

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	1.90	10.24	11.77	0.02		0.82	0.82		0.82	0.82	0.00	1,982.52		0.22		1,987.23
Total	1.90	10.24	11.77	0.02		0.82	0.82		0.82	0.82	0.00	1,982.52		0.22		1,987.23

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		3.21		0.00		3.21
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		83.37		0.01		83.53

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
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

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
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

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	1.04	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	1.04	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	0.11					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.93					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	1.04	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	0.11					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.93					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	1.04	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 S-4

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “LARGE PROJECT”

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL “CALEEMOD SEVILLE – SUBSTATION CONSTRUC LARGE PRJ V03.xls”

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Seville Solar Farm - Substation Construction
Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	1	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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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	0.14	0.90	0.60	0.00	0.84	0.05	0.89	0.08	0.05	0.13	0.00	98.62	98.62	0.01	0.00	98.85
Total	0.14	0.90	0.60	0.00	0.84	0.05	0.89	0.08	0.05	0.13	0.00	98.62	98.62	0.01	0.00	98.85

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	0.11	0.54	0.68	0.00	0.27	0.04	0.31	0.03	0.04	0.07	0.00	98.62	98.62	0.01	0.00	98.85
Total	0.11	0.54	0.68	0.00	0.27	0.04	0.31	0.03	0.04	0.07	0.00	98.62	98.62	0.01	0.00	98.85

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	0.19	0.00	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	0.19	0.00	0.00	0.00	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	0.19	0.00	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	0.19	0.00	0.00	0.00	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	0.13	0.89	0.54	0.00		0.05	0.05		0.05	0.05	0.00	94.40	94.40	0.01	0.00	94.62
Total	0.13	0.89	0.54	0.00		0.05	0.05		0.05	0.05	0.00	94.40	94.40	0.01	0.00	94.62

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	0.24	0.00	0.24	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	0.60	0.00	0.60	0.06	0.00	0.06	0.00	4.07	4.07	0.00	0.00	4.07
Total	0.01	0.01	0.06	0.00	0.84	0.00	0.84	0.08	0.00	0.08	0.00	4.22	4.22	0.00	0.00	4.22

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	tons/yr										MT/yr					
Off-Road	0.10	0.54	0.62	0.00		0.04	0.04		0.04	0.04	0.00	94.40	94.40	0.01	0.00	94.62
Total	0.10	0.54	0.62	0.00		0.04	0.04		0.04	0.04	0.00	94.40	94.40	0.01	0.00	94.62

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	0.08	0.00	0.08	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	0.19	0.00	0.19	0.02	0.00	0.02	0.00	4.07	4.07	0.00	0.00	4.07
Total	0.01	0.01	0.06	0.00	0.27	0.00	0.27	0.03	0.00	0.03	0.00	4.22	4.22	0.00	0.00	4.22

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	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

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	0.19	0.00	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	0.19	0.00	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	0.02					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.17					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	0.19	0.00	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	0.02					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.17					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	0.19	0.00	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 T

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “LARGE PROJECT”

CalEEMod MODELS:

“CALEEMOD SEVILLE – GENTIE CONSTRUC LARGE PRJ V03.xls”

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ATTACHMENT T-1

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “LARGE PROJECT”

CalEEMod MODEL “REMARKS”

MODEL “CALEEMOD SEVILLE – GENTIE CONSTRUC LARGE PRJ V03.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 – GenTie Power Line Construction CalEEMod Seville – GenTie Construc Large Prj V03.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 construction of a portion of the gentie power line 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 “Large Project” acreage since each of the five Seville Solar Farm lots would construct a portion of the gentie power line. ‘Lot Acreage’ for the Seville Solar Farm “Large Project” Lot totals to ~319 acre.

Construction Tabs

- **Construction Phase** - This model calculates the emissions from the gentie power line construction (building construction) equipment, and the worker, vendor and haul traffic associated with construction of the gentie power line. All other phases except building construction are deleted.
 - o Building Construction - 6/1/2014 – 7/31/2014
- **Off-road Equipment (Building Construction)** – Gentie power line 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 gentie power line construction trips and VMT emissions are calculated in this model. Gentie power line construction requires 12 worker and 2 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 1.2 miles of unpaved roads would be traveled by traffic accessing the “Large Project” area.
 - o CalEEMod default worker trip length= 10.2 miles
 - % Paved Worker = $1 - (1.2 \text{ miles unpaved roads to Project} / 10.2 \text{ miles}) = 88.2\%$ paved
 - o CalEEMod default vendor trip length= 11.9 miles
 - % Paved Vendor= $1 - (1.2 \text{ miles unpaved roads to Project} / 11.9 \text{ miles}) = 89.9\%$ paved
 - o CalEEMod default haul trip length= 20 miles
 - % Paved Haul= $1 - (1.2 \text{ miles unpaved roads to Project} / 20 \text{ miles}) = 94\%$ 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).
- **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 T-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “LARGE PROJECT”

CalEEMod MODEL OUTPUTS - SUMMER
MODEL “CALEEMOD SEVILLE – GENTIE CONSTRUC LARGE PRJ V03.xls”

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Seville Solar Farm - GenTie Line Construction
Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	319	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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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	1.79	8.50	7.52	0.01	24.95	0.69	25.64	2.48	0.69	3.17	0.00	949.92	0.00	0.16	0.00	953.18
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	1.28	5.39	6.78	0.01	7.80	0.48	8.28	0.77	0.48	1.25	0.00	949.92	0.00	0.16	0.00	953.18
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	332.63	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
Total	332.63	0.00	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	332.63	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
Total	332.63	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.05	0.44	0.25	0.00	3.57	0.01	3.58	0.36	0.01	0.37		87.82		0.00		87.86
Worker	0.15	0.15	1.42	0.00	21.39	0.00	21.39	2.13	0.00	2.13		101.65		0.01		101.87
Total	0.20	0.59	1.67	0.00	24.96	0.01	24.97	2.49	0.01	2.50		189.47		0.01		189.73

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.05	0.44	0.25	0.00	1.12	0.01	1.13	0.11	0.01	0.12		87.82		0.00		87.86
Worker	0.15	0.15	1.42	0.00	6.68	0.00	6.69	0.66	0.00	0.66		101.65		0.01		101.87
Total	0.20	0.59	1.67	0.00	7.80	0.01	7.82	0.77	0.01	0.78		189.47		0.01		189.73

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
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

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
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

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	332.63	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	332.63	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	35.26					0.00	0.00		0.00	0.00						0.00
Consumer Products	297.37					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	332.63	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	35.26					0.00	0.00		0.00	0.00						0.00
Consumer Products	297.37					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	332.63	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 T-3

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “LARGE PROJECT”

CalEEMod MODEL OUTPUTS - WINTER
MODEL “CALEEMOD SEVILLE – GENTIE CONSTRUC LARGE PRJ V03.xls”

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Seville Solar Farm - GenTie Line Construction
Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	319	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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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	1.77	8.51	7.31	0.01	24.95	0.69	25.64	2.48	0.69	3.17	0.00	943.89	0.00	0.15	0.00	947.13
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	1.26	5.39	6.57	0.01	7.80	0.48	8.28	0.77	0.48	1.25	0.00	943.89	0.00	0.15	0.00	947.13
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	332.63	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
Total	332.63	0.00	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	332.63	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
Total	332.63	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.05	0.44	0.26	0.00	3.57	0.01	3.58	0.36	0.01	0.37		87.24		0.00		87.28
Worker	0.13	0.14	1.19	0.00	21.39	0.00	21.39	2.13	0.00	2.13		96.19		0.01		96.39
Total	0.18	0.58	1.45	0.00	24.96	0.01	24.97	2.49	0.01	2.50		183.43		0.01		183.67

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.05	0.44	0.26	0.00	1.12	0.01	1.13	0.11	0.01	0.13		87.24		0.00		87.28
Worker	0.13	0.14	1.19	0.00	6.68	0.00	6.69	0.66	0.00	0.66		96.19		0.01		96.39
Total	0.18	0.58	1.45	0.00	7.80	0.01	7.82	0.77	0.01	0.79		183.43		0.01		183.67

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
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

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
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

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	332.63	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	332.63	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	35.26					0.00	0.00		0.00	0.00						0.00
Consumer Products	297.37					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	332.63	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	35.26					0.00	0.00		0.00	0.00						0.00
Consumer Products	297.37					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	332.63	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 T-4

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “LARGE PROJECT”

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL “CALEEMOD SEVILLE – GENTIE CONSTRUCC LARGE PRJ V03.xls”

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Seville Solar Farm - GenTie Line Construction
Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	319	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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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	0.22	0.19	0.00	0.63	0.02	0.65	0.06	0.02	0.08	0.00	22.41	22.41	0.00	0.00	22.49
Total	0.05	0.22	0.19	0.00	0.63	0.02	0.65	0.06	0.02	0.08	0.00	22.41	22.41	0.00	0.00	22.49

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	0.03	0.14	0.17	0.00	0.20	0.01	0.21	0.02	0.01	0.03	0.00	22.41	22.41	0.00	0.00	22.49
Total	0.03	0.14	0.17	0.00	0.20	0.01	0.21	0.02	0.01	0.03	0.00	22.41	22.41	0.00	0.00	22.49

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	60.70	0.00	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	60.70	0.00	0.00	0.00	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	60.70	0.00	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	60.70	0.00	0.00	0.00	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	0.04	0.21	0.15	0.00		0.02	0.02		0.02	0.02	0.00	17.93	17.93	0.00	0.00	18.00
Total	0.04	0.21	0.15	0.00		0.02	0.02		0.02	0.02	0.00	17.93	17.93	0.00	0.00	18.00

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	0.00	0.01	0.01	0.00	0.09	0.00	0.09	0.01	0.00	0.01	0.00	2.07	2.07	0.00	0.00	2.07
Worker	0.00	0.00	0.03	0.00	0.54	0.00	0.54	0.05	0.00	0.05	0.00	2.42	2.42	0.00	0.00	2.42
Total	0.00	0.01	0.04	0.00	0.63	0.00	0.63	0.06	0.00	0.06	0.00	4.49	4.49	0.00	0.00	4.49

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	0.03	0.12	0.13	0.00		0.01	0.01		0.01	0.01	0.00	17.93	17.93	0.00	0.00	18.00
Total	0.03	0.12	0.13	0.00		0.01	0.01		0.01	0.01	0.00	17.93	17.93	0.00	0.00	18.00

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	0.00	0.01	0.01	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	2.07	2.07	0.00	0.00	2.07
Worker	0.00	0.00	0.03	0.00	0.17	0.00	0.17	0.02	0.00	0.02	0.00	2.42	2.42	0.00	0.00	2.42
Total	0.00	0.01	0.04	0.00	0.20	0.00	0.20	0.02	0.00	0.02	0.00	4.49	4.49	0.00	0.00	4.49

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

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	60.70	0.00	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	60.70	0.00	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	6.44					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	54.27					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	60.71	0.00	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	6.44					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	54.27					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	60.71	0.00	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 U

RECALCULATED TIER 3 MITIGATED NO_x AND ROG EMISSIONS INCORRECTLY
CALCULATED BY CALEEMOD FOR THE OFF-ROAD EQUIPMENT FOR THE
COMMON INFRASTRUCTURE, SMALL PROJECT & LARGE PROJECT ACTIVITIES

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Access Rd Constrc OffRdEqp 2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Graders	2	6	162	0.61	100-174HP	0.00628	0.00033	0.392	7.451
Off-Highway Trucks	1	6	381	0.57	300-599HP	0.00628	0.00033	0.431	8.187
Rollers	2	4	84	0.56	75-99HP	0.00733	0.00039	0.145	2.759
Rubber Tired Dozers	1	6	358	0.59	300-599HP	0.00628	0.00033	0.419	7.963
Scrapers	1	8	356	0.72	300-599HP	0.00628	0.00033	0.678	12.884
Totals:								2.065	39.243

Switch Sta Constrc OffRdEqp2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Aerial Lifts	2	6	34	0.46	25-49HP	0.01173	0.00062	0.116	2.201
Cranes	1	6	208	0.43	175-299HP	0.00628	0.00033	0.177	3.372
Graders	1	8	162	0.61	100-174HP	0.00628	0.00033	0.261	4.967
Tractor/Loaders/Backhoes	1	6	75	0.55	75-99HP	0.00733	0.00039	0.095	1.814
Totals:								0.650	12.355

TransmisL Constr OffRdEqp 2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Aerial Lifts	3	4	34	0.46	25-49HP	0.01173	0.00062	0.116	2.201
Crawler Tractors	2	4	82	0.64	75-99HP	0.00733	0.00039	0.162	3.078
Totals:								0.278	5.279

Intrnal Rd Gradng OffRdEqp 2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Graders	1	6	162	0.61	100-174HP	0.00628	0.00033	0.196	3.725
Off-Highway Trucks	1	6	381	0.57	300-599HP	0.00628	0.00033	0.431	8.187
Rollers	2	4	84	0.56	75-99HP	0.00733	0.00039	0.145	2.759
Tractor/Loaders/Backhoes	1	6	75	0.55	75-99HP	0.00733	0.00039	0.095	1.814
Totals:								0.868	16.485

Demolition OffRdEqp 2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Tractor/Loaders/Backhoes	2	8	75	0.55	75-99HP	0.00733	0.00039	0.255	4.838
Totals:								0.255	4.838

Site Prep OffRdEqp 2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Tractor/Loaders/Backhoes	3	8	75	0.55	75-99HP	0.00733	0.00039	0.382	7.257
Totals:								0.382	7.257

Grading OffRdEqp 2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Graders	2	6	162	0.61	100-174HP	0.00628	0.00033	0.392	7.451
Off-Highway Trucks	2	7	381	0.57	300-599HP	0.00628	0.00033	1.005	19.103
Rubber Tired Dozers	1	5	358	0.59	300-599HP	0.00628	0.00033	0.349	6.636
Scrapers	2	8	356	0.72	300-599HP	0.00628	0.00033	1.356	25.768
Tractor/Loaders/Backhoes	2	8	75	0.55	75-99HP	0.00733	0.00039	0.255	4.838
Totals:								3.358	63.796

SolarPanel Instal OffRdEqp 2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Generator Sets	5	8	84	0.74	75-99HP	0.00733	0.00039	0.959	18.226
Off-Highway Trucks	1	6	381	0.57	300-599HP	0.00628	0.00033	0.431	8.187
Other General Industrial Equipment	1	6	150	0.51	100-174HP	0.00628	0.00033	0.152	2.884
Skid Steer Loaders	2	7	37	0.55	25-49HP	0.01173	0.00062	0.176	3.341
Trenchers	2	6	69	0.75	50-74HP	0.01173	0.00062	0.383	7.283
Totals:								2.101	39.922

Building Erec OffRdEqp 2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Aerial Lifts	2	6	34	0.46	25-49HP	0.01173	0.00062	0.116	2.201
Cranes	1	6	208	0.43	175-299HP	0.00628	0.00033	0.177	3.372
Other Construction Equipment	1	4	327	0.62	300-599HP	0.00628	0.00033	0.268	5.095
Other General Industrial Equipment	1	6	150	0.51	100-174HP	0.00628	0.00033	0.152	2.884
Rollers	1	4	84	0.56	75-99HP	0.00733	0.00039	0.073	1.379
Tractor/Loaders/Backhoes	1	6	75	0.55	75-99HP	0.00733	0.00039	0.095	1.814
Totals:								0.881	16.746

Substation Constrc OffRdEqp2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Aerial Lifts	2	6	34	0.46	25-49HP	0.01173	0.00062	0.116	2.201
Cranes	1	6	208	0.43	175-299HP	0.00628	0.00033	0.177	3.372
Other General Industrial Equipment	1	8	150	0.51	100-174HP	0.00628	0.00033	0.202	3.845
Tractor/Loaders/Backhoes	1	6	75	0.55	75-99HP	0.00733	0.00039	0.095	1.814
Totals:								0.591	11.233

GenTie Lin Constr OffRdEqp 2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Aerial Lifts	3	4	34	0.46	25-49HP	0.01173	0.00062	0.116	2.201
Crawler Tractors	2	4	82	0.64	75-99HP	0.00733	0.00039	0.162	3.078
Totals:								0.278	5.279

Tier 3 HP Rate Table

Table 3.5 with corrections in yellow (g/bhp-hr)									
Tier	LowHP	HighHP	Name	CO	NOX	PM10	PM25	ROG	TOG
Tier 3	0	24	0-24HP	4.1	5.32	0.45	0.45	0.28	0.28
Tier 3	25	49	25-49HP	4.1	5.32	0.45	0.45	0.28	0.28
Tier 3	50	74	50-74HP	3.7	5.32	0.3	0.3	0.28	0.28
Tier 3	75	99	75-99HP	3.7	3.325	0.3	0.3	0.175	0.175
Tier 3	100	174	100-174HP	3.7	2.85	0.22	0.22	0.15	0.15
Tier 3	175	299	175-299HP	2.6	2.85	0.15	0.15	0.15	0.15
Tier 3	300	599	300-599HP	2.6	2.85	0.15	0.15	0.15	0.15
Tier 3	600	750	600-750HP	2.6	2.85	0.15	0.15	0.15	0.15
Tier 3	750	2000	750-2000HP	2.6	4.56	0.15	0.15	0.24	0.24
Table 3.5 with corrections in yellow (lb/bhp-hr)									
Tier	LowHP	HighHP	Name	CO	NOX	PM10	PM25	ROG	TOG
Tier 3	0	24	0-24HP	0.00904	0.01173	0.00099	0.00099	0.00062	0.00062
Tier 3	25	49	25-49HP	0.00904	0.01173	0.00099	0.00099	0.00062	0.00062
Tier 3	50	74	50-74HP	0.00816	0.01173	0.00066	0.00066	0.00062	0.00062
Tier 3	75	99	75-99HP	0.00816	0.00733	0.00066	0.00066	0.00039	0.00039
Tier 3	100	174	100-174HP	0.00816	0.00628	0.00049	0.00049	0.00033	0.00033
Tier 3	175	299	175-299HP	0.00573	0.00628	0.00033	0.00033	0.00033	0.00033
Tier 3	300	599	300-599HP	0.00573	0.00628	0.00033	0.00033	0.00033	0.00033
Tier 3	600	750	600-750HP	0.00573	0.00628	0.00033	0.00033	0.00033	0.00033
Tier 3	750	2000	750-2000HP	0.00573	0.01005	0.00033	0.00033	0.00053	0.00053

ATTACHMENT V

TABLES SUMMARIZING DAILY AIR POLLUTANT EMISSIONS CALCULATED BY
CALEEMOD FOR EACH PROJECT ACTIVITY

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ATTACHMENT V-1

TABLES SUMMARIZING DAILY AIR POLLUTANT EMISSIONS CALCULATED BY
CALEEMOD AND AP-42 FOR EACH PROJECT ACTIVITY FOR “SMALL PROJECT”

TABLES SUMMARIZING DAILY AIR POLLUTANT EMISSIONS CALCULATED BY
CALEEMOD FOR EACH PROJECT ACTIVITY

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IntrnalRd Grading Fugitive Dust

Fugitive Dust Emissions from Grading

Graders & Scrapers

(Emission Factor Source: AP-42 (5th Ed. - 7/98) Table 11.9-1 (Grading))

$$EF_{PM_{15}} = (0.051) * (S)^{2.0} \quad \text{lbs/VMT}$$

$$EF_{PMTSP} = (0.04) * (S)^{2.5} \quad \text{lbs/VMT}$$

$$EF_{PM_{10}} = EF_{PM_{15}} * F_{PM_{10}} \quad \text{lbs/VMT}$$

$$EF_{PM_{2.5}} = EF_{PMTSP} * F_{PM_{2.5}} \quad \text{lbs/VMT}$$

Where:

S = Mean Vehicle Speed = 7.1 mph AP-42 default

$F_{PM_{2.5}} = PM_{2.5}$ emission factor = 0.031 lbs/VMT AP-42 default

$F_{PM_{10}} = PM_{10}$ emission factor = 0.600 lbs/VMT AP-42 default

Phase	Mean Vehicle Speed (mph)	PM Emission Factor (lbs/VMT)	PM ₁₀ Emission Factor (lbs/VMT)	PM _{2.5} Emission Factor (lbs/VMT)	Total VMT per Day	Emission Controls		Uncontrolled Emissions (lbs/day)			Controlled Emissions (lbs/day)		
						ECF	Technology	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Grading	7.1	5.37	1.54	0.17	1.0	61%	3 x Water	5.37E+00	1.54E+00	1.67E-01	2.10E+00	6.02E-01	6.50E-02
								5.37E+00	1.54E+00	1.67E-01	2.10E+00	6.02E-01	6.50E-02

Internal Rd Construc 2014

Seville Solar Farm - Winter 2014 Complex Internal Road Construction and Associated Traffic											
Winter Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Internal Rd Constrc Fugitive Dust	A							1.54			0.17
Internal Rd Constrc Off-Road	A	3.18	23.13	13.39	0.03		1.28	1.28		1.28	1.28
Internal Rd Constrc Offsite Haul	A	0.02	0.23	0.09	0.00	17.79	0.01	17.80	1.76	0.01	1.77
Internal Rd Constrc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Internal Rd Constrc Offsite Worker	A	0.31	0.36	2.97	0.00	88.57	0.01	88.58	8.82	0.01	8.83
Total		3.51	23.72	16.45	0.03	106.36	1.30	109.20	10.58	1.30	12.05
Seville Solar Farm - Summer 2014 Complex Internal Road Construction and Associated Traffic											
Summer Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Internal Rd Constrc Fugitive Dust	A							0.60			0.06
Internal Rd Constrc Off-Road	A				0.03			0.00			0.00
Internal Rd Constrc Off-Road	B	0.87	16.49	17.38			1.13	1.13		1.13	1.13
Internal Rd Constrc Offsite Haul	A	0.02	0.23	0.09	0.00	5.57	0.01	5.58	0.54	0.01	0.55
Internal Rd Constrc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Internal Rd Constrc Offsite Worker	A	0.31	0.36	2.97	0.00	27.51	0.01	27.52	2.73	0.01	2.74
Total		1.20	17.08	20.44	0.03	33.08	1.15	34.83	3.27	1.15	4.49
Seville Solar Farm - Summer 2014 Complex Internal Road Construction and Associated Traffic											
Summer Mitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Internal Rd Constrc Fugitive Dust	A							0.60			0.06
Internal Rd Constrc Off-Road	A				0.03			0.00			0.00
Internal Rd Constrc Off-Road	B	0.87	16.49	17.39			1.13	1.13		1.13	1.13
Internal Rd Constrc Offsite Haul	A	0.02	0.22	0.08	0.00	5.57	0.01	5.58	0.54	0.01	0.55
Internal Rd Constrc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Internal Rd Constrc Offsite Worker	A	0.38	0.37	3.54	0.00	27.51	0.01	27.52	2.73	0.01	2.74
Total		1.27	17.08	21.01	0.03	33.08	1.15	34.83	3.27	1.15	4.49
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Demolition 2014

Seville Solar Farm - Winter 2014 Demolition and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Demolition Off-Road	A	1.01	6.79	5.59	0.01		0.54	0.54		0.54	0.54
Demolition Offsite Haul	A	0.02	0.22	0.09	0.00	17.79	0.01	17.80	1.76	0.01	1.77
Demolition Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition Offsite Worker	A	0.08	0.10	0.79	0.00	23.62	0.00	23.62	2.36	0.00	2.36
Total		1.11	7.11	6.47	0.01	41.41	0.55	41.96	4.12	0.55	4.67
Seville Solar Farm - Summer 2014 Demolition and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Demolition Off-Road	A				0.01			0.00			0.00
Demolition Off-Road	B	0.25	4.84	5.38			0.44	0.44		0.44	0.44
Demolition Offsite Haul	A	0.02	0.22	0.09	0.00	5.57	0.01	5.58	0.54	0.01	0.55
Demolition Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition Offsite Worker	A	0.08	0.10	0.79	0.00	7.34	0.00	7.34	0.73	0.00	0.73
Total		0.35	5.16	6.26	0.01	12.91	0.45	13.36	1.27	0.45	1.72
Seville Solar Farm - Summer 2014 Demolition and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Demolition Off-Road	A				0.01			0.00			0.00
Demolition Off-Road	B	0.25	4.84	5.38			0.44	0.44		0.44	0.44
Demolition Offsite Haul	A	0.02	0.22	0.08	0.00	5.57	0.01	5.58	0.54	0.01	0.55
Demolition Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition Offsite Worker	A	0.10	0.10	0.95	0.00	7.34	0.00	7.34	0.73	0.00	0.73
Total		0.37	5.16	6.41	0.01	12.91	0.45	13.36	1.27	0.45	1.72
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Site Prep 2014

