

APPENDIX H

Air Quality and Greenhouse
Gas Data

Attachment 1

AQ/GHG Emissions Inventory

Stagecoach - Construction, CalEEMod Results of Emissions Estimates

Construction - Emissions Details from CalEEMod Results

Construction, Annual Emissions, Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	CO2e
Year	tons/yr										MT/yr
2023	4.98	50.42	40.70	0.11	165.94	2.05	167.99	21.03	1.89	22.92	9,932
2024	4.24	39.31	46.99	0.12	259.97	1.69	261.65	26.43	1.56	27.99	10,919
Maximum	4.98	50.42	46.99	0.12	259.97	2.05	261.65	26.43	1.89	27.99	10,919

	tons										MT
Duration of Construction, Total	9.23	89.73	87.68	0.23	425.91	3.74	429.65	47.46	3.45	50.91	20,852

Construction, Annual Emissions, Mitigated with Tier 4 Equipment

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	CO2e
Year	tons/yr										MT/yr
2023	1.44	8.25	49.26	0.11	30.99	0.18	31.16	5.26	0.17	5.44	9,932
2024	1.60	11.79	55.59	0.12	44.00	0.19	44.19	4.88	0.19	5.07	10,919
Maximum	1.60	11.79	55.59	0.12	44.00	0.19	44.19	5.26	0.19	5.44	10,919

	tons										MT
Duration of Construction, Total	3.04	20.04	104.85	0.23	74.98	0.37	75.35	10.15	0.36	10.51	20,852

Water Supply kWh factor Mojave Desert (kWh/Mgal)	11,110	(from CalEEMod Appx D, Table 9.2)
Water Supply GHG factor Mojave Desert (GHG MT/MWh)	0.18	(~400 lb/ MWh from CalEEMod v2020)
Construction Water Use million gal (Mgal)	84.07	(Project Description, May 2021)
Construction Water Supply GHG (MT)	169.47	

Construction, Water Supply **169**

Duration of Construction, Total **21,021**

Greenhouse Gas Emissions, Amortized

Construction overall GHG (MT)	20,852	
distillate no.2 equivalent (kg CO2/MMBtu)	73.96	(from 17 CCR 95115, Table 2-3)
distillate no.2 equivalent (MMBtu/gal)	0.138	(from 17 CCR 95115, Table 2-3)
Construction est'd equivalent fuel use (gal)	2,042,976	

	CO2e
Construction + Construction Water Supply, amortized over 30 years	701
Operations: Mobile Sources, Water Use	420
Operations: Propane Generators	48
GHG Related to Land Use Change	8,836
GHG Avoided by Producing Electricity	-186,000
Total GHG	-175,995

Stagecoach - Construction, CalEEMod Results of Emissions Estimates

Construction - Emissions Details from CalEEMod Results

Duration of Construction, Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	CO2e
Phase	tons										MT
3.2 1 Solar Site Preparation - 2023	3.29	34.38	24.22	0.06	64.65	1.38	66.03	10.53	1.27	11.79	5,731
3.4 2 Solar Installation - 2023	1.39	13.02	13.50	0.04	83.61	0.55	84.16	8.50	0.51	9.01	3,439
3.4 2 Solar Installation - 2024	2.48	22.84	24.66	0.07	154.52	0.95	155.47	15.71	0.88	16.59	6,302
3.6 3 Solar Electrical - 2024	1.26	11.41	15.99	0.03	54.80	0.55	55.35	5.57	0.50	6.08	2,848
3.8 4 Solar Gentie - 2024	0.09	0.82	0.85	0.00	19.46	0.02	19.48	1.98	0.02	2.00	402
3.3 S1 Substation Grading - 2023	0.18	1.85	1.48	0.00	10.48	0.07	10.56	1.27	0.07	1.34	423
3.5 S2 Substation Installation - 2023	0.12	1.16	1.49	0.00	7.19	0.05	7.24	0.73	0.05	0.78	339
3.5 S2 Substation Installation - 2024	0.36	3.48	4.70	0.01	22.78	0.14	22.92	2.32	0.13	2.45	1,064
3.7 S3 Substation Paving and Testing - 2024	0.06	0.77	0.78	0.00	8.40	0.02	8.43	0.86	0.02	0.88	303
Stagecoach Facilities, Unmitigated	8.51	82.47	79.22	0.21	377.05	3.45	380.50	42.29	3.18	45.46	18,722
SCE Calcite Facilities, Unmitigated	0.72	7.26	8.46	0.02	48.86	0.29	49.15	5.17	0.27	5.44	2,129

