		87.82		0.00		87.86
Worker	0.25	0.24	2.36	0.00	18.34	0.01	18.35	1.82	0.01	1.83		169.42		0.02		169.78
Total	0.30	0.70	2.62	0.00	23.89	0.02	23.91	2.36	0.02	2.39		261.58		0.02		261.99

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
User Defined Industrial	0.00	0.00	0.00				
Total	0.00	0.00	0.00				

4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
User Defined Industrial	16.40	9.50	11.90	0.00	0.00	0.00

5.0 Energy Detail

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	lb/day											lb/day					
NaturalGas Mitigated	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
NaturalGas Unmitigated	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
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day											lb/day					
User Defined Industrial	0	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	
Total		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	

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Land Use	KBTU	lb/day											lb/day					
User Defined Industrial	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00	

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Unmitigated	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00	
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00		0.00

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	20.45						0.00	0.00		0.00	0.00					0.00	
Consumer Products	172.45						0.00	0.00		0.00	0.00					0.00	
Landscaping	0.00	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00	0.00	
Total	192.90	0.00	0.00	0.00			0.00	0.00		0.00	0.00		0.00		0.00		0.00

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

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ATTACHMENT J-3

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL OUTPUTS - WINTER
MODEL “CALEEMOD SEVILLE – BUILDING ERECTION SMALL PRJ V02.xls”

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Seville Solar Farm - Building Erection

Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	185	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Utility Company	Imperial Irrigation District
Climate Zone	15	Precipitation Freq (Days)	12		

1.3 User Entered Comments

Project Characteristics -

Land Use - See "Remarks" Summary Attachment

Construction Phase - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Off-road Equipment - See "Remarks" Summary Attachment

Trips and VMT - See "Remarks" Summary Attachment

On-road Fugitive Dust - See "Remarks" Summary Attachment

Demolition - See "Remarks" Summary Attachment

Grading - See "Remarks" Summary Attachment

Architectural Coating - See "Remarks" Summary Attachment

Vehicle Trips - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Vechicle Emission Factors - See "Remarks" Summary Attachment

Road Dust - See "Remarks" Summary Attachment

Woodstoves - See "Remarks" Summary Attachment

Consumer Products - See "Remarks" Summary Attachment

Area Coating - See "Remarks" Summary Attachment

Landscape Equipment - See "Remarks" Summary Attachment

Energy Use - See "Remarks" Summary Attachment

Water And Wastewater - See "Remarks" Summary Attachment

Solid Waste - See "Remarks" Summary Attachment

Land Use Change - See "Remarks" Summary Attachment

Sequestration - See "Remarks" Summary Attachment

Construction Off-road Equipment Mitigation - See "Remarks" Summary Attachment

2.0 Emissions Summary

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					
2014	3.46	23.67	15.10	0.03	76.82	1.24	78.06	7.65	1.24	8.89	0.00	3,293.52	0.00	0.30	0.00	3,299.87
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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					
2014	2.95	15.96	18.96	0.03	23.90	1.16	25.06	2.36	1.16	3.53	0.00	3,293.52	0.00	0.30	0.00	3,299.87
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	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

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	192.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Mobile	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
Total	192.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.20	22.97	12.84	0.03		1.22	1.22		1.22	1.22	3,041.64		0.29			3,047.63
Total	3.20	22.97	12.84	0.03		1.22	1.22		1.22	1.22	3,041.64		0.29			3,047.63

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.02	0.01	0.00	11.86	0.00	11.86	1.17	0.00	1.18	4.32		0.00			4.32
Vendor	0.05	0.44	0.26	0.00	5.91	0.01	5.92	0.59	0.01	0.60	87.24		0.00			87.28
Worker	0.21	0.24	1.98	0.00	59.05	0.01	59.05	5.88	0.01	5.89	160.31		0.02			160.64
Total	0.26	0.70	2.25	0.00	76.82	0.02	76.83	7.64	0.02	7.67	251.87		0.02			252.24