Seville Solar Farm - Winter 2014 Site Preparation and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Site Preparation Off-Road	A	1.52	10.19	8.39	0.01		0.80	0.80		0.80	0.80
Site Preparation Offsite Haul	A	0.02	0.22	0.09	0.00	17.79	0.01	17.80	1.76	0.01	1.77
Site Preparation Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation Offsite Worker	A	0.08	0.10	0.79	0.00	23.62	0.00	23.62	2.36	0.00	2.36
Total		1.62	10.51	9.27	0.01	41.41	0.81	42.22	4.12	0.81	4.93
Seville Solar Farm - Summer 2014 Site Preparation and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Site Preparation Off-Road	A				0.01			0.00			0.00
Site Preparation Off-Road	B	0.38	7.26	8.07			0.65	0.65		0.65	0.65
Site Preparation Offsite Haul	A	0.02	0.22	0.09	0.00	5.57	0.01	5.58	0.54	0.01	0.55
Site Preparation Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation Offsite Worker	A	0.08	0.10	0.79	0.00	7.34	0.00	7.34	0.73	0.00	0.73
Total		0.48	7.58	8.95	0.01	12.91	0.66	13.57	1.27	0.66	1.93
Seville Solar Farm - Summer 2014 Site Preparation and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Site Preparation Off-Road	A				0.01			0.00			0.00
Site Preparation Off-Road	B	0.38	7.26	8.08			0.65	0.65		0.65	0.65
Site Preparation Offsite Haul	A	0.02	0.22	0.08	0.00	5.57	0.01	5.58	0.54	0.01	0.55
Site Preparation Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation Offsite Worker	A	0.10	0.10	0.95	0.00	7.34	0.00	7.34	0.73	0.00	0.73
Total		0.50	7.58	9.11	0.01	12.91	0.66	13.57	1.27	0.66	1.93
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Grading Fugitive Dust 2014

Fugitive Dust Emissions from Grading

Graders & Scrapers

(Emission Factor Source: AP-42 (5th Ed. - 7/98) Table 11.9-1 (Grading))

$$EF_{PM15} = (0.051) * (S)^{2.0} \quad \text{lbs/VMt}$$

$$EF_{PMTSP} = (0.04) * (S)^{2.5} \quad \text{lbs/VMt}$$

$$EF_{PM10} = EF_{PM15} * F_{PM10} \quad \text{lbs/VMt}$$

$$EF_{PM2.5} = EF_{PMTSP} * F_{PM2.5} \quad \text{lbs/VMt}$$

Where:

S = Mean Vehicle Speed = 7.1 mph AP-42 default
 $F_{PM2.5}$ = $PM_{2.5}$ emission factor = 0.031 lbs/VMt AP-42 default
 F_{PM10} = PM_{10} emission factor = 0.600 lbs/VMt AP-42 default

Phase	Mean Vehicle Speed (mph)	PM Emission Factor (lbs/VMt)	PM ₁₀ Emission Factor (lbs/VMt)	PM _{2.5} Emission Factor (lbs/VMt)	Total VMT per Day	Emission Controls		Uncontrolled Emissions (lbs/day)			Controlled Emissions (lbs/day)		
						ECF	Technology	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Grading	7.1	5.37	1.54	0.17	14.96	61%	3 x Water	8.04E+01	2.31E+01	2.49E+00	3.14E+01	9.00E+00	9.72E-01
								8.04E+01	2.31E+01	2.49E+00	3.14E+01	9.00E+00	9.72E-01

Dozers

(Emission Factor Source: AP-42 (5th Ed. - 7/98) Table 11.9-1 (Overburden Bulldozing))

$$EF_{PM15} = C_{PM15} * S^{1.5} / M^{1.4} \quad \text{lbs/hr}$$

$$EF_{PMTSP} = C_{TSP} * S^{1.2} / M^{1.3} \quad \text{lbs/hr}$$

$$EF_{PM10} = EF_{PM15} * F_{PM10} \quad \text{lbs/hr}$$

$$EF_{PM2.5} = EF_{PMTSP} * F_{PM2.5} \quad \text{lbs/hr}$$

Where:

M = Material Moisture content (%) = 7.9 % AP-42 mean default
s = Material Silt content (%) = 6.9 % AP-42 mean default
 $F_{PM2.5}$ = $PM_{2.5}$ emission factor = 0.105 lbs/hr AP-42 default
 F_{PM10} = PM_{10} emission factor = 0.750 lbs/hr AP-42 default
 C_{TSP} = 5.70 AP-42 default
 C_{PM15} = 1.00 AP-42 default

Phase	Silt Content (%)	Moisture Content (%)	PM Emission Factor (lbs/hour)	PM ₁₀ Emission Factor (lbs/hour)	PM _{2.5} Emission Factor (lbs/hour)	Hours Dozing (hrs/day)	Number of Units	Emission Controls		Uncontrolled Emissions (lbs/day)			Controlled Emissions (lbs/day)		
								ECF	Technology	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Grading	6.9	7.9	3.94	0.75	0.41	6.00	1.00	61%	3 x Water	2.36E+01	4.52E+00	2.48E+00	9.22E+00	1.76E+00	9.68E-01
										2.36E+01	4.52E+00	2.48E+00	9.22E+00	1.76E+00	9.68E-01

Grading 2014

Seville Solar Farm - Winter 2014 Grading and Associated Traffic											
Winter Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Grading Fugitive Dust	A							27.60			4.97
Grading Off-Road	A	11.93	96.17	47.72	0.11		4.15	4.15		4.15	4.15
Grading Offsite Haul	A	0.00	0.06	0.02	0.00	11.86	0.00	11.86	1.18	0.00	1.18
Grading Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading Offsite Worker	A	0.31	0.36	2.97	0.00	88.57	0.01	88.58	8.82	0.01	8.83
Total		12.24	96.59	50.71	0.11	100.43	4.16	132.19	10.00	4.16	19.13
Seville Solar Farm - Summer 2014 Grading and Associated Traffic											
Summer Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Grading Fugitive Dust	A							10.76			1.94
Grading Off-Road	A				0.11			0.00			0.00
Grading Off-Road	B	3.36	63.80	61.99			3.72	3.72		3.72	3.72
Grading Offsite Haul	A	0.00	0.06	0.02	0.00	4.27	0.00	4.27	0.42	0.00	0.42
Grading Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading Offsite Worker	A	0.31	0.36	2.97	0.00	31.70	0.01	31.71	3.15	0.01	3.16
Total		3.67	64.22	64.98	0.11	35.97	3.73	50.46	3.57	3.73	9.24
Seville Solar Farm - Summer 2014 Grading and Associated Traffic											
Summer Mitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Grading Fugitive Dust	A							10.76			1.94
Grading Off-Road	A				0.11			0.00			0.00
Grading Off-Road	B	3.36	63.80	65.69			3.93	3.93		3.93	3.93
Grading Offsite Haul	A	0.00	0.06	0.02	0.00	4.27	0.00	4.27	0.42	0.00	0.42
Grading Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading Offsite Worker	A	0.38	0.37	3.54	0.00	31.70	0.01	31.71	3.15	0.01	3.16
Total		3.74	64.23	69.25	0.11	35.97	3.94	50.67	3.57	3.94	9.45
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Construction Site Dust

Construction Fugitive Dust Emissions from Unpaved Roads

(Emission Factor Source: AP-42 (5th Ed. - 11/06) §13.2.2 - Unpaved Roads)

$$EF_{PM} \text{ (lbs/VMT)} = ((4.9) * ((s/12)^{0.7}) * ((W/3)^{0.45}))$$

$$EF_{PM_{10}} \text{ (lbs/VMT)} = ((1.5) * ((s/12)^{0.9}) * ((W/3)^{0.45}))$$

$$EF_{PM_{2.5}} \text{ (lbs/VMT)} = ((0.15) * ((s/12)^{0.9}) * ((W/3)^{0.45}))$$

Where:

s = Silt content of road surface material (%)

M = Surface material moisture content (%)

W = Mean Vehicle Weight (tons)

Road Segment	Silt Content	Moisture Content	Vehicle Weight (tons)	PM Emission Factor (lb/VMT)	PM ₁₀ Emission Factor (lb/VMT)	PM _{2.5} Emission Factor (lb/VMT)	VMT per day	Emission Controls		Controlled Emissions (lbs/day)		
								ECF	Technology	PM	PM ₁₀	PM _{2.5}
On-Site Roads	8.5	0.5	20.00	9.0390	2.5826	0.2583	3.00	61%	3 x Water	10.58	3.02	0.30

Solar Panel Installation 2014

Seville Solar Farm - Winter 2014 Solar Panel Installation and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Panel Installation Site Dust	C					3.02		3.02	0.30		0.30
Panel Installation Off-Road	A	7.95	54.87	35.05	0.07		3.68	3.68		3.68	3.68
Panel Installation Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel Installation Offsite Vendor	A	0.25	2.22	1.32	0.01	29.55	0.07	29.62	2.95	0.07	3.02
Panel Installation Offsite Worker	A	2.40	2.74	22.78	0.02	679.05	0.08	679.13	67.63	0.08	67.71
Total		10.60	59.83	59.15	0.10	711.62	3.83	715.45	70.88	3.83	74.71
Seville Solar Farm - Summer 2014 Solar Panel Installation and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Panel Installation Site Dust	C					3.02		3.02	0.30		0.30
Panel Installation Off-Road	A				0.07			0.00			0.00
Panel Installation Off-Road	B	2.10	39.92	39.10			2.99	2.99		2.99	2.99
Panel Installation Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel Installation Offsite Vendor	A	0.25	2.22	1.32	0.01	9.20	0.07	9.27	0.92	0.07	0.99
Panel Installation Offsite Worker	A	2.40	2.74	22.78	0.02	210.94	0.08	211.02	20.91	0.08	20.99
Total		4.75	44.88	63.20	0.10	223.16	3.14	226.30	22.13	3.14	25.27
Seville Solar Farm - Summer 2014 Solar Panel Installation and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Panel Installation Site Dust	C					3.02		3.02	0.30		0.30
Panel Installation Off-Road	A	7.96	54.92	35.09	0.07		3.68	3.68		3.68	3.68
Panel Installation Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel Installation Offsite Vendor	A	0.24	2.19	1.25	0.01	29.55	0.07	29.62	2.95	0.07	3.02
Panel Installation Offsite Worker	A	2.88	2.81	27.17	0.02	679.05	0.08	679.13	67.63	0.08	67.71
Total		11.08	59.92	63.51	0.10	711.62	3.83	715.46	70.88	3.83	74.72
Seville Solar Farm - Summer 2014 Solar Panel Installation and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Panel Installation Site Dust	C					3.02		3.02	0.30		0.30
Panel Installation Off-Road	A				0.07			0.00			0.00
Panel Installation Off-Road	B	2.10	39.92	39.14			2.99	2.99		2.99	2.99
Panel Installation Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel Installation Offsite Vendor	A	0.24	2.19	1.25	0.01	9.20	0.07	9.27	0.92	0.07	0.99
Panel Installation Offsite Worker	A	2.88	2.81	27.17	0.02	210.94	0.08	211.02	20.91	0.08	20.99
Total		5.22	44.92	67.56	0.10	223.16	3.14	226.30	22.13	3.14	25.27
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Building Erection 2014

Seville Solar Farm - Winter 2014 Building Erection and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Building Erection Off-Road	A	3.20	22.97	12.84	0.03		1.22	1.22		1.22	1.22
Building Erection Offsite Haul	A	0.00	0.02	0.01	0.00	11.86	0.00	11.86	1.17	0.00	1.17
Building Erection Offsite Vendor	A	0.05	0.44	0.26	0.00	5.91	0.01	5.92	0.59	0.01	0.60
Building Erection Offsite Worker	A	0.21	0.24	1.98	0.00	59.05	0.01	59.06	5.88	0.01	5.89
Total		3.46	23.67	15.09	0.03	76.82	1.24	78.06	7.64	1.24	8.88
Winter Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Building Erection Off-Road	A				0.03			0.00			0.00
Building Erection Off-Road	B	0.88	16.75	16.70			1.14	1.14		1.14	1.14
Building Erection Offsite Haul	A	0.00	0.02	0.01	0.00	3.71	0.00	3.71	0.36	0.00	0.36
Building Erection Offsite Vendor	A	0.05	0.44	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Erection Offsite Worker	A	0.21	0.24	1.98	0.00	18.34	0.01	18.35	1.82	0.01	1.83
Total		1.14	17.45	18.95	0.03	22.05	1.15	23.20	2.18	1.15	3.33
Seville Solar Farm - Summer 2014 Building Erection and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Building Erection Off-Road	A	3.20	22.99	12.85	0.03		1.22	1.22		1.22	1.22
Building Erection Offsite Haul	A	0.00	0.02	0.01	0.00	11.86	0.00	11.86	1.17	0.00	1.17
Building Erection Offsite Vendor	A	0.05	0.44	0.25	0.00	5.91	0.01	5.92	0.59	0.01	0.60
Building Erection Offsite Worker	A	0.25	0.24	2.36	0.00	59.05	0.01	59.06	5.88	0.01	5.89
Total		3.50	23.69	15.47	0.03	76.82	1.24	78.06	7.64	1.24	8.88
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Building Erection Off-Road	A				0.03			0.00			0.00
Building Erection Off-Road	B	0.88	16.75	16.72			1.14	1.14		1.14	1.14
Building Erection Offsite Haul	A	0.00	0.02	0.01	0.00	3.71	0.00	3.71	0.36	0.00	0.36
Building Erection Offsite Vendor	A	0.05	0.44	0.25	0.00	1.84	0.00	1.84	0.18	0.00	0.18
Building Erection Offsite Worker	A	0.25	0.24	2.36	0.00	18.34	0.01	18.35	1.82	0.01	1.83
Total		1.18	17.45	19.34	0.03	23.89	1.15	25.04	2.36	1.15	3.51
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Substation Construction 2014

Seville Solar Farm - Winter 2014 Substation Construction and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Substation Construc Off-Road	A	2.51	19.95	10.34	0.02		0.95	0.95		0.95	0.95
Substation Construc Offsite Haul	A	0.00	0.02	0.01	0.00	4.80	0.00	4.80	0.47	0.00	0.47
Substation Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substation Construc Offsite Worker	A	0.10	0.12	0.99	0.00	11.83	0.00	11.83	1.17	0.00	1.17
Total		2.61	20.09	11.34	0.02	16.63	0.95	17.58	1.64	0.95	2.59
Winter Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Substation Construc Off-Road	A				0.02			0.00			0.00
Substation Construc Off-Road	B	0.59	11.23	11.77			0.82	0.82		0.82	0.82
Substation Construc Offsite Haul	A	0.00	0.02	0.01	0.00	1.54	0.00	1.54	0.14	0.00	0.14
Substation Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substation Construc Offsite Worker	A	0.10	0.12	0.99	0.00	3.72	0.00	3.72	0.36	0.00	0.36
Total		0.69	11.37	12.77	0.02	5.26	0.82	6.08	0.50	0.82	1.32
Seville Solar Farm - Summer 2014 Substation Construction and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Substation Construc Off-Road	A	2.52	16.96	10.35	0.02		0.95	0.95		0.95	0.95
Substation Construc Offsite Haul	A	0.00	0.02	0.01	0.00	4.80	0.00	4.80	0.47	0.00	0.47
Substation Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substation Construc Offsite Worker	A	0.13	0.12	1.18	0.00	11.82	0.00	11.82	1.17	0.00	1.17
Total		2.65	17.10	11.54	0.02	16.62	0.95	17.57	1.64	0.95	2.59
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Substation Construc Off-Road	A				0.02			0.00			0.00
Substation Construc Off-Road	B	0.59	11.23	11.78			0.82	0.82		0.82	0.82
Substation Construc Offsite Haul	A	0.00	0.02	0.01	0.00	1.54	0.00	1.54	0.14	0.00	0.14
Substation Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substation Construc Offsite Worker	A	0.13	0.12	1.18	0.00	3.72	0.00	3.72	0.36	0.00	0.36
Total		0.72	11.37	12.97	0.02	5.26	0.82	6.08	0.50	0.82	1.32
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

GenTie Line Construction 2014

Seville Solar Farm - Winter 2014 GenTie Line Construction and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
GenTie Line Construc Off-Road	A	1.60	7.92	5.85	0.01		0.67	0.67		0.67	0.67
GenTie Line Construc Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GenTie Line Construc Offsite Vendor	A	0.05	0.44	0.26	0.00	5.91	0.01	5.92	0.59	0.01	0.60
GenTie Line Construc Offsite Worker	A	0.13	0.14	1.19	0.00	35.43	0.00	35.43	3.53	0.00	3.53
Total		1.78	8.50	7.30	0.01	41.34	0.68	42.02	4.12	0.68	4.80
Seville Solar Farm - Summer 2014 GenTie Line Construction and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
GenTie Line Construc Off-Road	A				0.01			0.00			0.00
GenTie Line Construc Off-Road	B	0.28	5.28	5.12			0.46	0.46		0.46	0.46
GenTie Line Construc Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GenTie Line Construc Offsite Vendor	A	0.05	0.44	0.26	0.00	1.84	0.02	1.86	0.18	0.02	0.20
GenTie Line Construc Offsite Worker	A	0.13	0.14	1.19	0.00	11.01	0.00	11.01	1.09	0.00	1.09
Total		0.46	5.86	6.57	0.01	12.85	0.48	13.33	1.27	0.48	1.75
Seville Solar Farm - Summer 2014 GenTie Line Construction and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
GenTie Construc Off-Road	A				0.01			0.00			0.00
GenTie Line Construc Off-Road	B	0.28	5.28	5.12			0.46	0.46		0.46	0.46
GenTie Line Construc Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GenTie Line Construc Offsite Vendor	A	0.05	0.44	0.25	0.00	1.84	0.02	1.86	0.18	0.02	0.20
GenTie Line Construc Offsite Worker	A	0.15	0.15	1.42	0.00	11.01	0.00	11.01	1.09	0.00	1.09
Total		0.48	5.87	6.79	0.01	12.85	0.48	13.33	1.27	0.48	1.75
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Construction Annual CO2e

Seville Solar Farm - Annual Construction and Associated Traffic				
Annual Unmitigated	Emission Rate (Metric Tons/year)			
	Bio-CO2	NBio-CO2	Total CO2	CO2e
New Access Road Construction 2014	0	47.60	47.60	47.69
Switching Station Construction 2014	0	95.75	95.75	95.97
Transmission Line Construction 2014	0	36.08	36.08	36.21
Internal Road Construction 2014	0	20.33	20.33	20.37
Demolition 2014	0	5.50	5.50	5.51
Site Preparation 2014	0	7.94	7.94	7.96
Grading 2014	0	197.93	197.93	198.29
Solar Panel Installation 2014	0	313.17	313.17	313.85
Building Erection 2014	0	116.88	116.88	117.10
Substation Construction 2014	0	96.62	96.62	98.85
GenTie Line Construction 2014	0	34.05	34.05	34.17
Total	0.00	766.59	766.59	770.22
Annual Mitigated	Emission Rate (Metric Tons/year)			
	Bio-CO2	NBio-CO2	Total CO2	CO2e
New Access Road Construction 2014	0	47.6	47.6	47.69
Switching Station Construction 2014	0	95.75	95.75	95.97
Transmission Line Construction 2014	0	36.08	36.08	36.21
Internal Road Construction 2014	0	20.33	20.33	20.37
Demolition 2014	0	5.5	5.5	5.51
Site Preparation 2014	0	7.94	7.94	7.96
Grading 2014	0	197.93	197.93	198.29
Solar Panel Installation 2014	0	313.17	313.17	313.85
Building Erection 2014	0	116.88	116.88	117.1
Substation Construction 2014	0	96.62	96.62	98.85
GenTie Line Construction 2014	0	34.05	34.05	34.17
Total	0.00	792.42	792.42	796.10

ATTACHMENT V-2

TABLES SUMMARIZING DAILY AIR POLLUTANT EMISSIONS CALCULATED BY
CALEEMOD AND AP-42 FOR EACH PROJECT ACTIVITY FOR “LARGE PROJECT”

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IntrnalRd Grading Fugitive Dust

Fugitive Dust Emissions from Grading

Graders & Scrapers

(Emission Factor Source: AP-42 (5th Ed. - 7/98) Table 11.9-1 (Grading))

$$EF_{PM_{15}} = (0.051) * (S)^{2.0} \quad \text{lbs/VMT}$$

$$EF_{PMTSP} = (0.04) * (S)^{2.5} \quad \text{lbs/VMT}$$

$$EF_{PM_{10}} = EF_{PM_{15}} * F_{PM_{10}} \quad \text{lbs/VMT}$$

$$EF_{PM_{2.5}} = EF_{PMTSP} * F_{PM_{2.5}} \quad \text{lbs/VMT}$$

Where:

S = Mean Vehicle Speed = 7.1 mph AP-42 default

$F_{PM_{2.5}} = PM_{2.5}$ emission factor = 0.031 lbs/VMT AP-42 default

$F_{PM_{10}} = PM_{10}$ emission factor = 0.600 lbs/VMT AP-42 default

Phase	Mean Vehicle Speed (mph)	PM Emission Factor (lbs/VMT)	PM ₁₀ Emission Factor (lbs/VMT)	PM _{2.5} Emission Factor (lbs/VMT)	Total VMT per Day	Emission Controls		Uncontrolled Emissions (lbs/day)			Controlled Emissions (lbs/day)		
						ECF	Technology	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Grading	7.1	5.37	1.54	0.17	1.0	61%	3 x Water	5.37E+00	1.54E+00	1.67E-01	2.10E+00	6.02E-01	6.50E-02
								5.37E+00	1.54E+00	1.67E-01	2.10E+00	6.02E-01	6.50E-02

Internal Rd Construc 2014

Seville Solar Farm - Winter 2014 Complex Internal Road Construction and Associated Traffic											
Winter Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Internal Rd Constrc Fugitive Dust	A							1.54			0.17
Internal Rd Constrc Off-Road	A	3.18	23.13	13.39	0.03		1.28	1.28		1.28	1.28
Internal Rd Constrc Offsite Haul	A	0.02	0.22	0.09	0.00	10.73	0.01	10.74	1.06	0.01	1.07
Internal Rd Constrc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Internal Rd Constrc Offsite Worker	A	0.31	0.36	2.97	0.00	53.47	0.01	53.48	5.32	0.01	5.33
Total		3.51	23.71	16.45	0.03	64.20	1.30	67.04	6.38	1.30	7.85
Seville Solar Farm - Summer 2014 Complex Internal Road Construction and Associated Traffic											
Summer Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Internal Rd Constrc Fugitive Dust	A							0.60			0.06
Internal Rd Constrc Off-Road	A				0.03			0.00			0.00
Internal Rd Constrc Off-Road	B	0.87	16.49	17.38			1.13	1.13		1.13	1.13
Internal Rd Constrc Offsite Haul	A	0.02	0.23	0.09	0.00	3.40	0.01	3.41	0.33	0.01	0.34
Internal Rd Constrc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Internal Rd Constrc Offsite Worker	A	0.31	0.36	2.97	0.00	16.71	0.01	16.72	1.65	0.01	1.66
Total		1.20	17.08	20.44	0.03	20.11	1.15	21.86	1.98	1.15	3.20
Seville Solar Farm - Summer 2014 Complex Internal Road Construction and Associated Traffic											
Summer Mitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Internal Rd Constrc Fugitive Dust	A							0.60			0.06
Internal Rd Constrc Off-Road	A				0.03			0.00			0.00
Internal Rd Constrc Off-Road	B	0.87	16.49	17.39			1.13	1.13		1.13	1.13
Internal Rd Constrc Offsite Haul	A	0.02	0.22	0.08	0.00	3.40	0.01	3.41	0.33	0.01	0.34
Internal Rd Constrc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Internal Rd Constrc Offsite Worker	A	0.38	0.37	3.54	0.00	16.71	0.01	16.72	1.65	0.01	1.66
Total		1.27	17.08	21.01	0.03	20.11	1.15	21.86	1.98	1.15	3.20
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Demolition 2014

Seville Solar Farm - Winter 2014 Demolition and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Demolition Off-Road	A	1.01	6.79	5.59	0.01		0.54	0.54		0.54	0.54
Demolition Offsite Haul	A	0.02	0.22	0.09	0.00	10.73	0.01	10.74	1.06	0.01	1.07
Demolition Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition Offsite Worker	A	0.08	0.10	0.79	0.00	14.26	0.00	14.26	1.42	0.00	1.42
Total		1.11	7.11	6.47	0.01	24.99	0.55	25.54	2.48	0.55	3.03
Seville Solar Farm - Summer 2014 Demolition and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Demolition Off-Road	A				0.01			0.00			0.00
Demolition Off-Road	B	0.25	4.84	5.38			0.44	0.44		0.44	0.44
Demolition Offsite Haul	A	0.02	0.22	0.09	0.00	3.40	0.01	3.41	0.33	0.01	0.34
Demolition Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition Offsite Worker	A	0.08	0.10	0.79	0.00	4.46	0.00	4.46	0.44	0.00	0.44
Total		0.35	5.16	6.26	0.01	7.86	0.45	8.31	0.77	0.45	1.22
Seville Solar Farm - Summer 2014 Demolition and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Demolition Off-Road	A				0.01			0.00			0.00
Demolition Off-Road	B	0.25	4.84	5.38			0.44	0.44		0.44	0.44
Demolition Offsite Haul	A	0.02	0.22	0.08	0.00	3.40	0.01	3.41	0.33	0.01	0.34
Demolition Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition Offsite Worker	A	0.10	0.10	0.95	0.00	4.46	0.00	4.46	0.44	0.00	0.44
Total		0.37	5.16	6.41	0.01	7.86	0.45	8.31	0.77	0.45	1.22
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Site Prep 2014

Seville Solar Farm - Winter 2014 Site Preparation and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Site Preparation Off-Road	A	1.52	10.19	8.39	0.01		0.80	0.80		0.80	0.80
Site Preparation Offsite Haul	A	0.02	0.22	0.09	0.00	10.73	0.01	10.74	1.06	0.01	1.07
Site Preparation Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation Offsite Worker	A	0.08	0.10	0.79	0.00	14.26	0.00	14.26	1.42	0.00	1.42
Total		1.62	10.51	9.27	0.01	24.99	0.81	25.80	2.48	0.81	3.29
Seville Solar Farm - Summer 2014 Site Preparation and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Site Preparation Off-Road	A				0.01			0.00			0.00
Site Preparation Off-Road	B	0.38	7.26	8.07			0.65	0.65		0.65	0.65
Site Preparation Offsite Haul	A	0.02	0.22	0.09	0.00	3.40	0.01	3.41	0.33	0.01	0.34
Site Preparation Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation Offsite Worker	A	0.08	0.10	0.79	0.00	4.46	0.00	4.46	0.44	0.00	0.44
Total		0.48	7.58	8.95	0.01	7.86	0.66	8.52	0.77	0.66	1.43
Seville Solar Farm - Summer 2014 Site Preparation and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Site Preparation Off-Road	A				0.01			0.00			0.00
Site Preparation Off-Road	B	0.38	7.26	8.08			0.65	0.65		0.65	0.65
Site Preparation Offsite Haul	A	0.02	0.22	0.08	0.00	3.40	0.01	3.41	0.33	0.01	0.34
Site Preparation Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation Offsite Worker	A	0.10	0.10	0.95	0.00	4.46	0.00	4.46	0.44	0.00	0.44
Total		0.50	7.58	9.11	0.01	7.86	0.66	8.52	0.77	0.66	1.43
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Grading Fugitive Dust 2014

Fugitive Dust Emissions from Grading

Graders & Scrapers

(Emission Factor Source: AP-42 (5th Ed. - 7/98) Table 11.9-1 (Grading))

$$EF_{PM15} = (0.051) * (S)^{2.0} \quad \text{lbs/VMT}$$

$$EF_{PMTSP} = (0.04) * (S)^{2.5} \quad \text{lbs/VMT}$$

$$EF_{PM10} = EF_{PM15} * F_{PM10} \quad \text{lbs/VMT}$$

$$EF_{PM2.5} = EF_{PMTSP} * F_{PM2.5} \quad \text{lbs/VMT}$$

Where:

S = Mean Vehicle Speed = 7.1 mph AP-42 default
 $F_{PM2.5}$ = $PM_{2.5}$ emission factor = 0.031 lbs/VMT AP-42 default
 F_{PM10} = PM_{10} emission factor = 0.600 lbs/VMT AP-42 default

Phase	Mean Vehicle Speed (mph)	PM Emission Factor (lbs/VMT)	PM ₁₀ Emission Factor (lbs/VMT)	PM _{2.5} Emission Factor (lbs/VMT)	Total VMT per Day	Emission Controls		Uncontrolled Emissions (lbs/day)			Controlled Emissions (lbs/day)		
						ECF	Technology	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Grading	7.1	5.37	1.54	0.17	14.96	61%	3 x Water	8.04E+01	2.31E+01	2.49E+00	3.14E+01	9.00E+00	9.72E-01
								8.04E+01	2.31E+01	2.49E+00	3.14E+01	9.00E+00	9.72E-01

Dozers

(Emission Factor Source: AP-42 (5th Ed. - 7/98) Table 11.9-1 (Overburden Bulldozing))

$$EF_{PM15} = C_{PM15} * S^{1.5} / M^{1.4} \quad \text{lbs/hr}$$

$$EF_{PMTSP} = C_{TSP} * S^{1.2} / M^{1.3} \quad \text{lbs/hr}$$

$$EF_{PM10} = EF_{PM15} * F_{PM10} \quad \text{lbs/hr}$$

$$EF_{PM2.5} = EF_{PMTSP} * F_{PM2.5} \quad \text{lbs/hr}$$

Where:

M = Material Moisture content (%) = 7.9 % AP-42 mean default
s = Material Silt content (%) = 6.9 % AP-42 mean default
 $F_{PM2.5}$ = $PM_{2.5}$ emission factor = 0.105 lbs/hr AP-42 default
 F_{PM10} = PM_{10} emission factor = 0.750 lbs/hr AP-42 default
 C_{TSP} = 5.70 AP-42 default
 C_{PM15} = 1.00 AP-42 default

Phase	Silt Content (%)	Moisture Content (%)	PM Emission Factor (lbs/hour)	PM ₁₀ Emission Factor (lbs/hour)	PM _{2.5} Emission Factor (lbs/hour)	Hours Dozing (hrs/day)	Number of Units	Emission Controls		Uncontrolled Emissions (lbs/day)			Controlled Emissions (lbs/day)		
								ECF	Technology	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Grading	6.9	7.9	3.94	0.75	0.41	6.00	1.00	61%	3 x Water	2.36E+01	4.52E+00	2.48E+00	9.22E+00	1.76E+00	9.68E-01
										2.36E+01	4.52E+00	2.48E+00	9.22E+00	1.76E+00	9.68E-01

Grading 2014

Seville Solar Farm - Winter 2014 Grading and Associated Traffic											
Winter Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Grading Fugitive Dust	A							27.60			4.97
Grading Off-Road	A	11.93	96.17	47.72	0.11		4.15	4.15		4.15	4.15
Grading Offsite Haul	A	0.00	0.06	0.02	0.00	7.15	0.00	7.15	0.71	0.00	0.71
Grading Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading Offsite Worker	A	0.31	0.36	2.97	0.00	53.47	0.01	53.48	5.32	0.01	5.33
Total		12.24	96.59	50.71	0.11	60.62	4.16	92.38	6.03	4.16	15.16
Seville Solar Farm - Summer 2014 Grading and Associated Traffic											
Summer Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Grading Fugitive Dust	A							10.76			1.94
Grading Off-Road	A				0.11			0.00			0.00
Grading Off-Road	B	3.36	63.80	61.99			3.72	3.72		3.72	3.72
Grading Offsite Haul	A	0.00	0.06	0.02	0.00	2.60	0.00	2.60	0.25	0.00	0.25
Grading Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading Offsite Worker	A	0.31	0.36	2.97	0.00	19.23	0.01	19.24	1.90	0.01	1.91
Total		3.67	64.22	64.98	0.11	21.83	3.73	36.32	2.15	3.73	7.82
Seville Solar Farm - Summer 2014 Grading and Associated Traffic											
Summer Mitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Grading Fugitive Dust	A							10.76			1.94
Grading Off-Road	A				0.11			0.00			0.00
Grading Off-Road	B	3.36	63.80	65.69			3.93	3.93		3.93	3.93
Grading Offsite Haul	A	0.00	0.06	0.02	0.00	2.60	0.00	2.60	0.25	0.00	0.25
Grading Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading Offsite Worker	A	0.38	0.37	3.54	0.00	19.23	0.01	19.24	1.90	0.01	1.91
Total		3.74	64.23	69.25	0.11	21.83	3.94	36.53	2.15	3.94	8.03
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Construction Site Dust

Construction Fugitive Dust Emissions from Unpaved Roads

(Emission Factor Source: AP-42 (5th Ed. - 11/06) §13.2.2 - Unpaved Roads)

$$EF_{PM} \text{ (lbs/VMT)} = ((4.9) * ((s/12)^{0.7}) * ((W/3)^{0.45}))$$

$$EF_{PM_{10}} \text{ (lbs/VMT)} = ((1.5) * ((s/12)^{0.9}) * ((W/3)^{0.45}))$$

$$EF_{PM_{2.5}} \text{ (lbs/VMT)} = ((0.15) * ((s/12)^{0.9}) * ((W/3)^{0.45}))$$

Where:

s = Silt content of road surface material (%)

M = Surface material moisture content (%)

W = Mean Vehicle Weight (tons)

Road Segment	Silt Content	Moisture Content	Vehicle Weight (tons)	PM Emission Factor (lb/VMT)	PM ₁₀ Emission Factor (lb/VMT)	PM _{2.5} Emission Factor (lb/VMT)	VMT per day	Emission Controls		Controlled Emissions (lbs/day)		
								ECF	Technology	PM	PM ₁₀	PM _{2.5}
On-Site Roads	8.5	0.5	20.00	9.0390	2.5826	0.2583	3.00	61%	3 x Water	10.58	3.02	0.30

Solar Panel Installation 2014

Seville Solar Farm - Winter 2014 Solar Panel Installation and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Panel Installation Site Dust	C					3.02		3.02	0.30		0.30
Panel Installation Off-Road	A	7.95	54.87	35.05	0.07		3.68	3.68		3.68	3.68
Panel Installation Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel Installation Offsite Vendor	A	0.25	2.22	1.32	0.01	17.83	0.07	17.90	1.78	0.07	1.85
Panel Installation Offsite Worker	A	2.40	2.74	22.78	0.02	409.95	0.08	410.03	40.76	0.08	40.84
Total		10.60	59.83	59.15	0.10	430.80	3.83	434.63	42.84	3.83	46.67
Seville Solar Farm - Summer 2014 Solar Panel Installation and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Panel Installation Site Dust	C					3.02		3.02	0.30		0.30
Panel Installation Off-Road	A				0.07			0.00			0.00
Panel Installation Off-Road	B	2.10	39.92	39.10			2.99	2.99		2.99	2.99
Panel Installation Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel Installation Offsite Vendor	A	0.25	2.22	1.32	0.01	5.59	0.07	5.66	0.56	0.07	0.63
Panel Installation Offsite Worker	A	2.40	2.74	22.78	0.02	128.13	0.08	128.21	12.63	0.08	12.71
Total		4.75	44.88	63.20	0.10	136.74	3.14	139.88	13.49	3.14	16.63
Seville Solar Farm - Summer 2014 Solar Panel Installation and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Panel Installation Site Dust	C					3.02		3.02	0.30		0.30
Panel Installation Off-Road	A				0.07			0.00			0.00
Panel Installation Off-Road	B	2.10	39.92	39.14			2.99	2.99		2.99	2.99
Panel Installation Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel Installation Offsite Vendor	A	0.24	2.19	1.25	0.01	5.59	0.07	5.66	0.56	0.07	0.63
Panel Installation Offsite Worker	A	2.88	2.81	27.17	0.02	128.13	0.08	128.21	12.63	0.08	12.71
Total		5.22	44.92	67.56	0.10	136.74	3.14	139.88	13.49	3.14	16.63
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Building Erection 2014

Seville Solar Farm - Winter 2014 Building Erection and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Building Erection Off-Road	A	3.20	22.97	12.84	0.03		1.22	1.22		1.22	1.22
Building Erection Offsite Haul	A	0.00	0.02	0.01	0.00	7.15	0.00	7.15	0.71	0.00	0.71
Building Erection Offsite Vendor	A	0.05	0.44	0.26	0.00	3.57	0.01	3.58	0.36	0.01	0.37
Building Erection Offsite Worker	A	0.21	0.24	1.98	0.00	35.65	0.01	35.66	3.54	0.01	3.55
Total		3.46	23.67	15.09	0.03	46.37	1.24	47.61	4.61	1.24	5.85
Winter Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Building Erection Off-Road	A				0.03			0.00			0.00
Building Erection Off-Road	B	0.88	16.75	16.70			1.14	1.14		1.14	1.14
Building Erection Offsite Haul	A	0.00	0.02	0.01	0.00	2.27	0.00	2.27	0.22	0.00	0.22
Building Erection Offsite Vendor	A	0.05	0.44	0.26	0.00	1.12	0.00	1.12	0.11	0.00	0.11
Building Erection Offsite Worker	A	0.21	0.24	1.98	0.00	11.14	0.01	11.15	1.10	0.01	1.11
Total		1.14	17.45	18.95	0.03	14.53	1.15	15.68	1.43	1.15	2.58
Seville Solar Farm - Summer 2014 Building Erection and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Building Erection Off-Road	A	3.20	22.99	12.85	0.03		1.22	1.22		1.22	1.22
Building Erection Offsite Haul	A	0.00	0.02	0.01	0.00	7.15	0.00	7.15	0.71	0.00	0.71
Building Erection Offsite Vendor	A	0.05	0.44	0.25	0.00	3.57	0.01	3.58	0.36	0.01	0.37
Building Erection Offsite Worker	A	0.25	0.24	2.36	0.00	35.65	0.01	35.66	3.54	0.01	3.55
Total		3.50	23.69	15.47	0.03	46.37	1.24	47.61	4.61	1.24	5.85
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Building Erection Off-Road	A				0.03			0.00			0.00
Building Erection Off-Road	B	0.88	16.75	16.72			1.14	1.14		1.14	1.14
Building Erection Offsite Haul	A	0.00	0.02	0.01	0.00	2.27	0.00	2.27	0.22	0.00	0.22
Building Erection Offsite Vendor	A	0.05	0.44	0.25	0.00	1.12	0.00	1.12	0.11	0.00	0.11
Building Erection Offsite Worker	A	0.25	0.24	2.36	0.00	11.14	0.01	11.15	1.10	0.01	1.11
Total		1.18	17.45	19.34	0.03	14.53	1.15	15.68	1.43	1.15	2.58
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Substation Construction 2014

Seville Solar Farm - Winter 2014 Substation Construction and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Substation Construc Off-Road	A	2.51	19.95	10.34	0.02		0.95	0.95		0.95	0.95
Substation Construc Offsite Haul	A	0.00	0.02	0.01	0.00	4.80	0.00	4.80	0.47	0.00	0.47
Substation Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substation Construc Offsite Worker	A	0.10	0.12	0.99	0.00	11.83	0.00	11.83	1.17	0.00	1.17
Total		2.61	20.09	11.34	0.02	16.63	0.95	17.58	1.64	0.95	2.59
Winter Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Substation Construc Off-Road	A				0.02			0.00			0.00
Substation Construc Off-Road	B	0.59	11.23	11.77			0.82	0.82		0.82	0.82
Substation Construc Offsite Haul	A	0.00	0.02	0.01	0.00	1.54	0.00	1.54	0.14	0.00	0.14
Substation Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substation Construc Offsite Worker	A	0.10	0.12	0.99	0.00	3.72	0.00	3.72	0.36	0.00	0.36
Total		0.69	11.37	12.77	0.02	5.26	0.82	6.08	0.50	0.82	1.32
Seville Solar Farm - Summer 2014 Substation Construction and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Substation Construc Off-Road	A	2.52	16.96	10.35	0.02		0.95	0.95		0.95	0.95
Substation Construc Offsite Haul	A	0.00	0.02	0.01	0.00	4.80	0.00	4.80	0.47	0.00	0.47
Substation Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substation Construc Offsite Worker	A	0.13	0.12	1.18	0.00	11.82	0.00	11.82	1.17	0.00	1.17
Total		2.65	17.10	11.54	0.02	16.62	0.95	17.57	1.64	0.95	2.59
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Substation Construc Off-Road	A				0.02			0.00			0.00
Substation Construc Off-Road	B	0.59	11.23	11.78			0.82	0.82		0.82	0.82
Substation Construc Offsite Haul	A	0.00	0.02	0.01	0.00	1.54	0.00	1.54	0.14	0.00	0.14
Substation Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substation Construc Offsite Worker	A	0.13	0.12	1.18	0.00	3.72	0.00	3.72	0.36	0.00	0.36
Total		0.72	11.37	12.97	0.02	5.26	0.82	6.08	0.50	0.82	1.32
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

GenTie Line Construction 2014

Seville Solar Farm - Winter 2014 GenTie Line Construction and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
GenTie Line Construc Off-Road	A	1.60	7.92	5.85	0.01		0.67	0.67		0.67	0.67
GenTie Line Construc Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GenTie Line Construc Offsite Vendor	A	0.05	0.44	0.26	0.00	3.57	0.01	3.58	0.36	0.01	0.37
GenTie Line Construc Offsite Worker	A	0.13	0.14	1.19	0.00	21.39	0.00	21.39	2.13	0.00	2.13
Total		1.78	8.50	7.30	0.01	24.96	0.68	25.64	2.49	0.68	3.17
Winter Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
GenTie Construc Off-Road	A				0.01			0.00			0.00
GenTie Line Construc Off-Road	B	0.28	5.28	5.12			0.46	0.46		0.46	0.46
GenTie Line Construc Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GenTie Line Construc Offsite Vendor	A	0.05	0.44	0.26	0.00	1.12	0.02	1.14	0.11	0.02	0.13
GenTie Line Construc Offsite Worker	A	0.13	0.14	1.19	0.00	6.68	0.00	6.68	0.66	0.00	0.66
Total		0.46	5.86	6.57	0.01	7.80	0.48	8.28	0.77	0.48	1.25
Seville Solar Farm - Summer 2014 GenTie Line Construction and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
GenTie Line Construc Off-Road	A	1.60	7.93	5.86	0.01		0.67	0.67		0.67	0.67
GenTie Line Construc Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GenTie Line Construc Offsite Vendor	A	0.05	0.44	0.25	0.00	3.57	0.01	3.58	0.36	0.01	0.37
GenTie Line Construc Offsite Worker	A	0.15	0.15	1.42	0.00	21.39	0.00	21.39	2.13	0.00	2.13
Total		1.80	8.52	7.53	0.01	24.96	0.68	25.64	2.49	0.68	3.17
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
GenTie Construc Off-Road	A				0.01			0.00			0.00
GenTie Line Construc Off-Road	B	0.28	5.28	5.12			0.46	0.46		0.46	0.46
GenTie Line Construc Offsite Haul	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GenTie Line Construc Offsite Vendor	A	0.05	0.44	0.25	0.00	1.12	0.02	1.14	0.11	0.02	0.13
GenTie Line Construc Offsite Worker	A	0.15	0.15	1.42	0.00	6.68	0.00	6.68	0.66	0.00	0.66
Total		0.48	5.87	6.79	0.01	7.80	0.48	8.28	0.77	0.48	1.25
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Construction Annual CO2e

Seville Solar Farm - Annual Construction and Associated Traffic				
Annual Unmitigated	Emission Rate (Metric Tons/year)			
	Bio-CO2	NBio-CO2	Total CO2	CO2e
New Access Road Construction 2014	0	47.60	47.60	47.69
Switching Station Construction 2014	0	95.75	95.75	95.97
Transmission Line Construction 2014	0	36.08	36.08	36.21
Internal Road Construction 2014	0	20.33	20.33	20.37
Demolition 2014	0	5.50	5.50	5.51
Site Preparation 2014	0	7.94	7.94	7.96
Grading 2014	0	267.74	267.74	268.22
Solar Panel Installation 2014	0	578.16	578.16	579.41
Building Erection 2014	0	116.88	116.88	117.10
Substation Construction 2014	0	96.62	96.62	98.85
GenTie Line Construction 2014	0	22.41	22.41	22.49
Total	0.00	1089.75	1089.75	1094.03
Annual Mitigated	Emission Rate (Metric Tons/year)			
	Bio-CO2	NBio-CO2	Total CO2	CO2e
New Access Road Construction 2014	0	47.6	47.6	47.69
Switching Station Construction 2014	0	95.75	95.75	95.97
Transmission Line Construction 2014	0	36.08	36.08	36.21
Internal Road Construction 2014	0	20.33	20.33	20.37
Demolition 2014	0	5.5	5.5	5.51
Site Preparation 2014	0	7.94	7.94	7.96
Grading 2014	0	267.74	267.74	268.22
Solar Panel Installation 2014	0	578.16	578.16	579.41
Building Erection 2014	0	116.88	116.88	117.1
Substation Construction 2014	0	96.62	96.62	98.85
GenTie Line Construction 2014	0	22.41	22.41	22.49
Total	0.00	1115.58	1115.58	1119.91

ATTACHMENT V-3

TABLES SUMMARIZING DAILY AIR POLLUTANT EMISSIONS CALCULATED BY
CALEEMOD AND AP-42 FOR EACH “COMMON INFRASTRUCTURE” ACTIVITY

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Access Rd Grading Fugitive Dust

Fugitive Dust Emissions from Grading

Graders & Scrapers

(Emission Factor Source: AP-42 (5th Ed. - 7/98) Table 11.9-1 (Grading))

$$EF_{PM15} = (0.051) * (S)^{2.0} \quad \text{lbs/VMT}$$

$$EF_{PMTSP} = (0.04) * (S)^{2.5} \quad \text{lbs/VMT}$$

$$EF_{PM10} = EF_{PM15} * F_{PM10} \quad \text{lbs/VMT}$$

$$EF_{PM2.5} = EF_{PMTSP} * F_{PM2.5} \quad \text{lbs/VMT}$$

Where:

S = Mean Vehicle Speed = 7.1 mph AP-42 default
 $F_{PM2.5}$ = $PM_{2.5}$ emission factor = 0.031 lbs/VMT AP-42 default
 F_{PM10} = PM_{10} emission factor = 0.600 lbs/VMT AP-42 default

Phase	Mean Vehicle Speed (mph)	PM Emission Factor (lbs/VMT)	PM ₁₀ Emission Factor (lbs/VMT)	PM _{2.5} Emission Factor (lbs/VMT)	Total VMT per Day	Emission Controls		Uncontrolled Emissions (lbs/day)			Controlled Emissions (lbs/day)		
						ECF	Technology	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Grading	7.1	5.37	1.54	0.17	2.5	61%	3 x Water	1.33E+01	3.82E+00	4.12E-01	5.19E+00	1.49E+00	1.61E-01
								1.33E+01	3.82E+00	4.12E-01	5.19E+00	1.49E+00	1.61E-01

Dozers

(Emission Factor Source: AP-42 (5th Ed. - 7/98) Table 11.9-1 (Overburden Bulldozing))

$$EF_{PM15} = C_{PM15} * S^{1.5} / M^{1.4} \quad \text{lbs/hr}$$

$$EF_{PMTSP} = C_{TSP} * S^{1.2} / M^{1.3} \quad \text{lbs/hr}$$

$$EF_{PM10} = EF_{PM15} * F_{PM10} \quad \text{lbs/hr}$$

$$EF_{PM2.5} = EF_{PMTSP} * F_{PM2.5} \quad \text{lbs/hr}$$

Where:

M = Material Moisture content (%) = 7.9 % AP-42 mean default
s = Material Silt content (%) = 6.9 % AP-42 mean default
 $F_{PM2.5}$ = $PM_{2.5}$ emission factor = 0.105 lbs/hr AP-42 default
 F_{PM10} = PM_{10} emission factor = 0.750 lbs/hr AP-42 default
 C_{TSP} = 5.70 AP-42 default
 C_{PM15} = 1.00 AP-42 default

Phase	Silt Content (%)	Moisture Content (%)	PM Emission Factor (lbs/hour)	PM ₁₀ Emission Factor (lbs/hour)	PM _{2.5} Emission Factor (lbs/hour)	Hours Dozing (hrs/day)	Number of Units	Emission Controls		Uncontrolled Emissions (lbs/day)			Controlled Emissions (lbs/day)		
								ECF	Technology	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Grading	6.9	7.9	3.94	0.75	0.41	6.00	1.00	61%	3 x Water	2.36E+01	4.52E+00	2.48E+00	9.22E+00	1.76E+00	9.68E-01
										2.36E+01	4.52E+00	2.48E+00	9.22E+00	1.76E+00	9.68E-01

New Access Rd Construc 2014

Seville Solar Farm - Winter 2014 New Access Road Construction and Associated Traffic											
Winter Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
New Access Rd Constrc Fugitive Dust	A							8.33			2.89
New Access Rd Constrc Off-Road	A	7.89	63.05	32.70	0.07		2.86	2.86		2.86	2.86
New Access Rd Constrc Offsite Haul	A	0.04	0.44	0.19	0.00	9.11	0.01	9.12	0.88	0.01	0.89
New Access Rd Constrc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Access Rd Constrc Offsite Worker	A	0.31	0.36	2.97	0.00	22.42	0.01	22.43	2.22	0.01	2.23
Total		8.24	63.85	35.86	0.07	31.53	2.88	42.75	3.10	2.88	8.88
Winter Mitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
New Access Rd Constrc Fugitive Dust	A							3.25			1.13
New Access Rd Constrc Off-Road	A				0.07			0.00			0.00
New Access Rd Constrc Off-Road	B	2.07	39.24	39.19			2.35	2.35		2.35	2.35
New Access Rd Constrc Offsite Haul	A	0.04	0.44	0.19	0.00	3.00	0.01	3.01	0.27	0.01	0.28
New Access Rd Constrc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Access Rd Constrc Offsite Worker	A	0.31	0.36	2.97	0.00	7.16	0.01	7.17	0.69	0.01	0.70
Total		2.42	40.04	42.35	0.07	10.16	2.37	15.78	0.96	2.37	4.46
Seville Solar Farm - Summer 2014 New Access Road Construction and Associated Traffic											
Summer Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
New Access Rd Constrc Fugitive Dust	A							8.33			2.89
New Access Rd Constrc Off-Road	A	7.90	63.11	32.73	0.07		2.86	2.86		2.86	2.86
New Access Rd Constrc Offsite Haul	A	0.03	0.43	0.17	0.00	9.11	0.01	9.12	0.88	0.01	0.89
New Access Rd Constrc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Access Rd Constrc Offsite Worker	A	0.38	0.37	3.54	0.00	22.42	0.01	22.43	2.22	0.01	2.23
Total		8.31	63.91	36.44	0.07	31.53	2.88	42.75	3.10	2.88	8.88
Summer Mitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
New Access Rd Constrc Fugitive Dust	A							3.25			1.13
New Access Rd Constrc Off-Road	A				0.07			0.00			0.00
New Access Rd Constrc Off-Road	B	2.07	39.24	41.21			2.51	2.51		2.51	2.51
New Access Rd Constrc Offsite Haul	A	0.03	0.43	0.17	0.00	3.00	0.01	3.01	0.27	0.01	0.28
New Access Rd Constrc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Access Rd Constrc Offsite Worker	A	0.38	0.37	3.54	0.00	7.16	0.01	7.17	0.69	0.01	0.70
Total		2.48	40.04	44.92	0.07	10.16	2.53	15.94	0.96	2.53	4.62
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

SwSt Grading Fugitive Dust 2014

Fugitive Dust Emissions from Grading

Graders & Scrapers

(Emission Factor Source: AP-42 (5th Ed. - 7/98) Table 11.9-1 (Grading))

$$EF_{PM_{15}} = (0.051) * (S)^{2.0} \quad \text{lbs/VMT}$$

$$EF_{PMTSP} = (0.04) * (S)^{2.5} \quad \text{lbs/VMT}$$

$$EF_{PM_{10}} = EF_{PM_{15}} * F_{PM_{10}} \quad \text{lbs/VMT}$$

$$EF_{PM_{2.5}} = EF_{PMTSP} * F_{PM_{2.5}} \quad \text{lbs/VMT}$$

Where:

S = Mean Vehicle Speed = 7.1 mph AP-42 default

$F_{PM_{2.5}} = PM_{2.5}$ emission factor = 0.031 lbs/VMT AP-42 default

$F_{PM_{10}} = PM_{10}$ emission factor = 0.600 lbs/VMT AP-42 default

Phase	Mean Vehicle Speed (mph)	PM Emission Factor (lbs/VMT)	PM ₁₀ Emission Factor (lbs/VMT)	PM _{2.5} Emission Factor (lbs/VMT)	Total VMT per Day	Emission Controls		Uncontrolled Emissions (lbs/day)			Controlled Emissions (lbs/day)		
						ECF	Technology	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Grading	7.1	5.37	1.54	0.17	3.0	61%	3 x Water	1.63E+01	4.67E+00	5.04E-01	6.34E+00	1.82E+00	1.96E-01
								1.63E+01	4.67E+00	5.04E-01	6.34E+00	1.82E+00	1.96E-01

Switch Station Construc 2014

Seville Solar Farm - Winter 2014 Switch Station Construction and Associated Traffic											
Winter Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Switch Sta Construc Fugitive Dust	A							4.67			0.50
Switch Sta Construc Off-Road	A	2.70	18.49	11.65	0.02		1.02	1.02		1.02	1.02
Switch Sta Construc Offsite Haul	A	0.00	0.02	0.01	0.00	4.80	0.00	4.80	0.47	0.00	0.47
Switch Sta Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Switch Sta Construc Offsite Worker	A	0.10	0.12	0.99	0.00	11.82	0.00	11.82	1.18	0.00	1.18
Total		2.80	18.63	12.65	0.02	16.62	1.02	22.30	1.65	1.02	3.17
Winter Mitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Switch Sta Construc Fugitive Dust	A							1.82			0.20
Switch Sta Construc Off-Road	A				0.02			0.00			0.00
Switch Sta Construc Off-Road	B	0.65	12.35	13.23			0.91	0.91		0.91	0.91
Switch Sta Construc Offsite Haul	A	0.00	0.02	0.01	0.00	1.54	0.00	1.54	0.14	0.00	0.14
Switch Sta Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Switch Sta Construc Offsite Worker	A	0.11	0.13	1.07	0.00	3.72	0.00	3.72	0.36	0.00	0.36
Total		0.76	12.50	14.31	0.02	5.26	0.91	7.99	0.50	0.91	1.61
Seville Solar Farm - Summer 2014 Switch Station Construction and Associated Traffic											
Summer Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Switch Sta Construc Fugitive Dust	A							4.67			0.50
Switch Sta Construc Off-Road	A	2.70	18.50	11.66	0.02		1.02	1.02		1.02	1.02
Switch Sta Construc Offsite Haul	A	0.00	0.02	0.01	0.00	4.80	0.00	4.80	0.47	0.00	0.47
Switch Sta Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Switch Sta Construc Offsite Worker	A	0.13	0.12	1.18	0.00	11.82	0.00	11.82	1.18	0.00	1.18
Total		2.83	18.64	12.85	0.02	16.62	1.02	22.30	1.65	1.02	3.17
Summer Mitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Switch Sta Construc Fugitive Dust	A							1.82			0.20
Switch Sta Construc Off-Road	A				0.02			0.00			0.00
Switch Sta Construc Off-Road	B	0.65	12.35	13.24			0.91	0.91		0.91	0.91
Switch Sta Construc Offsite Haul	A	0.00	0.02	0.01	0.00	1.54	0.00	1.54	0.14	0.00	0.14
Switch Sta Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Switch Sta Construc Offsite Worker	A	0.13	0.12	1.18	0.00	3.72	0.00	3.72	0.36	0.00	0.36
Total		0.78	12.49	14.43	0.02	5.26	0.91	7.99	0.50	0.91	1.61
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Transmission Line Construc 2014

Seville Solar Farm - Winter 2014 Transmission Line Construction and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Transmission Line Construc Off-Road	A	1.60	7.92	5.85	0.01		0.67	0.67		0.67	0.67
Transmission Line Construc Offsite Haul	A	0.00	0.01	0.00	0.00	2.40	0.00	2.40	0.24	0.00	0.24
Transmission Line Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Line Construc Offsite Worker	A	0.13	0.14	1.19	0.00	14.19	0.00	14.19	1.41	0.00	1.41
Total		1.73	8.07	7.04	0.01	16.59	0.67	17.26	1.65	0.67	2.32
Seville Solar Farm - Summer 2014 Transmission Line Construction and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Transmission Line Construc Off-Road	A				0.01			0.00			0.00
Transmission Line Construc Off-Road	B	0.28	5.28	5.12			0.46	0.46		0.46	0.46
Transmission Line Construc Offsite Haul	A	0.00	0.01	0.00	0.00	0.77	0.00	0.77	0.07	0.00	0.07
Transmission Line Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Line Construc Offsite Worker	A	0.13	0.14	1.19	0.00	4.47	0.00	4.47	0.44	0.00	0.44
Total		0.41	5.43	6.31	0.01	5.24	0.46	5.70	0.51	0.46	0.97
Seville Solar Farm - Summer 2014 Transmission Line Construction and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Transmission Line Construc Off-Road	A				0.01			0.00			0.00
Transmission Line Construc Off-Road	B	0.28	5.28	5.12			0.46	0.46		0.46	0.46
Transmission Line Construc Offsite Haul	A	0.00	0.01	0.00	0.00	0.77	0.00	0.77	0.07	0.00	0.07
Transmission Line Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Line Construc Offsite Worker	A	0.15	0.15	1.42	0.00	4.47	0.00	4.47	0.44	0.00	0.44
Total		0.43	5.44	6.54	0.01	5.24	0.46	5.70	0.51	0.46	0.97
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

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ATTACHMENT W

TABLES PROVIDING UNMITIGATED AND MITIGATED DAILY AIR POLLUTION
EMISSIONS SUMMED BY TIME PERIOD COMPARED TO APPLICABLE
SIGNIFICANCE THRESHOLDS

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ATTACHMENT W-1

SEVILLE SOLAR FARM “SMALL PROJECT” WITHOUT “COMMON
INFRASTRUCTURE” ACTIVITIES

TABLES PROVIDING UNMITIGATED AND MITIGATED DAILY AIR POLLUTION
EMISSIONS SUMMED BY TIME PERIOD COMPARED TO APPLICABLE
SIGNIFICANCE THRESHOLDS

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Small Prj Weeks 1-2

New Access Road Construction										
Weeks 1 - 2 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.24	63.85	35.86	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.31	63.91	36.44	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.42	40.04	42.35	0.07	10.16	2.37	15.78	0.96	2.37	4.46
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.48	40.04	44.92	0.07	10.16	2.53	15.94	0.96	2.53	4.62
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Small Prj Week 3

Complex Internal Road Construction, Demolition & Site Preparation										
Week 3 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.25	41.34	32.19	0.05	189.18	2.66	193.38	18.82	2.66	21.64
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Week 3 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.36	41.35	33.07	0.05	189.18	2.66	193.38	18.82	2.66	21.65
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Week 3 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.03	29.81	35.65	0.05	58.90	2.26	61.76	5.81	2.26	8.14
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Week 3 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.14	29.81	36.53	0.05	58.90	2.26	61.76	5.81	2.26	8.14
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Small Prj Week 4

Complex Internal Road Construction, Demolition, Site Preparation, & Grading										
Week 4 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	18.49	137.93	82.90	0.17	289.61	6.82	325.57	28.82	6.82	40.78
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	18.68	138.04	84.39	0.17	289.61	6.83	325.58	28.82	6.83	40.79
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.70	94.03	100.63	0.17	94.87	5.99	112.23	9.38	5.99	17.38
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Week 4 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.88	94.04	105.78	0.17	94.87	6.20	112.44	9.38	6.20	17.59
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Small Prj Weeks 5-8

Grading, Substation Construction, & GenTie Line Construction										
Weeks 5 - 8 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	16.63	125.18	69.35	0.14	158.40	5.79	191.79	15.76	5.79	26.52
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 5 - 8 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	16.76	122.31	70.39	0.14	158.39	5.79	191.78	15.76	5.79	26.53
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 5 - 8 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.82	81.45	84.32	0.14	54.08	5.04	69.88	5.34	5.04	12.32
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 5 - 8 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.94	81.47	89.01	0.14	54.08	5.25	70.09	5.34	5.25	12.53
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Small Prj Weeks 9-16

Solar Panel Installation, Building Erection, Substation Construction, & GenTie Line Construction										
Weeks 9 - 16 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	18.45	112.09	92.88	0.16	846.41	6.70	853.11	84.28	6.70	90.98
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 9 - 16 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	19.02	109.22	98.05	0.16	846.40	6.70	853.11	84.28	6.70	90.99
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 9 - 16 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.04	79.56	101.49	0.16	263.32	5.60	268.92	26.08	5.60	31.68
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 9 - 16 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.60	79.61	106.66	0.16	265.16	5.60	270.76	26.26	5.60	31.86
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

Small Prj Weeks 17-20

Solar Panel Installation, Building Erection, & Substation Construction										
Weeks 17 - 20 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	16.85	104.21	87.14	0.15	840.50	6.04	846.54	83.69	6.04	89.73
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	17.40	101.33	92.08	0.15	840.49	6.05	846.54	83.69	6.05	89.74
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.76	74.32	96.48	0.15	261.48	5.14	266.62	25.90	5.14	31.04
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.30	74.36	101.43	0.15	263.32	5.14	268.46	26.08	5.14	31.22
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

ATTACHMENT W-2

SEVILLE SOLAR FARM “SMALL PROJECT” WITH “COMMON INFRASTRUCTURE”
ACTIVITIES

TABLES PROVIDING UNMITIGATED AND MITIGATED DAILY AIR POLLUTION
EMISSIONS SUMMED BY TIME PERIOD COMPARED TO APPLICABLE
SIGNIFICANCE THRESHOLDS

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Small Prj Weeks 1-2 w Common

New Access Road Construction										
Weeks 1 - 2 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.24	63.85	35.86	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.31	63.91	36.44	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.42	40.04	42.35	0.07	10.16	2.37	15.78	0.96	2.37	4.46
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.48	40.04	44.92	0.07	10.16	2.53	15.94	0.96	2.53	4.62
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Small Prj Week 3 w Common

Complex Internal Road Construc., Demolition, Site Preparation, Transmission Line Construction & Switching Station Construction										
Week 3 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	10.77	68.04	51.88	0.08	222.39	4.34	232.94	22.12	4.34	27.13
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Week 3 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	10.93	68.08	53.20	0.08	222.39	4.37	232.97	22.12	4.35	27.14
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Week 3 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	3.20	47.74	56.27	0.08	69.40	3.64	75.46	6.82	3.64	10.72
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Week 3 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	3.35	47.74	57.50	0.08	69.40	3.64	75.46	6.82	3.64	10.72
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Small Prj Week 4 w Common

Complex Internal Rd Construc., Demolition, Site Preparation, Grading, Transmission Line Construc. & Switching Station Construc.										
Week 4 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	23.01	164.63	102.59	0.20	322.82	8.50	365.13	32.12	8.50	46.27
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	23.25	164.77	104.52	0.20	322.82	8.53	365.16	32.12	8.51	46.28
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.87	111.96	121.25	0.20	105.37	7.37	125.92	10.39	7.37	19.96
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Week 4 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.09	111.97	126.75	0.20	105.37	7.58	126.13	10.39	7.58	20.17
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			

Small Prj Weeks 5-8 w Common

Grading, Switching Station Construction, Substation Construction, Transmission Line Construction & GenTie Line Construction										
Weeks 5 - 8 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	21.15	151.88	89.04	0.18	191.61	7.47	231.35	19.06	7.47	32.01
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 5 - 8 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	21.34	149.04	90.52	0.18	191.60	7.50	231.36	19.06	7.48	32.02
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 5 - 8 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.98	99.38	104.94	0.18	64.58	6.41	83.58	6.35	6.41	14.90
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 5 - 8 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.14	99.40	109.99	0.18	64.58	6.62	83.79	6.35	6.62	15.11
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Small Prj Weeks 9-16 w Common

Solar Panel Installation, Building Erection, Switching Station Construction, Substation Construction, Transmission Line Construction & GenTie Line Construction										
Weeks 9 - 16 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	23.16	139.41	114.13	0.19	915.05	8.41	928.12	91.11	8.41	100.02
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 9 - 16 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	23.78	136.57	119.73	0.19	915.04	8.43	928.14	91.11	8.41	100.03
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 9 - 16 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.39	98.11	123.67	0.19	284.83	7.00	293.65	28.18	7.00	35.38
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 9 - 16 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.99	98.16	129.19	0.19	286.67	7.00	295.49	28.36	7.00	35.56
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

Small Prj Weeks 17-20 w Common

Solar Panel Installation, Building Erection, & Substation Construction										
Weeks 17 - 20 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	16.85	104.21	87.14	0.15	840.50	6.04	846.54	83.69	6.04	89.73
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	17.40	101.33	92.08	0.15	840.49	6.05	846.54	83.69	6.05	89.74
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.76	74.32	96.48	0.15	261.48	5.14	266.62	25.90	5.14	31.04
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.30	74.36	101.43	0.15	263.32	5.14	268.46	26.08	5.14	31.22
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

ATTACHMENT X

TABLES PROVIDING UNMITIGATED AND MITIGATED DAILY AIR POLLUTION
EMISSIONS SUMMED BY TIME PERIOD COMPARED TO APPLICABLE
SIGNIFICANCE THRESHOLDS

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ATTACHMENT X-1

SEVILLE SOLAR FARM “LARGE PROJECT” WITHOUT “COMMON
INFRASTRUCTURE” ACTIVITIES

TABLES PROVIDING UNMITIGATED AND MITIGATED DAILY AIR POLLUTION
EMISSIONS SUMMED BY TIME PERIOD COMPARED TO APPLICABLE
SIGNIFICANCE THRESHOLDS

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Large Prj Weeks 1-2

New Access Road Construction										
Weeks 1 - 2 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.24	63.85	35.86	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.31	63.91	36.44	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.42	40.04	42.35	0.07	10.16	2.37	15.78	0.96	2.37	4.46
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.48	40.04	44.92	0.07	10.16	2.53	15.94	0.96	2.53	4.62
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Large Prj Week 3

Complex Internal Road Construction, Demolition & Site Preparation										
Week 3 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.25	41.33	32.19	0.05	114.18	2.66	118.38	11.34	2.66	14.16
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Week 3 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.36	41.35	33.07	0.05	114.18	2.66	118.38	11.34	2.66	14.17
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Week 3 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.03	29.81	35.65	0.05	35.83	2.26	38.69	3.52	2.26	5.85
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Week 3 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.14	29.81	36.53	0.05	35.83	2.26	38.69	3.52	2.26	5.85
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Large Prj Week 4

Complex Internal Road Construction, Demolition, Site Preparation, & Grading										
Week 4 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	18.49	137.92	82.90	0.17	174.80	6.82	210.76	17.37	6.82	29.33
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	18.68	138.04	84.39	0.17	174.80	6.83	210.77	17.37	6.83	29.34
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.70	94.03	100.63	0.17	57.66	5.99	75.02	5.67	5.99	13.67
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Week 4 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.88	94.04	105.78	0.17	57.66	6.20	75.23	5.67	6.20	13.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Large Prj Weeks 5-8

Grading & Substation Construction										
Weeks 5 - 8 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	14.85	116.68	62.05	0.14	77.25	5.11	109.96	7.67	5.11	17.75
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Weeks 5 - 8 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	14.97	113.80	62.86	0.14	77.24	5.12	109.95	7.67	5.12	17.76
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Weeks 5 - 8 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.36	75.59	77.75	0.14	27.09	4.55	42.41	2.65	4.55	9.14
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 5 - 8 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.46	75.60	82.22	0.14	27.09	4.76	42.62	2.65	4.76	9.35
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Large Prj Weeks 9-10

Grading, Substation Construction, & GenTie Line Construction										
Weeks 9 - 10 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	16.63	125.18	69.35	0.14	102.21	5.79	135.60	10.16	5.79	20.92
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Weeks 9 - 10 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	16.76	122.31	70.39	0.14	102.20	5.79	135.59	10.16	5.79	20.93
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Weeks 9 - 10 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.82	81.45	84.32	0.14	34.89	5.04	50.69	3.42	5.04	10.40
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 9 - 10 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.94	81.47	89.01	0.14	34.89	5.25	50.90	3.42	5.25	10.61
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Large Prj Weeks 11-16

Solar Panel Installation, Building Erection, Substation Construction, & GenTie Line Construction										
Weeks 11 - 16 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	18.45	112.09	92.88	0.16	518.76	6.70	525.46	51.58	6.70	58.28
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 11 - 16 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	19.02	109.22	98.05	0.16	518.75	6.70	525.46	51.58	6.70	58.29
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 11 - 16 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.04	79.56	101.49	0.16	164.33	5.60	169.93	16.19	5.60	21.79
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 11 - 16 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.60	79.61	106.66	0.16	164.33	5.60	169.93	16.19	5.60	21.79
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

Large Prj Weeks 17-20

Solar Panel Installation, Building Erection, & Substation Construction										
Weeks 17 - 20 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	16.85	104.21	87.14	0.15	529.23	6.04	535.27	52.62	6.04	58.66
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	17.40	101.33	92.08	0.15	529.22	6.05	535.27	52.62	6.05	58.67
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.76	74.32	96.48	0.15	167.54	5.14	172.68	16.51	5.14	21.65
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.30	74.36	101.43	0.15	167.54	5.14	172.68	16.51	5.14	21.65
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

Large Prj Weeks 21-22

Solar Panel Installation & Building Erection										
Weeks 21 - 22 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	14.06	83.50	74.24	0.13	477.17	5.07	482.25	47.45	5.07	52.53
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 21 - 22 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	14.58	83.60	78.98	0.13	477.17	5.08	482.25	47.45	5.08	52.53
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 21 - 22 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.89	62.33	82.15	0.13	151.27	4.29	155.57	14.92	4.29	19.22
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 21 - 22 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.40	62.37	86.89	0.13	151.27	4.29	155.57	14.92	4.29	19.22
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

Large Prj Weeks 23-32

Solar Panel Installation										
Weeks 21 - 32 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	10.60	59.83	59.15	0.10	430.80	3.83	434.63	42.84	3.83	46.67
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 21 - 32 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	11.08	59.92	63.51	0.10	430.80	3.83	434.64	42.84	3.83	46.68
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 21 - 32 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.75	44.88	63.20	0.10	136.74	3.14	139.88	13.49	3.14	16.63
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 21 - 32 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.22	44.92	67.56	0.10	136.74	3.14	139.88	13.49	3.14	16.63
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

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ATTACHMENT X-2

SEVILLE SOLAR FARM “LARGE PROJECT” WITH “COMMON INFRASTRUCTURE”
ACTIVITIES

TABLES PROVIDING UNMITIGATED AND MITIGATED DAILY AIR POLLUTION
EMISSIONS SUMMED BY TIME PERIOD COMPARED TO APPLICABLE
SIGNIFICANCE THRESHOLDS

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Large Prj Weeks 1-2 w Common

New Access Road Construction										
Weeks 1 - 2 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.24	63.85	35.86	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.31	63.91	36.44	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.42	40.04	42.35	0.07	10.16	2.37	15.78	0.96	2.37	4.46
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.48	40.04	44.92	0.07	10.16	2.53	15.94	0.96	2.53	4.62
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Large Prj Week 3 w Common

Complex Internal Rd Construc., Demolition, Site Preparation, Transmission Line Construction & Switching Station Construction										
Week 3 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	10.77	68.03	51.88	0.08	147.39	4.34	157.94	14.64	4.34	19.65
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Week 3 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	10.93	68.08	53.20	0.08	147.39	4.37	157.97	14.64	4.35	19.66
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Week 3 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	3.20	47.74	56.27	0.08	46.33	3.64	52.39	4.53	3.64	8.43
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Week 3 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	3.35	47.74	57.50	0.08	46.33	3.64	52.39	4.53	3.64	8.43
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Large Prj Week 4 w Common

Complex Internal Rd Construc, Demolition, Site Preparation, Grading, Transmission Line Construc & Switching Station Construc										
Week 4 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	23.01	164.62	102.59	0.20	208.01	8.50	250.32	20.67	8.50	34.82
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	23.25	164.77	104.52	0.20	208.01	8.53	250.35	20.67	8.51	34.83
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.87	111.96	121.25	0.20	68.16	7.37	88.71	6.68	7.37	16.25
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Week 4 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.09	111.97	126.75	0.20	68.16	7.58	88.92	6.68	7.58	16.46
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			

Large Prj Weeks 5-8 w Common

Grading, Switching Station Construction, Substation Construction, & Transmission Line Construction										
Weeks 5 - 8 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	19.38	143.38	81.74	0.17	110.46	6.79	149.52	10.97	6.79	23.24
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Weeks 5 - 8 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	19.54	140.52	82.99	0.17	110.45	6.82	149.54	10.97	6.80	23.25
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Weeks 5 - 8 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.53	93.52	98.37	0.17	37.59	5.93	56.10	3.66	5.93	11.73
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 5 - 8 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.67	93.53	103.19	0.17	37.59	6.14	56.31	3.66	6.14	11.94
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Large Prj Weeks 9-10 w Common

Grading, Switching Station Construction, Substation Construction, Transmission Line Construction & GenTie Line Construction										
Weeks 9 - 10 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	21.15	151.88	89.04	0.18	135.42	7.47	175.16	13.46	7.47	26.41
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 9 - 10 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	21.34	149.04	90.52	0.18	135.41	7.50	175.17	13.46	7.48	26.42
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 9 - 10 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.98	99.38	104.94	0.18	45.39	6.41	64.39	4.43	6.41	12.98
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 9 - 10 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.14	99.40	109.99	0.18	45.39	6.62	64.60	4.43	6.62	13.19
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Large Prj Weeks 11-16 w Common

Solar Panel Installation, Building Erection, Switching Station Construction, Substation Construction, Transmission Line Construction & GenTie Line Construction										
Weeks 11 - 16 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	23.16	139.41	114.13	0.19	587.40	8.41	600.47	58.41	8.41	67.32
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 11 - 16 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	23.78	136.57	119.73	0.19	587.39	8.43	600.49	58.41	8.41	67.33
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 11 - 16 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.39	98.11	123.67	0.19	185.84	7.00	194.66	18.29	7.00	25.49
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 11 - 16 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.99	98.16	129.19	0.19	185.84	7.00	194.66	18.29	7.00	25.49
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

Large Prj Weeks 17-20 w Common

Solar Panel Installation, Building Erection, & Substation Construction										
Weeks 17 - 20 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	16.85	104.21	87.14	0.15	529.23	6.04	535.27	52.62	6.04	58.66
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	17.40	101.33	92.08	0.15	529.22	6.05	535.27	52.62	6.05	58.67
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.76	74.32	96.48	0.15	167.54	5.14	172.68	16.51	5.14	21.65
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.30	74.36	101.43	0.15	167.54	5.14	172.68	16.51	5.14	21.65
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

Large Prj Weeks 21-22 w Common

Solar Panel Installation & Building Erection										
Weeks 21 - 22 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	14.06	83.50	74.24	0.13	477.17	5.07	482.25	47.45	5.07	52.53
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 21 - 22 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	14.58	83.60	78.98	0.13	477.17	5.08	482.25	47.45	5.08	52.53
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 21 - 22 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.89	62.33	82.15	0.13	151.27	4.29	155.57	14.92	4.29	19.22
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 21 - 22 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.40	62.37	86.89	0.13	151.27	4.29	155.57	14.92	4.29	19.22
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

Large Prj Weeks 23-32 w Common

Solar Panel Installation										
Weeks 23 - 32 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	10.60	59.83	59.15	0.10	430.80	3.83	434.63	42.84	3.83	46.67
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 23 - 32 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	11.08	59.92	63.51	0.10	430.80	3.83	434.64	42.84	3.83	46.68
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 23 - 32 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.75	44.88	63.20	0.10	136.74	3.14	139.88	13.49	3.14	16.63
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 23 - 32 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.22	44.92	67.56	0.10	136.74	3.14	139.88	13.49	3.14	16.63
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

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OPERATIONAL AIR POLLUTANT EMISSION ESTIMATES

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ENVIRONMENTAL MANAGEMENT ASSOCIATES

June 7, 2013

via Email and Mail

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 Operations, 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 Seville Solar Farm Complex, Imperial County, California (Project) operations which are not subject to a permit from the Imperial County Air Pollution Control District (ICAPCD): 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), 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 CEQA Lead Agencies in making a determination on the type of environmental document to prepare. The Handbook (page 8) states that "Table 1 (of the Handbook) provides general guidelines for determining the significance of impacts and the recommended type of environmental analysis required based on the total emissions that are expected from the operations phase of a project."¹ Table 1 presents these "Thresholds of Significance for Project Operations" from Table 1 of the ICAPCD CEQA Handbook.

¹ Note that the ICAPCD CEQA Handbook also states that "For industrial development projects, the thresholds in Table 1 should be used only to determine significance of the impact from mobile source emissions attracted to the stationary source. Therefore, Table 1 would not be used to determine significance for the air emissions associated with the stationary source, including off-road mobile emissions produced within the stationary source. Those stationary source emissions are already subject to mitigation according to Rule 207, New and Modified Stationary Source Review and Rule 201 and must therefore be excluded." (ICAPCD CEQA Handbook, p. 8)

Table 1: ICAPCD “Thresholds of Significance for Project Operations”

Air Pollutant	ROG	NO_x	CO	SO₂	PM₁₀
Threshold (<lbs/day)	55.00	55.00	550.00	150.00	150.00

The ICAPCD Project Operations activities table does not present “significance thresholds” for PM_{2.5} 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 those Project operations which are not subject to a permit from the ICAPCD 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.

The other Project operations 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. The CalEEMod CO₂ intensity factor for the Imperial Irrigation District (IID) was used to calculate annual CO₂e emissions from the Project’s annual electrical energy use.

The 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).

Operation of each of the three smaller projects (Seville Solar Farm Projects One – Three built on Lots 1 – 3, respectively) may commence after approximately 4 months of the 5-month construction period. The schedule presented in Table 2 includes the likely phasing of the various construction activities and operations for each of these three projects. Operation of each of the

two larger projects (Seville Solar Farm Projects Four and Five built on Lot 4 and Lot 5, respectively) may commence after approximately 4 months of the 8-month construction period. The schedule presented in Table 3 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 operational 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).

Although the CalEEMod model is capable of calculating air pollutant emissions 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 and annual air pollutant emissions from each of the “Small Project” and the “Large Project” operational activities in one CalEEMod model, one calculation using AP-42 emission factors, and one calculation using the CalEEMod CO₂e emission factor.

Table 2 provides an outline of the CalEEMod model (solar farm operations), the AP-42 calculation (on-site, unpaved roads during panel washing), and the CalEEMod CO₂e emission factor used to calculate the air pollutant emissions from Project operations. Table 2 identifies the Project activities, air pollutant sources, 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.

Table 2: CalEEMod and AP 42 Air Pollutant Emissions Calculation Models – Project Operations

Project Phase(s)	Seville Solar Farm Complex Operations				
Air Pollutant Source	On-Site Equipment	Off-Site Traffic		On-Site Traffic	Electrical Energy
Air Pollutant Emissions	Combustion Emissions	Fugitive Dust	Combustion Emissions	Fugitive Dust	CO ₂ e
Model Using	CalEEMod			AP-42	CalEEMod EF
Model Name	CalEEMod Seville Solar – Operations Small Prj V02.xls CalEEMod Seville Solar – Operations Large Prj V02.xls			N/A	N/A
Attachment	Attachment B/ Attachment C			Attachment E	Attachment E

Two attachments (Attachments B and Attachments C) are included with this letter report, each of which describes the CalEEMod calculations and results for the operation of each project type. Calculations and results for the average “Small Project” operations activities are presented in Attachments B; and the average “Large Project” operations activities are presented in Attachments C.

Each of the two attachments contain a “Remarks” summary (see Attachments A-1 and B-1). “Remarks” are typically used in CalEEMod to explain non-default inputs. For the current modeling this “remarks” summary replaces the “remarks” sections of the 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 “general heavy industry” land use category was selected as a surrogate. Where applicable, CalEEMod defaults were retained as the model inputs. However, CalEEMod defaults were replaced with specific Project 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 Regenerate. In the CalEEMod operations model, the all construction phases were deleted except for the water truck (off-highway truck) in the “building construction” phase. Consistent with the Supplemental Project Description, the water truck engine would be rated as Tier 3 or better and the operations AP-42 model (onsite traffic on unpaved roads) assumed that the onsite unpaved roads would be watered when in use for panel washing.

Attachment B and C also contain the CalEEMod-generated reports of the model outputs for the two operations model – one for the summer months (Attachment B-2 and C-2), for the winter months (Attachment B-3 and C-3), and for the annual time period (Attachment B-4 and C-4). All of the output reports contain calculated 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 operations 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 operation equipment air pollutant emission calculations are provided in Attachment D.

Attachment E-1 contains tables summarizing the specific daily air pollutant emissions calculated by CalEEMod for the “Small Project” operations. Attachment E-2 contains tables summarizing the specific daily air pollutant emissions calculated by CalEEMod for the “Large Project” operations. Also included in Attachment E-1 and Attachment E-2 are the calculations of fugitive dust generated on-site daily traffic from panel washing, as calculated using the unpaved roads emissions factors in AP-42 (using the silt and moisture defaults from CalEEMod) and the annual CO₂e emissions from the Project’s annual electrical energy use using the CalEEMod CO₂ intensity factor for the IID. Attachment E-1 and Attachment E-2 also compare the summed daily operations air pollution emissions for each type of project against the daily operations emission thresholds listed in Table 1. The unmitigated daily operations air pollution emissions from each type of project are each below the applicable “thresholds of significance” listed in Table 1.

Mr. Mohammed S. Alrai

June 7, 2013

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Attachment F contains tables totaling the specific daily air pollutant emissions calculated by CalEEMod for the entirety of the Seville Solar Farm Complex operations (that is, three “Small Projects” and two “Large Projects”). Attachment F also compares the summed daily operations air pollution emissions of the Complex against the daily operations emission thresholds listed in Table 1. The Complex unmitigated daily operations air pollution emissions are each below the applicable “threshold of significance” listed in Table 1.

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 the first name "Dwight" being more prominent and the last name "Carey" following in a similar style.

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
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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																									
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	X												
GenTie Power Line Constrc					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	

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	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	
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	X												
GenTie Power Line Constrc									X	X	X	X	X	X	X	X																
Operations																	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	X																
Transmission Line Construction			X	X	X	X	X	X	X	X	X	X	X	X	X	X																

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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.

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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

SEVILLE SOLAR FARM COMPLEX
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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 Construc 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.

SEVILLE SOLAR FARM COMPLEX
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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												
Building Erection									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												
GenTie Power Line Constrc					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	260	260	260	260	0	0	0	0	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																								
Solar Panel Installation									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												
Substation Construction					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																
Total One-Way Vendor Trips	0	0	0	0	2	2	2	2	14	14	14	14	14	14	14	14	12	12	12	12	0	0	0	0	0	0	0	0	0	0	0	0

SEVILLE SOLAR FARM COMPLEX
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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												
Building Erection									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												
GenTie Power Line Constrc					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	0	0	0	0	0	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																													
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	
Building Erection											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												
GenTie Power Line Constrc									12	12	12	12	12	12	12	12																
Total One-Way Worker Trips	0	0	46	76	40	40	40	40	52	52	272	272	272	272	272	272	260	260	260	260	230	230	230	230	230	230	230	230	230	230	230	

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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																						
Solar Panel Installation											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											
Substation Construction					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																
Total One-Way Vendor Trips	0	0	0	0	0	0	0	0	2	2	12	12	12	12	12	12	10	10	10	10	10	10	10	10	10	10	10	10	10	10	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																						
Solar Panel Installation											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												
Substation Construction					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																
Total One-Way Trips	0	0	18	22	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	0	0	0	0	0	0	0	0	0	0	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																	
Transmission Line Construction			12	12	12	12	12	12	12	12	12	12	12	12	12																	
Total One-Way Trips	30	30	22	22	22	22	22	22	22	22	22	22	22	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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																	
Transmission Line Construction			0	0	0	0	0	0	0	0	0	0	0	0	0																	
Total One-Way Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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																	
Transmission Line Construction			2	2	2	2	2	2	2	2	2	2	2	2	2																	
Total One-Way Trips	12	12	6	6	6	6	6	6	6	6	6	6	6	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ATTACHMENT B

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODELS:

“CALEEMOD SEVILLE SOLAR– OPERATIONS SMALL PRJ V02.xls”

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ATTACHMENT B-1

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

CalEEMod MODEL “REMARKS”

MODEL “CALEEMOD SEVILLE SOLAR– OPERATIONS 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 – Operations Small CalEEMod Seville – Operations 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 on-site equipment (water truck) and traffic associated with the operations of the Seville Solar Farm “Small Project”. The ‘General Heavy Industry’ land use subtype represents the Seville Solar Farm “Small Project”. For this model in particular the ‘General Heavy Industry’ ‘Lot Acreage’ is the approximate area of operations/maintenance building (110 feet x 50 feet). ‘Lot Acreage’ totals to 0.13 acres (5,500 square feet).

Construction Tabs

- **Construction Phase** – The ‘Construction’ tab is only used to calculate the daily emissions from the water truck that will be on-site once Operations of the Seville “Small Project” solar photovoltaic farm commence. All of the phase’s except ‘Building Construction’ has been deleted because only the daily emissions from the water truck is calculated in the ‘Construction’ tab.
 - o Building Construction - 8/1/2014 – 8/31/2014
- **Off-road Equipment (Building)** – “Small Project” operations model only. Building Construction equipment represents the equipment necessary during operations. Default equipment is altered to reflect the one water truck on-site during operations. The off-highway truck was added to represent the on-site water truck during operations.
- **Trips and VMT** – “Small Project” Operations model only. Trips and VMT emissions from operations are calculated in ‘Operational - Mobile’ tab of this CalEEMod Model.
- **On-road Fugitive Dust** – “Small Project” Operations model only. On-road off-site fugitive dust emissions from operations are calculated in ‘Operational - Mobile’ tab of this CalEEMod Model.
- **Demolition** – “Small Project” Operations model only. Demolition emissions are calculated in a separate CalEEMod model.
- **Dust from Material Movement** – “Small Project” Operations model only. Grading fugitive dust emissions are calculated in a separate CalEEMod Model. Site Prep PM emissions are calculated in a separate CalEEMod Model.
- **Architectural Coating** – “Small Project” Operations model only. No coating is required for this project. (see Supplemental Project Description)

Operational Tabs

- **Vehicle Trips** – “Small Project” Operations will require up to 5 trips. The model requires Trip rate/Size/day (Trip rate=5; Size=5,500 square feet). 5 trips/5,500 square feet/day=.19 trips/1000 sq ft/day. All trips to the “Small Project” area will be either commercial-work or commercial-nonwork because there will be maintenance workers (commercial-work), water delivery trucks (commercial-nonwork) but no customers (commercial customer) visiting the site during operations. The vendor trip length was changed to match the higher, more conservative, trip length of 16.4 miles. Also, to be conservative, all trips will be primary not pass-by or diverted trips.

- **Vehicle Emission Factors Annual**– The 5 daily trips during “Small Project” Operations will be 4.5 worker trips and 0.5 vendor trips(No haul trips). CalEEMod defines the worker vehicle fleet as 50% Light Duty Auto (LDA), 25% Light Duty truck Type 1 (LDT1) and 25% Light Duty Truck Type 2 (LDT2). CalEEMod defines the vendor vehicle fleet as 50% heavy-heavy duty trucks (HHDT) and 50% medium-heavy duty trucks (MHDT). The water delivery truck (vendor) fleet for this model is conservatively 100% heavy-heavy duty trucks (HHDT). The vehicle fleet mix in this tab has been changed to reflect only the worker and vendor vehicles that will be driving to the “Small Project” during Operations, using the CalEEMod worker vehicle fleet mix default and only the heavy-heavy duty trucks (HHDT) for the vendor trips.
 - Worker trip percentage= $1 - (4.5 \text{ trips} / 5 \text{ total trips}) = 90\%$ of the total trips
 - 50% of the 90% are Light Duty Auto (LDA)= 45% of the total vehicle fleet are LDA
 - 25% of the 90% are Light Duty truck Type 1 (LDT1)= 22.5% of the total vehicle fleet are LDT1
 - 25% of the 90% are Light Duty truck Type 2 (LDT2)= 22.5% of the total vehicle fleet are LDT1
 - Vendor trip percentage= $1 - (0.5 \text{ trips} / 5 \text{ total trips}) = 10\%$ of the total trips
 - 100% of the 10% are heavy-heavy duty trucks (HHDT)= 10% of the total vehicle fleet are HHDT
- **Vehicle Emission Factors Summer**– See “Vehicle Emission Factors Annual” above.
- **Vehicle Emission Factors Winter**– See “Vehicle Emission Factors Annual” above.
- **Road 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 Non-Residential C-W trip length= 16.4 miles
 - Operations % Paved = $1 - (2.0 \text{ miles unpaved roads to Project} / 16.4 \text{ miles}) = 87.8\%$ paved
- **Hearths – Woodstoves/Fireplaces** – The “Small Project” operations will be controlled from a 5,500 square foot operations/maintenance building. As such, the ‘Hearths’ operational emissions that are associated with this operations/maintenance building are calculated in this model using CalEEMod defaults.
- **Consumer Products** – The default consumer product emission factor was changed to zero. No emission from ‘Consumer Products’ are expected from the “Small Project”.
- **Area Coating** – The default coating reapplication rate percentage was changed to zero. No coating is required for this project.
- **Landscape Equipment** – The “Small Project” operations will be controlled from a 5,500 square foot operations/maintenance building. As such, the ‘Landscape Equipment’ operational emissions that are associated with this operations/maintenance building are calculated in this model using CalEEMod defaults.
- **Energy Use** – The Project’s energy use is 250 kWhr/day. Using the Imperial Irrigation Districts CO2 intensity factor from CalEEMod, annual CO2 emissions associated with the Project’s energy use are calculated in Attachment E. The “Small Project” operations will be controlled from a 5,500 square foot operations/maintenance building. As such, the ‘Energy Use’ operational emissions that are associated with this operations/maintenance building are calculated in this model using CalEEMod defaults. The natural gas energy defaults have been changed to zero because natural gas energy use emissions are not expected from the “Small Project”.
- **Water And Wastewater** – The “Small Project” operations will be controlled from a 5,500 square foot operations/maintenance building. The project will require up to 10 acre feet per year (AFY) of water. The default has been changed to reflect this amount.
- **Solid Waste** – The “Small Project” operations will be controlled from a 5,500 square foot operations/maintenance building. As such, the ‘Solid Waste’ operational emissions that are associated with this operations/maintenance building are calculated in this model using CalEEMod defaults.

Vegetation Tabs

- **Land Use Change** –
- **Sequestration** –

Mitigation Tabs

- **Construction Off-road Equipment Mitigation –**
- **Mobile Land Use Mitigation –**
- **Mobile Commute Mitigation –**
- **Area Mitigation –**
- **Energy Mitigation –**
- **Water Mitigation –**
- **Waste Mitigation -**

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ATTACHMENT B-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

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

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Seville Solar Farm - Operations Small
Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Heavy Industry	5.5	1000sqft

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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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
Water Mitigation -

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	1.24	9.55	3.67	0.01	0.00	0.34	0.34	0.00	0.34	0.34	0.00	1,631.04	0.00	0.11	0.00	1,633.33
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	1.15	7.46	7.46	0.01	0.00	0.43	0.43	0.00	0.43	0.43	0.00	1,631.04	0.00	0.11	0.00	1,633.33
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	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	0.09	0.23	0.89	0.00	7.54	0.01	7.55	0.75	0.01	0.75		89.39		0.01		89.51
Total	0.09	0.23	0.89	0.00	7.54	0.01	7.55	0.75	0.01	0.75		89.39		0.01	0.00	89.51

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	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	0.09	0.23	0.89	0.00	7.54	0.01	7.55	0.75	0.01	0.75		89.39		0.01		89.51
Total	0.09	0.23	0.89	0.00	7.54	0.01	7.55	0.75	0.01	0.75		89.39		0.01	0.00	89.51

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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	1.24	9.55	3.67	0.01		0.34	0.34		0.34	0.34		1,631.04		0.11		1,633.33
Total	1.24	9.55	3.67	0.01		0.34	0.34		0.34	0.34		1,631.04		0.11		1,633.33

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
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	0.00	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

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	1.15	7.46	7.46	0.01		0.43	0.43		0.43	0.43	0.00	1,631.04		0.11		1,633.33
Total	1.15	7.46	7.46	0.01		0.43	0.43		0.43	0.43	0.00	1,631.04		0.11		1,633.33

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
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	0.00	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

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	0.09	0.23	0.89	0.00	7.54	0.01	7.55	0.75	0.01	0.75		89.39		0.01		89.51
Unmitigated	0.09	0.23	0.89	0.00	7.54	0.01	7.55	0.75	0.01	0.75		89.39		0.01		89.51
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
General Heavy Industry	5.01	5.01	5.01	29,878	29,878
Total	5.01	5.01	5.01	29,878	29,878

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
General Heavy Industry	16.40	9.50	16.40	90.00	0.00	10.00

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					
General Heavy Industry	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

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					
General Heavy Industry	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	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
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	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
Total	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	lb/day										lb/day					
Architectural Coating	0.00					0.00	0.00		0.00	0.00						0.00
Consumer Products	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
Total	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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

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ATTACHMENT B-3

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

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

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Seville Solar Farm - Operations Small
Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Heavy Industry	5.5	1000sqft

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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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
Water Mitigation -

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	1.24	9.55	3.67	0.01	0.00	0.34	0.34	0.00	0.34	0.34	0.00	1,631.04	0.00	0.11	0.00	1,633.33
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	1.15	7.46	7.46	0.01	0.00	0.43	0.43	0.00	0.43	0.43	0.00	1,631.04	0.00	0.11	0.00	1,633.33
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	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	0.08	0.23	0.75	0.00	7.54	0.01	7.55	0.75	0.01	0.75		86.00		0.01		86.11
Total	0.08	0.23	0.75	0.00	7.54	0.01	7.55	0.75	0.01	0.75		86.00		0.01	0.00	86.11

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	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	0.08	0.23	0.75	0.00	7.54	0.01	7.55	0.75	0.01	0.75		86.00		0.01		86.11
Total	0.08	0.23	0.75	0.00	7.54	0.01	7.55	0.75	0.01	0.75		86.00		0.01	0.00	86.11

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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	1.24	9.55	3.67	0.01		0.34	0.34		0.34	0.34		1,631.04		0.11		1,633.33
Total	1.24	9.55	3.67	0.01		0.34	0.34		0.34	0.34		1,631.04		0.11		1,633.33

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
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	0.00	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

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	1.15	7.46	7.46	0.01		0.43	0.43		0.43	0.43	0.00	1,631.04		0.11		1,633.33
Total	1.15	7.46	7.46	0.01		0.43	0.43		0.43	0.43	0.00	1,631.04		0.11		1,633.33

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
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	0.00	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

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	0.08	0.23	0.75	0.00	7.54	0.01	7.55	0.75	0.01	0.75		86.00		0.01		86.11
Unmitigated	0.08	0.23	0.75	0.00	7.54	0.01	7.55	0.75	0.01	0.75		86.00		0.01		86.11
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
General Heavy Industry	5.01	5.01	5.01	29,878	29,878
Total	5.01	5.01	5.01	29,878	29,878

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
General Heavy Industry	16.40	9.50	16.40	90.00	0.00	10.00

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					
General Heavy Industry	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

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					
General Heavy Industry	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	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
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	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
Total	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	lb/day										lb/day					
Architectural Coating	0.00					0.00	0.00		0.00	0.00						0.00
Consumer Products	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
Total	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

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

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ATTACHMENT B-4

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “SMALL PROJECT”

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

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Seville Solar Farm - Operations Small
Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Heavy Industry	5.5	1000sqft

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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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
Water Mitigation -

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	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96
Total	0.02	0.15	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96

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	0.02	0.12	0.12	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96
Total	0.02	0.12	0.12	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96

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	0.00	0.00	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	35.10	35.10	0.00	0.00	35.21
Mobile	0.01	0.04	0.15	0.00	1.37	0.00	1.37	0.14	0.00	0.14	0.00	14.82	14.82	0.00	0.00	14.84
Waste						0.00	0.00		0.00	0.00	6.87	0.00	6.87	0.41	0.00	15.40
Water						0.00	0.00		0.00	0.00	0.00	20.87	20.87	0.00	0.00	20.94
Total	0.01	0.04	0.15	0.00	1.37	0.00	1.37	0.14	0.00	0.14	6.87	70.79	77.66	0.41	0.00	86.39

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	0.00	0.00	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	35.10	35.10	0.00	0.00	35.21
Mobile	0.01	0.04	0.15	0.00	1.37	0.00	1.37	0.14	0.00	0.14	0.00	14.82	14.82	0.00	0.00	14.84
Waste						0.00	0.00		0.00	0.00	6.87	0.00	6.87	0.41	0.00	15.40
Water						0.00	0.00		0.00	0.00	0.00	20.87	20.87	0.00	0.00	20.94
Total	0.01	0.04	0.15	0.00	1.37	0.00	1.37	0.14	0.00	0.14	6.87	70.79	77.66	0.41	0.00	86.39

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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	0.02	0.15	0.06	0.00		0.01	0.01		0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96
Total	0.02	0.15	0.06	0.00		0.01	0.01		0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96

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	0.00	0.00	0.00	0.00	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	0.00	0.00	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	0.00	0.00

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	0.02	0.12	0.12	0.00		0.01	0.01		0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96
Total	0.02	0.12	0.12	0.00		0.01	0.01		0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96

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	0.00	0.00	0.00	0.00	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	0.00	0.00	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	0.00	0.00

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	0.01	0.04	0.15	0.00	1.37	0.00	1.37	0.14	0.00	0.14	0.00	14.82	14.82	0.00	0.00	14.84
Unmitigated	0.01	0.04	0.15	0.00	1.37	0.00	1.37	0.14	0.00	0.14	0.00	14.82	14.82	0.00	0.00	14.84
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
General Heavy Industry	5.01	5.01	5.01	29,878	29,878
Total	5.01	5.01	5.01	29,878	29,878

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
General Heavy Industry	16.40	9.50	16.40	90.00	0.00	10.00

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	35.10	35.10	0.00	0.00	35.21
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	35.10	35.10	0.00	0.00	35.21
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

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					
General Heavy Industry	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					
General Heavy Industry	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			
General Heavy Industry	60885					35.10	0.00	0.00	35.21
Total						35.10	0.00	0.00	35.21

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			
General Heavy Industry	60885					35.10	0.00	0.00	35.21
Total						35.10	0.00	0.00	35.21

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	0.00	0.00	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
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	0.00
Consumer Products	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
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

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	0.00
Consumer Products	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
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

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					20.87	0.00	0.00	20.94
Unmitigated					20.87	0.00	0.00	20.94
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			
General Heavy Industry	0 / 3.25851					20.87	0.00	0.00	20.94
Total						20.87	0.00	0.00	20.94

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			
General Heavy Industry	0 / 3.25851					20.87	0.00	0.00	20.94
Total						20.87	0.00	0.00	20.94

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					6.87	0.41	0.00	15.40
Unmitigated					6.87	0.41	0.00	15.40
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			
General Heavy Industry	33.86					6.87	0.41	0.00	15.40
Total						6.87	0.41	0.00	15.40

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
General Heavy Industry	33.86					6.87	0.41	0.00	15.40
Total						6.87	0.41	0.00	15.40

9.0 Vegetation

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ATTACHMENT C

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “LARGE PROJECT”

CalEEMod MODELS:

“CALEEMOD SEVILLE SOLAR– OPERATIONS LARGE PRJ V03.xls”

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ATTACHMENT C-1

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “LARGE PROJECT”

CalEEMod MODEL “REMARKS”

MODEL “CALEEMOD SEVILLE SOLAR– OPERATIONS LARGE PRJ V03.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 – Operations Large CalEEMod Seville – Operations Large 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 on-site equipment (water truck) and traffic associated with the operations of the Seville Solar Farm “Large Project”. The ‘General Heavy Industry’ land use subtype represents the Seville Solar Farm “Large Project”. For this model in particular the ‘General Heavy Industry’ ‘Lot Acreage’ is the approximate area of operations/maintenance building (110 feet x 50 feet). ‘Lot Acreage’ totals to 0.13 acres (5,500 square feet).

Construction Tabs

- **Construction Phase** – The ‘Construction’ tab is only used to calculate the daily emissions from the water truck that will be on-site once Operations of the Seville “Large Project” solar photovoltaic farm commence. All of the phase’s except ‘Building Construction’ has been deleted because only the daily emissions from the water truck is calculated in the ‘Construction’ tab.
 - o Building Construction - 8/1/2014 – 8/31/2014
- **Off-road Equipment (Building)** – “Large Project” operations model only. Building Construction equipment represents the equipment necessary during operations. Default equipment is altered to reflect the one water truck on-site during operations. The off-highway truck was added to represent the on-site water truck during operations.
- **Trips and VMT** – “Large Project” Operations model only. Trips and VMT emissions from operations are calculated in ‘Operational - Mobile’ tab of this CalEEMod Model.
- **On-road Fugitive Dust** – “Large Project” Operations model only. On-road off-site fugitive dust emissions from operations are calculated in ‘Operational - Mobile’ tab of this CalEEMod Model.
- **Demolition** – “Large Project” Operations model only. Demolition emissions are calculated in a separate CalEEMod model.
- **Dust from Material Movement** – “Large Project” Operations model only. Grading fugitive dust emissions are calculated in a separate CalEEMod Model. Site Prep PM emissions are calculated in a separate CalEEMod Model.
- **Architectural Coating** – “Large Project” Operations model only. No coating is required for this project. (see Supplemental Project Description)

Operational Tabs

- **Vehicle Trips** – “Large Project” Operations will require up to 5 trips. The model requires Trip rate/Size/day (Trip rate=5; Size=5,500 square feet). 5 trips/5,500 square feet/day=.19 trips/1000 sq ft/day. All trips to the “Large Project” area will be either commercial-work or commercial-nonwork because there will be maintenance workers (commercial-work), water delivery trucks (commercial-nonwork) but no customers (commercial customer) visiting the site during operations. The vendor trip length was changed to match the higher, more conservative, trip length of 16.4 miles. Also, to be conservative, all trips will be primary not pass-by or diverted trips.

- **Vehicle Emission Factors Annual**– The 5 daily trips during “Large Project” Operations will be 4.5 worker trips and 0.5 vendor trips(No haul trips). CalEEMod defines the worker vehicle fleet as 50% Light Duty Auto (LDA), 25% Light Duty truck Type 1 (LDT1) and 25% Light Duty Truck Type 2 (LDT2). CalEEMod defines the vendor vehicle fleet as 50% heavy-heavy duty trucks (HHDT) and 50% medium-heavy duty trucks (MHDT). The water delivery truck (vendor) fleet for this model is conservatively 100% heavy-heavy duty trucks (HHDT). The vehicle fleet mix in this tab has been changed to reflect only the worker and vendor vehicles that will be driving to the “Large Project” during Operations, using the CalEEMod worker vehicle fleet mix default and only the heavy-heavy duty trucks (HHDT) for the vendor trips.
 - Worker trip percentage= $1 - (4.5 \text{ trips} / 5 \text{ total trips}) = 90\%$ of the total trips
 - 50% of the 90% are Light Duty Auto (LDA)= 45% of the total vehicle fleet are LDA
 - 25% of the 90% are Light Duty truck Type 1 (LDT1)= 22.5% of the total vehicle fleet are LDT1
 - 25% of the 90% are Light Duty truck Type 2 (LDT2)= 22.5% of the total vehicle fleet are LDT1
 - Vendor trip percentage= $1 - (0.5 \text{ trips} / 5 \text{ total trips}) = 10\%$ of the total trips
 - 100% of the 10% are heavy-heavy duty trucks (HHDT)= 10% of the total vehicle fleet are HHDT
- **Vehicle Emission Factors Summer**– See “Vehicle Emission Factors Annual” above.
- **Vehicle Emission Factors Winter**– See “Vehicle Emission Factors Annual” above.
- **Road 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 1.2 miles of unpaved roads would be traveled by traffic accessing the “Large Project” area.
 - CalEEMod default Non-Residential C-W trip length= 16.4 miles
 - Operations % Paved = $1 - (1.2 \text{ miles unpaved roads to Project} / 16.4 \text{ miles}) = 92.7\%$ paved
- **Hearths – Woodstoves/Fireplaces** – The “Large Project” operations will be controlled from a 5,500 square foot operations/maintenance building. As such, the ‘Hearths’ operational emissions that are associated with this operations/maintenance building are calculated in this model using CalEEMod defaults.
- **Consumer Products** – The default consumer product emission factor was changed to zero. No emission from ‘Consumer Products’ are expected from the “Large Project”.
- **Area Coating** – The default coating reapplication rate percentage was changed to zero. No coating is required for this project.
- **Landscape Equipment** – The “Large Project” operations will be controlled from a 5,500 square foot operations/maintenance building. As such, the ‘Landscape Equipment’ operational emissions that are associated with this operations/maintenance building are calculated in this model using CalEEMod defaults.
- **Energy Use** – The Project’s energy use is 400 kWhr/day. Using the Imperial Irrigation Districts CO2 intensity factor from CalEEMod, annual CO2 emissions associated with the Project’s energy use are calculated in Attachment E. The “Large Project” operations will be controlled from a 5,500 square foot operations/maintenance building. As such, the ‘Energy Use’ operational emissions that are associated with this operations/maintenance building are calculated in this model using CalEEMod defaults. The natural gas energy defaults have been changed to zero because natural gas energy use emissions are not expected from the “Large Project”.
- **Water And Wastewater** – The “Large Project” operations will be controlled from a 5,500 square foot operations/maintenance building. The project will require up to 10 acre feet per year (AFY) of water. The default has been changed to reflect this amount.
- **Solid Waste** – The “Large Project” operations will be controlled from a 5,500 square foot operations/maintenance building. As such, the ‘Solid Waste’ operational emissions that are associated with this operations/maintenance building are calculated in this model using CalEEMod defaults.

Vegetation Tabs

- **Land Use Change** –
- **Sequestration** –

Mitigation Tabs

- **Construction Off-road Equipment Mitigation –**
- **Mobile Land Use Mitigation –**
- **Mobile Commute Mitigation –**
- **Area Mitigation –**
- **Energy Mitigation –**
- **Water Mitigation –**
- **Waste Mitigation -**

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ATTACHMENT C-2

SEVILLE SOLAR FARM COMPLEX

SEVILLE SOLAR FARM “LARGE PROJECT”

CalEEMod MODEL OUTPUTS - SUMMER
MODEL “CALEEMOD SEVILLE SOLAR– OPERATIONS LARGE PRJ V03.xls”

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Seville Solar Farm - Operations Large
Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Heavy Industry	5.5	1000sqft

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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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
Water Mitigation -

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	1.24	9.55	3.67	0.01	0.00	0.34	0.34	0.00	0.34	0.34	0.00	1,631.04	0.00	0.11	0.00	1,633.33
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	1.15	7.46	7.46	0.01	0.00	0.43	0.43	0.00	0.43	0.43	0.00	1,631.04	0.00	0.11	0.00	1,633.33
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	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	0.09	0.23	0.89	0.00	4.55	0.01	4.56	0.45	0.01	0.45		89.39		0.01		89.51
Total	0.09	0.23	0.89	0.00	4.55	0.01	4.56	0.45	0.01	0.45		89.39		0.01	0.00	89.51

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	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	0.09	0.23	0.89	0.00	4.55	0.01	4.56	0.45	0.01	0.45		89.39		0.01		89.51
Total	0.09	0.23	0.89	0.00	4.55	0.01	4.56	0.45	0.01	0.45		89.39		0.01	0.00	89.51

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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	1.24	9.55	3.67	0.01		0.34	0.34		0.34	0.34		1,631.04		0.11		1,633.33
Total	1.24	9.55	3.67	0.01		0.34	0.34		0.34	0.34		1,631.04		0.11		1,633.33

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
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	0.00	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

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	1.15	7.46	7.46	0.01		0.43	0.43		0.43	0.43	0.00	1,631.04		0.11		1,633.33
Total	1.15	7.46	7.46	0.01		0.43	0.43		0.43	0.43	0.00	1,631.04		0.11		1,633.33

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
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	0.00	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

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	0.09	0.23	0.89	0.00	4.55	0.01	4.56	0.45	0.01	0.45		89.39		0.01		89.51
Unmitigated	0.09	0.23	0.89	0.00	4.55	0.01	4.56	0.45	0.01	0.45		89.39		0.01		89.51
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
General Heavy Industry	5.01	5.01	5.01	29,878	29,878
Total	5.01	5.01	5.01	29,878	29,878

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
General Heavy Industry	16.40	9.50	16.40	90.00	0.00	10.00

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					
General Heavy Industry	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

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					
General Heavy Industry	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	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
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	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
Total	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	lb/day										lb/day					
Architectural Coating	0.00					0.00	0.00		0.00	0.00						0.00
Consumer Products	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
Total	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

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 “LARGE PROJECT”

CalEEMod MODEL OUTPUTS - WINTER
MODEL “CALEEMOD SEVILLE SOLAR– OPERATIONS LARGE PRJ V03.xls”

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Seville Solar Farm - Operations Large
Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Heavy Industry	5.5	1000sqft

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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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
Water Mitigation -

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	1.24	9.55	3.67	0.01	0.00	0.34	0.34	0.00	0.34	0.34	0.00	1,631.04	0.00	0.11	0.00	1,633.33
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	1.15	7.46	7.46	0.01	0.00	0.43	0.43	0.00	0.43	0.43	0.00	1,631.04	0.00	0.11	0.00	1,633.33
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	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	0.08	0.23	0.75	0.00	4.55	0.01	4.56	0.45	0.01	0.45		86.00		0.01		86.11
Total	0.08	0.23	0.75	0.00	4.55	0.01	4.56	0.45	0.01	0.45		86.00		0.01	0.00	86.11

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	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	0.08	0.23	0.75	0.00	4.55	0.01	4.56	0.45	0.01	0.45		86.00		0.01		86.11
Total	0.08	0.23	0.75	0.00	4.55	0.01	4.56	0.45	0.01	0.45		86.00		0.01	0.00	86.11

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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	1.24	9.55	3.67	0.01		0.34	0.34		0.34	0.34		1,631.04		0.11		1,633.33
Total	1.24	9.55	3.67	0.01		0.34	0.34		0.34	0.34		1,631.04		0.11		1,633.33

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
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	0.00	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

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	1.15	7.46	7.46	0.01		0.43	0.43		0.43	0.43	0.00	1,631.04		0.11		1,633.33
Total	1.15	7.46	7.46	0.01		0.43	0.43		0.43	0.43	0.00	1,631.04		0.11		1,633.33

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
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	0.00	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

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	0.08	0.23	0.75	0.00	4.55	0.01	4.56	0.45	0.01	0.45		86.00		0.01		86.11
Unmitigated	0.08	0.23	0.75	0.00	4.55	0.01	4.56	0.45	0.01	0.45		86.00		0.01		86.11
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
General Heavy Industry	5.01	5.01	5.01	29,878	29,878
Total	5.01	5.01	5.01	29,878	29,878

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
General Heavy Industry	16.40	9.50	16.40	90.00	0.00	10.00

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					
General Heavy Industry	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

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					
General Heavy Industry	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	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
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	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
Total	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	lb/day										lb/day					
Architectural Coating	0.00					0.00	0.00		0.00	0.00						0.00
Consumer Products	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
Total	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

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 “LARGE PROJECT”

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL “CALEEMOD SOLAR– OPERATIONS LARGE PRJ V03.xls”

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Seville Solar Farm - Operations Large
Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Heavy Industry	5.5	1000sqft

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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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
Water Mitigation -

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	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96
Total	0.02	0.15	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96

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	0.02	0.12	0.12	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96
Total	0.02	0.12	0.12	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96

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	0.00	0.00	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	35.10	35.10	0.00	0.00	35.21
Mobile	0.01	0.04	0.15	0.00	0.83	0.00	0.83	0.08	0.00	0.08	0.00	14.82	14.82	0.00	0.00	14.84
Waste						0.00	0.00		0.00	0.00	6.87	0.00	6.87	0.41	0.00	15.40
Water						0.00	0.00		0.00	0.00	0.00	20.87	20.87	0.00	0.00	20.94
Total	0.01	0.04	0.15	0.00	0.83	0.00	0.83	0.08	0.00	0.08	6.87	70.79	77.66	0.41	0.00	86.39

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	0.00	0.00	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	35.10	35.10	0.00	0.00	35.21
Mobile	0.01	0.04	0.15	0.00	0.83	0.00	0.83	0.08	0.00	0.08	0.00	14.82	14.82	0.00	0.00	14.84
Waste						0.00	0.00		0.00	0.00	6.87	0.00	6.87	0.41	0.00	15.40
Water						0.00	0.00		0.00	0.00	0.00	20.87	20.87	0.00	0.00	20.94
Total	0.01	0.04	0.15	0.00	0.83	0.00	0.83	0.08	0.00	0.08	6.87	70.79	77.66	0.41	0.00	86.39

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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	0.02	0.15	0.06	0.00		0.01	0.01		0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96
Total	0.02	0.15	0.06	0.00		0.01	0.01		0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96

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	0.00	0.00	0.00	0.00	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	0.00	0.00	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	0.00	0.00

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	0.02	0.12	0.12	0.00		0.01	0.01		0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96
Total	0.02	0.12	0.12	0.00		0.01	0.01		0.01	0.01	0.00	22.93	22.93	0.00	0.00	22.96

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	0.00	0.00	0.00	0.00	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	0.00	0.00	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	0.00	0.00

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	0.01	0.04	0.15	0.00	0.83	0.00	0.83	0.08	0.00	0.08	0.00	14.82	14.82	0.00	0.00	14.84
Unmitigated	0.01	0.04	0.15	0.00	0.83	0.00	0.83	0.08	0.00	0.08	0.00	14.82	14.82	0.00	0.00	14.84
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
General Heavy Industry	5.01	5.01	5.01	29,878	29,878
Total	5.01	5.01	5.01	29,878	29,878

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
General Heavy Industry	16.40	9.50	16.40	90.00	0.00	10.00

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	35.10	35.10	0.00	0.00	35.21
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	35.10	35.10	0.00	0.00	35.21
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

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					
General Heavy Industry	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					
General Heavy Industry	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			
General Heavy Industry	60885					35.10	0.00	0.00	35.21
Total						35.10	0.00	0.00	35.21

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			
General Heavy Industry	60885					35.10	0.00	0.00	35.21
Total						35.10	0.00	0.00	35.21

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	0.00	0.00	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
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	0.00
Consumer Products	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
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

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	0.00
Consumer Products	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
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

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					20.87	0.00	0.00	20.94
Unmitigated					20.87	0.00	0.00	20.94
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			
General Heavy Industry	0 / 3.25851					20.87	0.00	0.00	20.94
Total						20.87	0.00	0.00	20.94

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			
General Heavy Industry	0 / 3.25851					20.87	0.00	0.00	20.94
Total						20.87	0.00	0.00	20.94

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					6.87	0.41	0.00	15.40
Unmitigated					6.87	0.41	0.00	15.40
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			
General Heavy Industry	33.86					6.87	0.41	0.00	15.40
Total						6.87	0.41	0.00	15.40

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
General Heavy Industry	33.86					6.87	0.41	0.00	15.40
Total						6.87	0.41	0.00	15.40

9.0 Vegetation

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ATTACHMENT D

RECALCULATED TIER 3 MITIGATED NO_x AND ROG EMISSIONS INCORRECTLY
CALCULATED BY CALEEMOD FOR THE OFF-ROAD EQUIPMENT FOR THE SMALL
PROJECT & LARGE PROJECT OPERATIONS

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Operations OffRdEqp2014

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Off-Highway Trucks	1	6	381	0.57	300-599HP	0.00628	0.00033	0.431	8.187
Totals:								0.431	8.187

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ATTACHMENT E

TABLES SUMMARIZING DAILY AIR POLLUTANT EMISSIONS CALCULATED BY
CALEEMOD AND AP-42 FOR PROJECT OPERATIONS AND COMPARED TO
APPLICABLE SIGNIFICANCE THRESHOLDS

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ATTACHMENT E-1

SEVILLE SOLAR FARM “SMALL PROJECT”

TABLES SUMMARIZING DAILY AIR POLLUTANT EMISSIONS CALCULATED BY
CALEEMOD AND AP-42 FOR PROJECT OPERATIONS AND COMPARED TO
APPLICABLE SIGNIFICANCE THRESHOLDS

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Operations Site Dust

Operations Fugitive Dust Emissions from Unpaved Roads

(Emission Factor Source: AP-42 (5th Ed. - 11/06) §13.2.2 - Unpaved Roads)

$$EF_{PM} \text{ (lbs/VMT)} = ((4.9) * ((s/12)^{0.7}) * ((W/3)^{0.45}))$$

$$EF_{PM_{10}} \text{ (lbs/VMT)} = ((1.5) * ((s/12)^{0.9}) * ((W/3)^{0.45}))$$

$$EF_{PM_{2.5}} \text{ (lbs/VMT)} = ((0.15) * ((s/12)^{0.9}) * ((W/3)^{0.45}))$$

Where:

s = Silt content of road surface material (%)

M = Surface material moisture content (%)

W = Mean Vehicle Weight (tons)

Road Segment	Silt Content	Moisture Content	Vehicle Weight (tons)	PM Emission Factor (lb/VMT)	PM ₁₀ Emission Factor (lb/VMT)	PM _{2.5} Emission Factor (lb/VMT)	VMT per day	Emission Controls		Controlled Emissions (lbs/day)		
								ECF	Technology	PM	PM ₁₀	PM _{2.5}
On-Site Roads	8.5	0.5	20.00	9.0390	2.5826	0.2583	2.00	61%	3 x Water	7.05	2.01	0.20

Operations 2014

Seville Solar Farm - Winter 2014 Operations and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Operations Site Dust	C					2.01		2.01	0.20		0.20
Operations Mobile	A	0.08	0.23	0.75	0.00	7.55	0.01	7.56	0.75	0.01	0.76
Operations Offroad	A	1.24	9.56	3.68	0.01		0.34	0.34		0.34	0.34
Total		1.32	9.79	4.43	0.01	9.56	0.35	9.91	0.95	0.35	1.30
Seville Solar Farm - Summer 2014 Operations and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Operations Site Dust	C					2.01		2.01	0.20		0.20
Operations Mobile	A	0.08	0.23	0.75	0.00	7.55	0.01	7.56	0.75	0.01	0.76
Operations Offroad	A				0.01			0.00			0.00
Operations Offroad	B	0.43	8.19	7.47			0.43	0.43		0.43	0.43
Total		0.51	8.42	8.22	0.01	9.56	0.44	10.01	0.95	0.44	1.39
Seville Solar Farm - Summer 2014 Operations and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Operations Site Dust	C					2.01		2.01	0.20		0.20
Operations Mobile	A	0.09	0.23	0.89	0.00	7.55	0.01	7.56	0.75	0.01	0.76
Operations Offroad	A	1.24	9.56	3.68	0.01		0.34	0.34		0.34	0.34
Total		1.33	9.79	4.57	0.01	9.56	0.35	9.91	0.95	0.35	1.30
Seville Solar Farm - Summer 2014 Operations and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Operations Site Dust	C					2.01		2.01	0.20		0.20
Operations Mobile	A	0.09	0.23	0.89	0.00	7.55	0.01	7.56	0.75	0.01	0.76
Operations Offroad	A				0.01			0.00			0.00
Operations Offroad	B	0.43	8.19	7.47			0.43	0.43		0.43	0.43
Total		0.52	8.42	8.36	0.01	9.56	0.44	10.01	0.95	0.44	1.39
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Operations 2014 Small

Operations										
Operations 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	1.32	9.79	4.43	0.01	9.56	0.35	9.91	0.95	0.35	1.30
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Operations 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	1.33	9.79	4.57	0.01	9.56	0.35	9.91	0.95	0.35	1.30
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Operations 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	0.51	8.42	8.22	0.01	9.56	0.44	10.01	0.95	0.44	1.39
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Operations 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	0.52	8.42	8.36	0.01	9.56	0.44	10.01	0.95	0.44	1.39
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Operations Energy CO2e

Carbon Dioxide Emissions from Energy Use

(Intensity Factor Source: CalEEMod Imperial Irrigation District (IID) CO2 Intensity Factor)

$$\text{Emissions}_{\text{CO}_2} \text{ (Mtons/yr)} = ((\text{Intensity Factor}/2204.6) * (\text{MWh/yr}))$$

Where:

IID Intensity Factor = 1270.9 lbs/MWh

<i>IID CO₂ Intensity Factor (lbs/MWh)</i>	<i>Total Energy Consumption (MWh/yr)</i>	<i>CO₂ Emissions (lbs/yr)</i>	<i>CO₂ Emissions (Mtons/yr)</i>
1270.9	91.3	115969.63	52.60

Operations Annual CO2e

Seville Solar Farm - 2014 Annual Operations and Associated Traffic				
Annual Unmitigated	Emission Rate (Metric Tons/year)			
	Bio-CO2	NBio-CO2	Total CO2	CO2e
Operations Offroad	0	22.93	22.93	22.96
Operations Energy	0	35.1	35.1	35.21
Operations Mobile	0	14.84	14.84	14.86
Operations Waste	6.87	0	6.87	15.4
Operations Water	0	20.87	20.87	20.94
Total	6.87	93.74	100.61	109.37
Annual Mitigated	Emission Rate (Metric Tons/year)			
	Bio-CO2	NBio-CO2	Total CO2	CO2e
Operations Offroad	0	22.93	22.93	22.96
Operations Energy	0	35.1	35.1	35.21
Operations Mobile	0	14.84	14.84	14.86
Operations Waste	0	0	6.87	15.4
Operations Water	0	20.87	20.87	20.94
Total	0.00	93.74	100.61	109.37

2014 Operations CO2e

2014 - Unmitigated Annual Operations	
Annual Unmitigated	(Mtons/yr)
	CO2e
Total	161.97
2014 - Mitigated Annual Operations	
Annual Mitigated	(Mtons/yr)
	CO2e
Total	161.97

ATTACHMENT E-2

SEVILLE SOLAR FARM “LARGE PROJECT”

TABLES SUMMARIZING DAILY AIR POLLUTANT EMISSIONS CALCULATED BY
CALEEMOD AND AP-42 FOR PROJECT OPERATIONS AND COMPARED TO
APPLICABLE SIGNIFICANCE THRESHOLDS

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Operations Site Dust

Operations Fugitive Dust Emissions from Unpaved Roads

(Emission Factor Source: AP-42 (5th Ed. - 11/06) §13.2.2 - Unpaved Roads)

$$EF_{PM} \text{ (lbs/VMT)} = ((4.9) * ((s/12)^{0.7}) * ((W/3)^{0.45}))$$

$$EF_{PM_{10}} \text{ (lbs/VMT)} = ((1.5) * ((s/12)^{0.9}) * ((W/3)^{0.45}))$$

$$EF_{PM_{2.5}} \text{ (lbs/VMT)} = ((0.15) * ((s/12)^{0.9}) * ((W/3)^{0.45}))$$

Where:

s = Silt content of road surface material (%)

M = Surface material moisture content (%)

W = Mean Vehicle Weight (tons)

Road Segment	Silt Content	Moisture Content	Vehicle Weight (tons)	PM Emission Factor (lb/VMT)	PM ₁₀ Emission Factor (lb/VMT)	PM _{2.5} Emission Factor (lb/VMT)	VMT per day	Emission Controls		Controlled Emissions (lbs/day)		
								ECF	Technology	PM	PM ₁₀	PM _{2.5}
On-Site Roads	8.5	0.5	20.00	9.0390	2.5826	0.2583	2.00	61%	3 x Water	7.05	2.01	0.20

Operations 2014

Seville Solar Farm - Winter 2014 Operations and Associated Traffic											
Winter Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Operations Site Dust	C					2.01		2.01	0.20		0.20
Operations Mobile	A	0.08	0.23	0.75	0.00	4.56	0.01	4.57	0.45	0.01	0.46
Operations Offroad	A	1.24	9.56	3.68	0.01		0.34	0.34		0.34	0.34
Total		1.32	9.79	4.43	0.01	6.57	0.35	6.92	0.65	0.35	1.00
Seville Solar Farm - Summer 2014 Operations and Associated Traffic											
Summer Unmitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Operations Site Dust	C					2.01		2.01	0.20		0.20
Operations Mobile	A	0.08	0.23	0.75	0.00	4.56	0.01	4.57	0.45	0.01	0.46
Operations Offroad	A				0.01			0.00			0.00
Operations Offroad	B	0.43	8.19	7.47			0.43	0.43		0.43	0.43
Total		0.51	8.42	8.22	0.01	6.57	0.44	7.02	0.65	0.44	1.09
Seville Solar Farm - Summer 2014 Operations and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Operations Site Dust	C					2.01		2.01	0.20		0.20
Operations Mobile	A	0.09	0.23	0.89	0.00	4.56	0.01	4.57	0.45	0.01	0.46
Operations Offroad	A	1.24	9.56	3.68	0.01		0.34	0.34		0.34	0.34
Total		1.33	9.79	4.57	0.01	6.57	0.35	6.92	0.65	0.35	1.00
Seville Solar Farm - Summer 2014 Operations and Associated Traffic											
Summer Mitigated	Source*	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Operations Site Dust	C					2.01		2.01	0.20		0.20
Operations Mobile	A	0.09	0.23	0.89	0.00	4.56	0.01	4.57	0.45	0.01	0.46
Operations Offroad	A				0.01			0.00			0.00
Operations Offroad	B	0.43	8.19	7.47			0.43	0.43		0.43	0.43
Total		0.52	8.42	8.36	0.01	6.57	0.44	7.02	0.65	0.44	1.09
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

Operations 2014 Large

Operations										
Operations 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	1.32	9.79	4.43	0.01	6.57	0.35	6.92	0.65	0.35	1.00
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Operations 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	1.33	9.79	4.57	0.01	6.57	0.35	6.92	0.65	0.35	1.00
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Operations 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	0.51	8.42	8.22	0.01	6.57	0.44	7.02	0.65	0.44	1.09
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Operations 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	0.52	8.42	8.36	0.01	6.57	0.44	7.02	0.65	0.44	1.09
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Operations Energy CO2e

Carbon Dioxide Emissions from Energy Use

(Intensity Factor Source: CalEEMod Imperial Irrigation District (IID) CO2 Intensity Factor)

$$\text{Emissions}_{\text{CO}_2} \text{ (Mtons/yr)} = ((\text{Intensity Factor}/2204.6) * (\text{MWh/yr}))$$

Where:

IID Intensity Factor = 1270.9 lbs/MWh

<i>IID CO₂ Intensity Factor (lbs/MWh)</i>	<i>Total Energy Consumption (MWh/yr)</i>	<i>CO₂ Emissions (lbs/yr)</i>	<i>CO₂ Emissions (Mtons/yr)</i>
1270.9	146.0	185551.40	84.17

Operations Annual CO2e

Seville Solar Farm - 2014 Annual Operations and Associated Traffic				
Annual Unmitigated	Emission Rate (Metric Tons/year)			
	Bio-CO2	NBio-CO2	Total CO2	CO2e
Operations Offroad	0	22.93	22.93	22.96
Operations Energy	0	35.1	35.1	35.21
Operations Mobile	0	14.84	14.84	14.86
Operations Waste	6.87	0	6.87	15.4
Operations Water	0	20.87	20.87	20.94
Total	6.87	93.74	100.61	109.37
Annual Mitigated	Emission Rate (Metric Tons/year)			
	Bio-CO2	NBio-CO2	Total CO2	CO2e
Operations Offroad	0	22.93	22.93	22.96
Operations Energy	0	35.1	35.1	35.21
Operations Mobile	0	14.84	14.84	14.86
Operations Waste	0	0	6.87	15.4
Operations Water	0	20.87	20.87	20.94
Total	0.00	93.74	100.61	109.37

2014 Operations CO2e

2014 - Unmitigated Annual Operations	
Annual Unmitigated	(Mtons/yr)
	CO2e
Total	193.54
2014 - Mitigated Annual Operations	
Annual Mitigated	(Mtons/yr)
	CO2e
Total	193.54

ATTACHMENT F

SEVILLE SOLAR FARM COMPLEX

TABLES SUMMARIZING DAILY AIR POLLUTANT EMISSIONS CALCULATED BY
CALEEMOD AND AP-42 FOR PROJECT OPERATIONS AND COMPARED TO
APPLICABLE SIGNIFICANCE THRESHOLDS

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Operations 2014 Total

Seville Solar Farm Complex Total Operations										
Operations 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
3 Small Project Total	3.95	29.36	13.28	0.04	28.69	1.05	29.74	2.85	1.05	3.90
2 Large ProjectTotal	2.64	19.57	8.85	0.03	13.15	0.70	13.85	1.30	0.70	2.00
Seville Solar Farm ComplexTotal	6.59	48.94	22.14	0.07	41.84	1.74	43.59	4.16	1.74	5.90
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Operations 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
3 Small Project Total	3.98	29.36	13.70	0.04	28.69	1.05	29.74	2.85	1.05	3.90
2 Large ProjectTotal	2.66	19.57	9.13	0.03	13.15	0.70	13.85	1.30	0.70	2.00
Seville Solar Farm ComplexTotal	6.64	48.94	22.84	0.07	41.84	1.74	43.59	4.16	1.74	5.90
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Operations 2014 Total

Operations 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
3 Small Project Total	1.53	25.25	24.66	0.04	28.69	1.32	30.02	2.85	1.32	4.18
2 Large ProjectTotal	1.02	16.83	16.44	0.03	13.15	0.88	14.03	1.30	0.88	2.18
Seville Solar Farm ComplexTotal	2.55	42.09	41.09	0.07	41.84	2.20	44.05	4.16	2.20	6.36
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Operations 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
3 Small Project Total	1.56	25.25	25.08	0.04	28.69	1.32	30.02	2.85	1.32	4.18
2 Large ProjectTotal	1.04	16.83	16.72	0.03	13.15	0.88	14.03	1.30	0.88	2.18
Seville Solar Farm ComplexTotal	2.60	42.09	41.79	0.07	41.84	2.20	44.05	4.16	2.20	6.36
ICAPCD Significance	55.00	55.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Operations 2014 CO2e Total

2014 - Unmitigated Annual Operations	
Annual Unmitigated	(Mtons/yr)
	CO2e
3 Small Project Total	485.92
2 Large Project Total	387.07
Total	872.99
2014 - Mitigated Annual Operations	
Annual Mitigated	(Mtons/yr)
	CO2e
3 Small Project Total	485.92
2 Large Project Total	387.07
Total	872.99

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AIR POLLUTANT EMISSION ASSESSMENT, ANZA SUBSTATION EXPANSION

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ENVIRONMENTAL MANAGEMENT ASSOCIATES

February 25, 2014

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

Re: Air Pollutant Emission Assessment, Anza Substation Expansion, Imperial County, California

Dear Mr. Alrai:

Environmental Management Associates, Inc. (EMA) has prepared this assessment of the emissions of the following seven air pollutants from the proposed expansion of the Imperial Irrigation District (IID) Anza Substation, Imperial County, California: criteria air pollutants particulate matter smaller than 10 microns in aerodynamic diameter (PM₁₀), particulate matter smaller than 2.5 microns in aerodynamic diameter (PM_{2.5}), carbon monoxide (CO), nitrogen oxides (NO_x) and sulfur dioxide (SO₂); and criteria air pollutant precursor reactive organic gases (ROGs); as well as greenhouse gases (GHG), such as carbon dioxide (CO₂) and methane (CH₄).

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}, SO₂ or GHG.

To conduct this analysis, EMA utilized the following information provided by Regenerate Power LLC. Construction of the Anza Substation expansion would likely require up to an estimated three and one-half months to complete. The light grading activities are expected to occur over a total of one-half acre; the total cumulative acreage disturbed from grading is total of 2 acres (approximately four passes over the one-half acre area). An estimated 16 worker trips and

six haul truck trips would be generated per day. The construction contractor is assumed to use construction equipment using diesel engines with certified NO_x emissions rated as Tier 3 or better. Construction workers and on-road trucks may be driving an estimated 0.63 miles per day on-site to deliver construction materials directly to the active work locations. Disturbed on-site areas would be watered at least three times a day. The equipment anticipated to be used during the Anza Substation expansion construction is provided in Table 2.

Table 2– Anticipated Anza Substation Construction Equipment

Equipment Type	Amount	Daily Usage (Hours)
Aerial Lifts	2	6
Cranes	1	6
Grader	1	4
Tractor/Loader/Backhoe	1	6
Generator Set	1	6
Skid Steer Loader	1	6

Air pollutant emissions for most of the Anza Substation expansion 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 Anza Substation expansion 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.

Although the CalEEMod model is capable of calculating air pollutant emissions across many types of construction activities, its default project types do not include a "substation" project. Thus, EMA has calculated the daily air pollutant emissions from the expansion of the Anza Substation using one CalEEMod model and two using AP-42 emission factors. Table 3 identifies the project construction activities, air pollutant sources, daily air pollutant emissions, type of model used, the name of the model run and the Attachment to this letter report in which the input and output files are located.

Table 3: CalEEMod Air Pollutant Emissions Model – Anza Substation Activities

Project Phase(s)	Anza Substation Expansion				
Air Pollutant Source	Grading	On-Site Equipment	Off-Site Traffic		Onsite Traffic
Air Pollutant Emissions	Fugitive Dust	Combustion Emissions	Fugitive Dust	Combustion Emissions	Fugitive Dust
Model Using	AP-42	CalEEMod			AP-42
Model Name	CalEEMod – Anza Substation Expansion V03.xls				
Attachment	Attach. C	Attachment A			Attach. C

Three attachments (Attachment A, Attachment B, and Attachment C) are included with this letter report which describe the CalEEMod calculations and results for the Anza Substation expansion activities.

Attachment A contains a “Remarks” summary (see Attachment A-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 substation, 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 and provided by Regenerate. Examples of this latter information include the mix of construction equipment expected to be used. In the CalEEMod Anza Substation expansion activities model, emissions from only this construction phase was calculated by deleting all of the other CalEEMod construction phases.

The Anza Substation CalEEMod model 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 grading occurring during Anza Substation expansion 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 onsite roads. Onsite, unpaved roads in the CalEEMod models assume watering three times daily.

Attachment A also contains the CalEEMod-generated reports of the model outputs for the Anza Substation– one each for the summer months (Attachment A-2), for the winter months (Attachment A-3), and for the annual (or phase) time period (Attachment A-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 CalEEMod version 2011.1.1 for Tier 2 and Tier 3 engines are incorrect for NO_x, ROG and TOG (“total organic gases”) 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 B for the Anza Substation.

Attachment C-1 contains tables summarizing the specific daily air pollutant emissions calculated for the Anza Substation expansion activities. In addition to the tables summarizing the specific daily air pollutant emissions calculated by CalEEMod (as corrected through the calculations in Attachment B), these attachments also present the calculations of the fugitive dust generated on-site daily from the grading activity (using the grading emissions factors in AP-42) and from the delivery of the Anza substation equipment and the on-site traffic, 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 estimate the combined daily construction air pollutant emissions from the Anza Substation and the adjacent Seville Solar Farm Complex, the daily air pollutant emissions from the Anza Substation expansion construction (presented in Attachment C of this assessment) and the daily air pollutant emissions presented in Attachment V of the June 2013 “Seville Solar Farm Complex Construction Air Pollutant Emission Assessment” must be summed across each construction activity which would be occurring at the same time. Table 4 identifies the Seville Solar Farm Complex “Small Project” construction activity timeline, to which has been added the expected construction schedule for the Anza Substation expansion. Table 5 does the same for the Seville “Large Project” construction activities and the Anza Substation expansion construction schedule.

Attachment D-1 presents tables providing the winter and summer unmitigated and mitigated daily air pollution emissions (from Attachment C of this assessment and Attachment V of the Seville Project report) summed by applicable construction activities across the six time periods outlined in Table 4 for the “Small Project” with the Seville “Common Infrastructure” activities included. Attachment D-2 presents tables providing the winter and summer unmitigated and mitigated daily air pollution emissions from these same sources summed by applicable construction activities across the nine time periods outlined in Table 5 for the “Large Project” with the Seville “Common Infrastructure” activities included.

Table 4: 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												
Building Erection								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												
GenTie Power Line Constrc					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																
Transmission Line Construction			X	X	X	X	X	X	X	X	X	X	X	X	X	X																
Anza Substation Expansion			X	X	X	X	X	X	X	X	X	X	X	X	X	X																

Table 5: 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	
Building Erection										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												
GenTie Power Line Constrc									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																
Transmission Line Construction			X	X	X	X	X	X	X	X	X	X	X	X	X	X																
Anza Substation Expansion			X	X	X	X	X	X	X	X	X	X	X	X	X																	

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Attachment D-1 and Attachment D-2 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 D-1 and Attachment D-2 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.

Attachment D-1 and Attachment D-2 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 for the combined projects 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 initial "D" and "C".

Dwight L. Carey, D.Env.
Principal

Attachments:

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ATTACHMENT A

CalEEMod MODELS:
“CALEEMOD – ANZA SUBSTATION EXPANSION V02.xls”

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ATTACHMENT A-1

CalEEMod MODEL "REMARKS"
MODEL "CALEEMOD ANZA SUBSTATION EXPANSION V02.xls"

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“Remarks” for the Anza Substation Expansion 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: Anza Substation Expansion CalEEMod – Anza Substation ExpansionV02.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 Anza Substation expansion. The ‘User Defined Industrial’ land use subtype represents the Anza Substation. For this model in particular the ‘User Defined Industrial’ ‘Lot Acreage’ is the acreage associated with the Anza Substation expansion. ‘Lot Acreage’ totals to 1 acre.

Construction Tabs

- **Construction Phase** - This model calculates the emissions from the Anza Substation expansion grading/construction equipment, and the worker, vendor and haul traffic associated with grading/construction of the Anza Substation Area. All other phases except grading are deleted.
 - o Grading- 4/16/2014 – 7/31/2014
- **Off-road Equipment (Grading)** – The Anza Substation 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 Lift	2	6
Cranes	1	6
Graders	1	4
Tractor/Loader/Backhoe	1	6
Generator Set	1	6
Skid Steer Loader	1	6

- **Trips and VMT** – Only the Anza Substation expansion grading/construction trips and VMT emissions are calculated in this model. The Anza Substation expansion grading/construction require 16 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). No unpaved roads would be traveled by traffic accessing the construction area.
 - o CalEEMod default worker trip length= 10.2 miles
 - % Paved Worker = 1-(0 miles unpaved roads to Project / 10.2 miles)=100% paved
 - o CalEEMod default vendor trip length= 11.9 miles
 - % Paved Vendor= 1-(0 miles unpaved roads to Project / 11.9 miles)=100% paved
 - o CalEEMod default haul trip length= 20 miles
 - % Paved Haul= 1-(0 miles unpaved roads to Project / 20 miles)=100% 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 Attachment C). Default grading ‘dust from material movement’ acreage has been zeroed out.

- **Architectural Coating** No coating is required for this expansion.

Operational Tabs

- **Vehicle Trips** – Construction model only, operations are zeroed out.
- **Vehicle Emission Factors** – Construction model only, operations are zeroed out.
- **Vehicle Emission Factors** – Construction model only, operations are zeroed out.
- **Vehicle Emission Factors** – Construction model only, operations are zeroed out.
- **Road Dust** - Construction model only, operations are zeroed out.
- **Woodstoves** - Construction model only, operations are zeroed out.
- **Consumer Products** - Construction model only, operations are zeroed out.
- **Area Coating** - Construction model only, operations are zeroed out.
- **Landscape Equipment** - Construction model only, operations are zeroed out.
- **Energy Use** - Construction model only, operations are zeroed out.
- **Water And Wastewater** - Construction model only, operations are zeroed out.
- **Solid Waste** - Construction model only, operations are zeroed out.

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 A-2

CalEEMod MODEL OUTPUTS - SUMMER
MODEL "CALEEMOD ANZA SUBSTATION EXPANSION V02.xls"

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Seville Solar Farm - Anza Substation Construc
Imperial County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	1	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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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	3.20	20.04	14.84	0.03	0.34	1.19	1.53	0.01	1.19	1.20	0.00	2,471.99	0.00	0.28	0.00	2,477.93
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	2.73	13.01	16.05	0.03	0.34	1.09	1.43	0.01	1.09	1.10	0.00	2,471.99	0.00	0.28	0.00	2,477.93
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	1.04	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
Total	1.04	0.00	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	1.04	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
Total	1.04	0.00	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

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	3.00	19.81	12.94	0.03		1.18	1.18		1.18	1.18		2,330.93		0.27		2,336.58
Total	3.00	19.81	12.94	0.03		1.18	1.18		1.18	1.18		2,330.93		0.27		2,336.58

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	0.03	0.01	0.00	0.14	0.00	0.14	0.00	0.00	0.00		5.53		0.00		5.53
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	0.20	0.20	1.89	0.00	0.20	0.01	0.20	0.01	0.01	0.01		135.54		0.01		135.82
Total	0.20	0.23	1.90	0.00	0.34	0.01	0.34	0.01	0.01	0.01		141.07		0.01		141.35

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	2.53	12.78	14.15	0.03		1.09	1.09		1.09	1.09	0.00	2,330.93		0.27		2,336.58
Total	2.53	12.78	14.15	0.03		1.09	1.09		1.09	1.09	0.00	2,330.93		0.27		2,336.58

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	0.03	0.01	0.00	0.14	0.00	0.14	0.00	0.00	0.00		5.53		0.00		5.53
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	0.20	0.20	1.89	0.00	0.20	0.01	0.20	0.01	0.01	0.01		135.54		0.01		135.82
Total	0.20	0.23	1.90	0.00	0.34	0.01	0.34	0.01	0.01	0.01		141.07		0.01		141.35

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
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

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
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

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	1.04	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	1.04	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	0.11					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.93					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	1.04	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	0.11					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.93					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	1.04	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 A-3

CalEEMod MODEL OUTPUTS - WINTER
MODEL "CALEEMOD ANZA SUBSTATION EXPANSION V02.xls"

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Seville Solar Farm - Anza Substation Construc
Imperial County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	1	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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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	3.17	20.03	14.54	0.03	0.34	1.19	1.53	0.01	1.19	1.20	0.00	2,464.67	0.00	0.28	0.00	2,470.59
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	2.70	13.00	15.75	0.03	0.34	1.09	1.43	0.01	1.09	1.10	0.00	2,464.67	0.00	0.28	0.00	2,470.59
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	1.04	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
Total	1.04	0.00	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	1.04	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
Total	1.04	0.00	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

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	3.00	19.81	12.94	0.03		1.18	1.18		1.18	1.18		2,330.93		0.27		2,336.58
Total	3.00	19.81	12.94	0.03		1.18	1.18		1.18	1.18		2,330.93		0.27		2,336.58

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	0.03	0.01	0.00	0.14	0.00	0.14	0.00	0.00	0.00		5.49		0.00		5.49
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	0.17	0.19	1.59	0.00	0.20	0.01	0.20	0.01	0.01	0.01		128.25		0.01		128.52
Total	0.17	0.22	1.60	0.00	0.34	0.01	0.34	0.01	0.01	0.01		133.74		0.01		134.01

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	2.53	12.78	14.15	0.03		1.09	1.09		1.09	1.09	0.00	2,330.93		0.27		2,336.58
Total	2.53	12.78	14.15	0.03		1.09	1.09		1.09	1.09	0.00	2,330.93		0.27		2,336.58

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	0.03	0.01	0.00	0.14	0.00	0.14	0.00	0.00	0.00		5.49		0.00		5.49
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	0.17	0.19	1.59	0.00	0.20	0.01	0.20	0.01	0.01	0.01		128.25		0.01		128.52
Total	0.17	0.22	1.60	0.00	0.34	0.01	0.34	0.01	0.01	0.01		133.74		0.01		134.01

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
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

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
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

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	1.04	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	1.04	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	0.11					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.93					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	1.04	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	0.11					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.93					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	1.04	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 A-4

CalEEMod MODEL OUTPUTS - ANNUAL
MODEL "CALEEMOD – ANZA SUBSTATION EXPANSION V02.xls"

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Seville Solar Farm - Anza Substation Construc
Imperial County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
User Defined Industrial	1	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
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle Emission Factors - See "Remarks" Summary Attachment
Vehicle 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	0.12	0.77	0.57	0.00	0.01	0.05	0.06	0.00	0.05	0.05	0.00	86.35	86.35	0.01	0.00	86.56
Total	0.12	0.77	0.57	0.00	0.01	0.05	0.06	0.00	0.05	0.05	0.00	86.35	86.35	0.01	0.00	86.56

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	0.50	0.61	0.00	0.01	0.04	0.05	0.00	0.04	0.04	0.00	86.35	86.35	0.01	0.00	86.56
Total	0.10	0.50	0.61	0.00	0.01	0.04	0.05	0.00	0.04	0.04	0.00	86.35	86.35	0.01	0.00	86.56

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	0.19	0.00	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	0.19	0.00	0.00	0.00	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	0.19	0.00	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	0.19	0.00	0.00	0.00	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

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	0.76	0.50	0.00		0.05	0.05		0.05	0.05	0.00	81.39	81.39	0.01	0.00	81.59
Total	0.12	0.76	0.50	0.00		0.05	0.05		0.05	0.05	0.00	81.39	81.39	0.01	0.00	81.59

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	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.19
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	0.07	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.77	4.77	0.00	0.00	4.78
Total	0.01	0.01	0.07	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	4.96	4.96	0.00	0.00	4.97

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	0.10	0.49	0.54	0.00		0.04	0.04		0.04	0.04	0.00	81.39	81.39	0.01	0.00	81.59
Total	0.10	0.49	0.54	0.00		0.04	0.04		0.04	0.04	0.00	81.39	81.39	0.01	0.00	81.59

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	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.19
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	0.07	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.77	4.77	0.00	0.00	4.78
Total	0.01	0.01	0.07	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	4.96	4.96	0.00	0.00	4.97

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	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

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	0.19	0.00	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	0.19	0.00	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	0.02					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.17					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	0.19	0.00	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	0.02					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.17					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	0.19	0.00	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 B

RECALCULATED TIER 3 MITIGATED NO_x AND ROG EMISSIONS INCORRECTLY
CALCULATED BY CALEEMOD FOR THE OFF-ROAD EQUIPMENT FOR THE ANZA
SUBSTATION EXPANSION ACTIVITIES

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**Anza Substation Expansion
Anza Substation OffRdEquip2014**

Off-Road Equipment Type	Unit Amount	Usage Hours	Horse Power	Load Factor	Actual HP (range)	Tier 3 Emission Factor		Tier 3 Mitigated Emissions	
						NOx	ROG	ROG	NOx
		hrs/day				(lb/bhp-hr)		(lbs/day)	
Aerial Lifts	2	6	34	0.46	25-49HP	0.01173	0.00062	0.116	2.201
Cranes	1	6	208	0.43	175-299HP	0.00628	0.00033	0.177	3.372
Generator Sets	1	6	84	0.74	75-99HP	0.00733	0.00039	0.144	2.734
Graders	1	4	162	0.61	100-174HP	0.00628	0.00033	0.131	2.484
Skid Steer Loaders	1	6	37	0.55	25-49HP	0.01173	0.00062	0.075	1.432
Tractor/Loaders/Backhoes	1	6	75	0.55	75-99HP	0.00733	0.00039	0.095	1.814
Totals:								0.739	14.037

Tier 3 HP Rate Table

Table 3.5 with corrections in yellow (g/bhp-hr)									
Tier	LowHP	HighHP	Name	CO	NOX	PM10	PM25	ROG	TOG
Tier 3	0	24	0-24HP	4.1	5.32	0.45	0.45	0.28	0.28
Tier 3	25	49	25-49HP	4.1	5.32	0.45	0.45	0.28	0.28
Tier 3	50	74	50-74HP	3.7	5.32	0.3	0.3	0.28	0.28
Tier 3	75	99	75-99HP	3.7	3.325	0.3	0.3	0.175	0.175
Tier 3	100	174	100-174HP	3.7	2.85	0.22	0.22	0.15	0.15
Tier 3	175	299	175-299HP	2.6	2.85	0.15	0.15	0.15	0.15
Tier 3	300	599	300-599HP	2.6	2.85	0.15	0.15	0.15	0.15
Tier 3	600	750	600-750HP	2.6	2.85	0.15	0.15	0.15	0.15
Tier 3	750	2000	750-2000HP	2.6	4.56	0.15	0.15	0.24	0.24
Table 3.5 with corrections in yellow (lb/bhp-hr)									
Tier	LowHP	HighHP	Name	CO	NOX	PM10	PM25	ROG	TOG
Tier 3	0	24	0-24HP	0.00904	0.01173	0.00099	0.00099	0.00062	0.00062
Tier 3	25	49	25-49HP	0.00904	0.01173	0.00099	0.00099	0.00062	0.00062
Tier 3	50	74	50-74HP	0.00816	0.01173	0.00066	0.00066	0.00062	0.00062
Tier 3	75	99	75-99HP	0.00816	0.00733	0.00066	0.00066	0.00039	0.00039
Tier 3	100	174	100-174HP	0.00816	0.00628	0.00049	0.00049	0.00033	0.00033
Tier 3	175	299	175-299HP	0.00573	0.00628	0.00033	0.00033	0.00033	0.00033
Tier 3	300	599	300-599HP	0.00573	0.00628	0.00033	0.00033	0.00033	0.00033
Tier 3	600	750	600-750HP	0.00573	0.00628	0.00033	0.00033	0.00033	0.00033
Tier 3	750	2000	750-2000HP	0.00573	0.01005	0.00033	0.00033	0.00053	0.00053

ATTACHMENT C

TABLES SUMMARIZING DAILY AIR POLLUTANT EMISSIONS CALCULATED BY
CALEEMOD FOR THE ANZA SUBSTATION EXPANSION

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ATTACHMENT C-1

TABLES SUMMARIZING DAILY AIR POLLUTANT EMISSIONS CALCULATED BY
CALEEMOD AND AP-42 FOR TABLES SUMMARIZING DAILY AIR POLLUTANT
EMISSIONS CALCULATED BY CALEEMOD FOR THE ANZA SUBSTATION
EXPANSION ACTIVITIES

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Anza Substa Constrc Site Dust

Anza Substation Expansion Fugitive Dust Emissions from Unpaved Roads

(Emission Factor Source: AP-42 (5th Ed. - 11/06) §13.2.2 - Unpaved Roads)

$$EF_{PM} \text{ (lbs/VMT)} = ((4.9) * ((s/12)^{0.7}) * ((W/3)^{0.45}))$$

$$EF_{PM_{10}} \text{ (lbs/VMT)} = ((1.5) * ((s/12)^{0.9}) * ((W/3)^{0.45}))$$

$$EF_{PM_{2.5}} \text{ (lbs/VMT)} = ((0.15) * ((s/12)^{0.9}) * ((W/3)^{0.45}))$$

Where:

s = Silt content of road surface material (%)

M = Surface material moisture content (%)

W = Mean Vehicle Weight (tons)

Road Segment	Silt Content	Moisture Content	Vehicle Weight (tons)	PM Emission Factor (lb/VMT)	PM ₁₀ Emission Factor (lb/VMT)	PM _{2.5} Emission Factor (lb/VMT)	VMT per day	Emission Controls		Uncontrolled Emissions (lbs/day)			Controlled Emissions (lbs/day)		
								ECF	Technology	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
On-Site Roads	8.5	0.5	20.00	9.0390	2.5826	0.2583	0.63	61%	3 x Water	5.69	1.63	0.16	2.22	0.63	0.06

Anza Sbst Grading Fugitive Dust

Fugitive Dust Emissions from Grading

Graders & Scrapers

(Emission Factor Source: AP-42 (5th Ed. - 7/98) Table 11.9-1 (Grading))

$$EF_{PM_{15}} = (0.051) * (S)^{2.0} \quad \text{lbs/VMT}$$

$$EF_{PMTSP} = (0.04) * (S)^{2.5} \quad \text{lbs/VMT}$$

$$EF_{PM_{10}} = EF_{PM_{15}} * F_{PM_{10}} \quad \text{lbs/VMT}$$

$$EF_{PM_{2.5}} = EF_{PMTSP} * F_{PM_{2.5}} \quad \text{lbs/VMT}$$

Where:

S = Mean Vehicle Speed = 7.1 mph AP-42 default

$F_{PM_{2.5}} = PM_{2.5}$ emission factor = 0.031 lbs/VMT AP-42 default

$F_{PM_{10}} = PM_{10}$ emission factor = 0.600 lbs/VMT AP-42 default

Phase	Mean Vehicle Speed (mph)	PM Emission Factor (lbs/VMT)	PM ₁₀ Emission Factor (lbs/VMT)	PM _{2.5} Emission Factor (lbs/VMT)	Total VMT per Day	Emission Controls		Uncontrolled Emissions (lbs/day)			Controlled Emissions (lbs/day)		
						ECF	Technology	PM	PM ₁₀	PM _{2.5}	PM	PM ₁₀	PM _{2.5}
Grading	7.1	5.37	1.54	0.17	0.28	61%	3 x Water	1.48E+00	4.24E-01	4.58E-02	5.76E-01	1.65E-01	1.79E-02
								1.48E+00	4.24E-01	4.58E-02	5.76E-01	1.65E-01	1.79E-02

Anza Substation Expansion 2014

Winter 2014 Anza Substation Expansion and Associated Traffic											
Winter Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Anza Substa Construc Fugitive Dust	A							2.05			0.21
Anza Substa Construc Off-Road	A	3.00	19.83	12.95	0.03		1.18	1.18		1.18	1.18
Anza Substa Construc Offsite Haul	A	0.00	0.03	0.01	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Anza Substa Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anza Substa Construc Offsite Worker	A	0.17	0.19	1.59	0.00	0.20	0.01	0.21	0.01	0.01	0.02
Total		3.17	20.05	14.55	0.03	0.34	1.19	3.59	0.01	1.19	1.41
Winter Mitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Anza Substa Construc Fugitive Dust	A							0.80			0.08
Anza Substa Construc Off-Road	A				0.03			0.00			0.00
Anza Substa Construc Off-Road	B	0.74	14.04	13.23			1.09	1.09		1.09	1.09
Anza Substa Construc Offsite Haul	A	0.00	0.03	0.01	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Anza Substa Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anza Substa Construc Offsite Worker	A	0.17	0.19	1.59	0.00	0.20	0.01	0.21	0.01	0.01	0.02
Total		0.91	14.26	14.83	0.03	0.34	1.10	2.24	0.01	1.10	1.19
Summer 2014 Anza Substation Expansion and Associated Traffic											
Summer Unmitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Anza Substa Construc Fugitive Dust	A							2.05			0.21
Anza Substa Construc Off-Road	A	3.00	19.83	12.95	0.03		1.18	1.18		1.18	1.18
Anza Substa Construc Offsite Haul	A	0.00	0.03	0.01	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Anza Substa Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anza Substa Construc Offsite Worker	A	0.20	0.20	1.89	0.00	0.20	0.01	0.21	0.01	0.01	0.02
Total		3.20	20.06	14.85	0.03	0.34	1.19	3.59	0.01	1.19	1.41
Summer Mitigated	Source	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	PM10	FUGPM2.5	EXHPM2.5	PM2.5
Anza Substa Construc Fugitive Dust	A							0.80			0.08
Anza Substa Construc Off-Road	A				0.03			0.00			0.00
Anza Substa Construc Off-Road	B	0.74	14.04	14.16			1.09	1.09		1.09	1.09
Anza Substa Construc Offsite Haul	A	0.00	0.03	0.01	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Anza Substa Construc Offsite Vendor	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Anza Substa Construc Offsite Worker	A	0.20	0.20	1.89	0.00	0.20	0.01	0.21	0.01	0.01	0.02
Total		0.94	14.27	16.06	0.03	0.34	1.10	2.24	0.01	1.10	1.19
* Source A - CalEEMod Model Results Source B - Corrected CalEEMod Results Source C - Other Calculated Results											

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ATTACHMENT D

TABLES PROVIDING UNMITIGATED AND MITIGATED DAILY AIR POLLUTION
EMISSIONS FOR THE SEVILLE COMPLEX AND THE ANZA SUBSTATION
EXPANSION SUMMED BY TIME PERIOD COMPARED TO APPLICABLE
SIGNIFICANCE THRESHOLDS

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ATTACHMENT D-1

SEVILLE SOLAR FARM “SMALL PROJECT” WITH “COMMON INFRASTRUCTURE”
ACTIVITIES AND ANZA SUBSTATION EXPANSION

TABLES PROVIDING UNMITIGATED AND MITIGATED DAILY AIR POLLUTION
EMISSIONS SUMMED BY TIME PERIOD COMPARED TO APPLICABLE
SIGNIFICANCE THRESHOLDS

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Small Prj Weeks 1-2 w Common

New Access Road Construction										
Weeks 1 - 2 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.24	63.85	35.86	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.31	63.91	36.44	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.42	40.04	42.35	0.07	10.16	2.37	15.78	0.96	2.37	4.46
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.48	40.04	44.92	0.07	10.16	2.53	15.94	0.96	2.53	4.62
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Small Prj Week 3 w Common

Complex Internal Road Construc., Demolition, Site Preparation, Transmission Line Construction, Switching Station Construction, & Anza Substation Expansion										
Week 3 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	13.94	88.09	66.43	0.11	222.73	5.54	236.53	22.13	5.54	28.55
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Week 3 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	14.13	88.14	68.05	0.11	222.73	5.56	236.55	22.13	5.54	28.55
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Week 3 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.11	62.00	71.10	0.11	69.74	4.73	77.70	6.83	4.73	11.91
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Week 3 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.29	62.01	73.57	0.11	69.74	4.73	77.70	6.83	4.73	11.91
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Small Prj Week 4 w Common

Complex Internal Rd Construc., Demolition, Site Preparation, Grading, Transmission Line Construc., Switching Station Construc., & Anza Substation Expansion										
Week 4 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	26.18	184.68	117.14	0.22	323.16	9.70	368.72	32.13	9.70	47.68
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	26.45	184.83	119.37	0.22	323.16	9.73	368.75	32.13	9.71	47.69
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.78	126.22	136.08	0.22	105.71	8.46	128.16	10.40	8.46	21.15
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Week 4 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.03	126.24	142.82	0.22	105.71	8.67	128.37	10.40	8.67	21.36
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			

Small Prj Weeks 5-8 w Common

Grading, Switching Station Construction, Substation Construction, Transmission Line Construction, GenTie Line Construction, & Anza Substation Expansion										
Weeks 5 - 8 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	24.33	171.93	103.59	0.20	191.95	8.67	234.93	19.07	8.67	33.42
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 5 - 8 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	24.54	169.10	105.37	0.20	191.94	8.69	234.95	19.07	8.67	33.43
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 5 - 8 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.89	113.64	119.77	0.20	64.92	7.51	85.81	6.36	7.51	16.09
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Weeks 5 - 8 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.08	113.67	126.05	0.20	64.92	7.72	86.02	6.36	7.72	16.30
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			

Small Prj Weeks 9-16 w Common

Solar Panel Installation, Building Erection, Switching Station Construction, Substation Construction, Transmission Line Construction, GenTie Line Construction, & Anza Substation Expansion										
Weeks 9 - 16 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	26.33	159.46	128.68	0.21	915.39	9.60	931.71	91.12	9.60	101.44
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 9 - 16 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	26.98	156.64	134.58	0.21	915.38	9.62	931.72	91.12	9.60	101.44
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 9 - 16 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	9.30	112.37	138.50	0.21	285.17	8.09	295.89	28.19	8.09	36.56
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 9 - 16 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	9.93	112.43	145.25	0.21	287.01	8.09	297.73	28.37	8.09	36.74
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			

Small Prj Weeks 17-20 w Common

Solar Panel Installation, Building Erection, & Substation Construction										
Weeks 17 - 20 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	16.85	104.21	87.14	0.15	840.50	6.04	846.54	83.69	6.04	89.73
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	17.40	101.33	92.08	0.15	840.49	6.05	846.54	83.69	6.05	89.74
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.76	74.32	96.48	0.15	261.48	5.14	266.62	25.90	5.14	31.04
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.30	74.36	101.43	0.15	263.32	5.14	268.46	26.08	5.14	31.22
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

ATTACHMENT D-2

SEVILLE SOLAR FARM “LARGE PROJECT” WITH “COMMON INFRASTRUCTURE”
ACTIVITIES AND ANZA SUBSTATION EXPANSION

TABLES PROVIDING UNMITIGATED AND MITIGATED DAILY AIR POLLUTION
EMISSIONS SUMMED BY TIME PERIOD COMPARED TO APPLICABLE
SIGNIFICANCE THRESHOLDS

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Large Prj Weeks 1-2 w Common

New Access Road Construction										
Weeks 1 - 2 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.24	63.85	35.86	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.31	63.91	36.44	0.07	31.53	2.88	42.75	3.10	2.88	8.88
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.42	40.04	42.35	0.07	10.16	2.37	15.78	0.96	2.37	4.46
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 1 - 2 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	2.48	40.04	44.92	0.07	10.16	2.53	15.94	0.96	2.53	4.62
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Large Prj Week 3 w Common

Complex Internal Rd Construc., Demolition, Site Preparation, Transmission Line Construction, Switching Station Construction, & Anza Substation Expansion										
Week 3 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	13.94	88.08	66.43	0.11	147.73	5.54	161.53	14.65	5.54	21.07
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Week 3 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	14.10	88.13	67.75	0.11	147.73	5.56	161.55	14.65	5.54	21.07
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Week 3 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.11	62.00	71.10	0.11	46.67	4.73	54.63	4.54	4.73	9.62
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Week 3 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.26	62.00	73.27	0.11	46.67	4.73	54.63	4.54	4.73	9.62
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

Large Prj Week 4 w Common

Complex Internal Rd Construc, Demolition, Site Preparation, Grading, Transmission Line Construc, Switching Station Construc, & Anza Substation Expansion										
Week 4 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	26.18	184.67	117.14	0.22	208.35	9.70	253.91	20.68	9.70	36.23
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	26.42	184.82	119.07	0.22	208.35	9.73	253.94	20.68	9.71	36.24
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Week 4 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.78	126.22	136.08	0.22	68.50	8.46	90.95	6.69	8.46	17.44
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Week 4 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	8.00	126.23	142.52	0.22	68.50	8.67	91.16	6.69	8.67	17.65
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			

Large Prj Weeks 5-8 w Common

Grading, Switching Station Construction, Substation Construction, Transmission Line Construction, & Anza Substation Expansion										
Weeks 5 - 8 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	22.55	163.43	96.29	0.19	110.80	7.99	153.11	10.98	7.99	24.66
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 5 - 8 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	22.71	160.58	97.54	0.19	110.79	8.02	153.12	10.98	8.00	24.66
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 5 - 8 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.44	107.78	113.20	0.19	37.93	7.03	58.34	3.67	7.03	12.91
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Weeks 5 - 8 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.58	107.79	118.96	0.19	37.93	7.24	58.55	3.67	7.24	13.12
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			

Large Prj Weeks 9-10 w Common

Grading, Switching Station Construction, Substation Construction, Transmission Line Construction, GenTie Line Construction, & Anza Substation Expansion										
Weeks 9 - 10 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	24.33	171.93	103.59	0.20	135.76	8.67	178.74	13.47	8.67	27.82
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 9 - 10 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	24.51	169.09	105.07	0.20	135.75	8.69	178.76	13.47	8.67	27.83
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 9 - 10 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.89	113.64	119.77	0.20	45.73	7.51	66.62	4.44	7.51	14.17
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			
Weeks 9 - 10 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.05	113.66	125.75	0.20	45.73	7.72	66.83	4.44	7.72	14.38
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			No			

Large Prj Weeks 11-16 w Common

Solar Panel Installation, Building Erection, Switching Station Construction, Substation Construction, Transmission Line Construction, GenTie Line Construction, & Anza Substation Expansion										
Weeks 11 - 16 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	26.33	159.46	128.68	0.21	587.74	9.60	604.06	58.42	9.60	68.74
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 11 - 16 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	26.95	156.63	134.28	0.21	587.73	9.62	604.07	58.42	9.60	68.74
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 11 - 16 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	9.30	112.37	138.50	0.21	186.18	8.09	196.90	18.30	8.09	26.67
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 11 - 16 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	9.90	112.42	144.95	0.21	186.18	8.09	196.90	18.30	8.09	26.67
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			

Large Prj Weeks 17-20 w Common

Solar Panel Installation, Building Erection, & Substation Construction										
Weeks 17 - 20 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	16.85	104.21	87.14	0.15	529.23	6.04	535.27	52.62	6.04	58.66
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	17.40	101.33	92.08	0.15	529.22	6.05	535.27	52.62	6.05	58.67
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	Yes	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.76	74.32	96.48	0.15	167.54	5.14	172.68	16.51	5.14	21.65
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 17 - 20 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	7.30	74.36	101.43	0.15	167.54	5.14	172.68	16.51	5.14	21.65
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

Large Prj Weeks 21-22 w Common

Solar Panel Installation & Building Erection										
Weeks 21 - 22 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	14.06	83.50	74.24	0.13	477.17	5.07	482.25	47.45	5.07	52.53
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 21 - 22 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	14.58	83.60	78.98	0.13	477.17	5.08	482.25	47.45	5.08	52.53
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 21 - 22 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.89	62.33	82.15	0.13	151.27	4.29	155.57	14.92	4.29	19.22
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 21 - 22 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	6.40	62.37	86.89	0.13	151.27	4.29	155.57	14.92	4.29	19.22
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			

Large Prj Weeks 23-32 w Common

Solar Panel Installation										
Weeks 23 - 32 - 2014 - Unmitigated Winter										
Winter Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	10.60	59.83	59.15	0.10	430.80	3.83	434.63	42.84	3.83	46.67
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 23 - 32 - 2014 - Unmitigated Summer										
Summer Unmitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	11.08	59.92	63.51	0.10	430.80	3.83	434.64	42.84	3.83	46.68
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			Yes			
Weeks 23 - 32 - 2014 - Mitigated Winter										
Winter Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	4.75	44.88	63.20	0.10	136.74	3.14	139.88	13.49	3.14	16.63
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			
Weeks 23 - 32 - 2014 - Mitigated Summer										
Summer Mitigated	Emission Rate (lbs/day)									
	ROG	NOx	CO	SO2	FUGPM10	EXHPM10	TOTPM10	FUGPM2.5	EXHPM2.5	TOTPM2.5
Total	5.22	44.92	67.56	0.10	136.74	3.14	139.88	13.49	3.14	16.63
ICAPCD Significance	75.00	100.00	550.00	150.00			150.00			
CEQA Significant?	No	No	No	No			No			

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ENVIRONMENTAL MANAGEMENT ASSOCIATES

MEMORANDUM

TO: Seville Solar Farm Complex Project File

FROM: Dwight L. Carey

SUBJECT: Reductions of Fugitive Dust Emissions from the Shorter Access Road Alternative, Seville Solar Farm Complex, Imperial County, California

DATE: March 24, 2014

Environmental Management Associates, Inc. (EMA) prepared an analysis, dated June 7, 2013, of air pollutant emissions during construction of the Seville Solar Farm Complex, Imperial County, California (Complex). One of the many sources of fugitive dust (PM₁₀) emissions was from traffic using the new 0.8-mile road to be built to access the project areas during construction and operations. This memorandum estimates the reduction in fugitive dust emissions from an alternative alignment of the new access road which would shorten the road by about 1,000 feet (about 0.19 miles), or about 24 percent.

Fugitive dust emissions from traffic on any road are directly proportional to the length of the road traveled and the number of vehicles traveling that length of road. Because the alternative access road is 24 percent shorter than the original, the fugitive dust emissions from the traffic using this shorter road would be 24 percent less than the same number of vehicles traveling the original, longer road. Since the number of vehicles traveling this access road varies depending on the phase of construction and the size of the solar project, the quantity of fugitive dust reduced by the shorter road also varies depending on the phase of construction and the size of the solar project being constructed. For each of the three smaller solar projects, the shorter access road was calculated to reduce the construction PM₁₀ emissions by 5.7 to 28.1 pounds per day, or a reduction of from 8.1 to 10.3 percent of the PM₁₀ emitted daily during construction of each of the smaller projects. For each of the two larger solar projects, the shorter access road reduced the construction PM₁₀ emissions by 4.6 to 28.1 pounds per day, or a reduction of from 10.9 to 15.1 percent of the PM₁₀ emitted daily during construction of each of the larger projects.

Fugitive dust emissions from traffic on the shorter access road during solar project operations would also be reduced by 24 percent from same number of vehicles traveling the original, longer road. Although not calculated, the percentage reduction in PM₁₀ emissions is expected to be similar to those for construction, although the daily mass of the reduced emissions would be substantially less because there are so few vehicles using the access road during project operations.

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