Duration of Construction, Mitigated with Tier 4 Equipment

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	CO2e
Phase	tons										MT
3.2 1 Solar Site Preparation - 2023	0.81	4.07	29.28	0.06	13.71	0.10	13.81	3.26	0.10	3.36	5,731
3.4 2 Solar Installation - 2023	0.52	3.26	16.58	0.04	14.15	0.06	14.21	1.57	0.06	1.63	3,439
3.4 2 Solar Installation - 2024	0.94	5.96	30.36	0.07	26.14	0.11	26.25	2.90	0.11	3.01	6,302
3.6 3 Solar Electrical - 2024	0.43	3.39	18.04	0.03	9.27	0.05	9.32	1.03	0.05	1.08	2,848
3.8 4 Solar Gentie - 2024	0.06	0.62	0.92	0.00	3.29	0.01	3.30	0.37	0.01	0.37	402
3.3 S1 Substation Grading - 2023	0.06	0.49	1.69	0.00	1.92	0.01	1.92	0.30	0.01	0.31	423
3.5 S2 Substation Installation - 2023	0.05	0.42	1.72	0.00	1.22	0.01	1.22	0.14	0.01	0.14	339
3.5 S2 Substation Installation - 2024	0.14	1.32	5.40	0.01	3.86	0.02	3.88	0.43	0.02	0.45	1,064
3.7 S3 Substation Paving and Testing - 2024	0.03	0.50	0.86	0.00	1.43	0.01	1.43	0.16	0.01	0.17	303
Stagecoach Facilities, Mitigated	2.77	17.30	95.18	0.21	66.57	0.33	66.90	9.12	0.33	9.44	18,722
SCE Calcite Facilities, Mitigated	0.27	2.74	9.67	0.02	8.42	0.04	8.46	1.03	0.04	1.07	2,129

Stagecoach - Construction, CalEEMod Results of Emissions Estimates

Construction - Emissions Details from CalEEMod Results

Construction, Summer Daily Maximum, Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Phase	lb/day									
3.2 1 Solar Site Preparation - 2023	44.0	457.6	326.4	0.9	926.9	18.3	945.3	146.8	16.9	163.7
3.4 2 Solar Installation - 2023	35.8	327.7	352.1	1.0	2,304.7	14.0	2,318.6	234.0	12.9	246.9
3.4 2 Solar Installation - 2024	34.4	311.0	347.4	1.0	2,304.7	13.0	2,317.7	234.0	12.0	246.0
3.6 3 Solar Electrical - 2024	16.9	151.4	216.4	0.4	795.5	7.3	802.8	80.8	6.7	87.5
3.8 4 Solar Gentie - 2024	1.8	15.9	18.6	0.1	423.8	0.4	424.2	43.0	0.4	43.5
3.3 S1 Substation Grading - 2023	4.8	48.9	40.6	0.1	303.2	2.0	305.2	36.2	1.8	38.0
3.5 S2 Substation Installation - 2023	4.5	42.7	56.4	0.1	290.0	1.8	291.8	29.5	1.7	31.2
3.5 S2 Substation Installation - 2024	4.2	40.2	55.9	0.1	290.0	1.7	291.7	29.5	1.5	31.0
3.7 S3 Substation Paving and Testing - 2024	1.3	15.0	16.0	0.1	183.0	0.5	183.5	18.6	0.5	19.1

Construction, Summer Daily Maximum, Mitigated with Tier 4 Equipment

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Phase	lb/day									
3.2 1 Solar Site Preparation - 2023	11.0	53.5	393.9	0.9	193.3	1.4	194.6	44.5	1.4	45.9
3.4 2 Solar Installation - 2023	13.8	80.5	430.1	1.0	388.5	1.5	390.0	42.8	1.5	44.3
3.4 2 Solar Installation - 2024	13.4	79.7	425.5	1.0	388.5	1.5	390.0	42.8	1.5	44.3
3.6 3 Solar Electrical - 2024	5.9	44.5	243.7	0.4	134.1	0.7	134.8	14.8	0.7	15.4
3.8 4 Solar Gentie - 2024	1.2	11.8	20.1	0.1	71.5	0.1	71.6	7.9	0.1	8.0
3.3 S1 Substation Grading - 2023	1.5	12.8	46.0	0.1	54.9	0.2	55.1	8.4	0.2	8.7
3.5 S2 Substation Installation - 2023	1.7	15.2	64.6	0.1	49.0	0.2	49.2	5.4	0.2	5.6
3.5 S2 Substation Installation - 2024	1.7	15.0	64.1	0.1	49.0	0.2	49.2	5.4	0.2	5.6
3.7 S3 Substation Paving and Testing - 2024	0.6	9.7	17.7	0.1	31.0	0.1	31.1	3.4	0.1	3.6

Stagecoach - Construction, CalEEMod Results of Emissions Estimates

Construction - Emissions Details from CalEEMod Results

Construction, Winter Daily Maximum, Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Phase	lb/day									
3.2 1 Solar Site Preparation - 2023	44.0	458.2	321.9	0.9	926.9	18.3	945.3	146.8	16.9	163.7
3.4 2 Solar Installation - 2023	35.7	329.2	338.6	0.9	2,304.7	14.0	2,318.6	234.0	12.9	246.9
3.4 2 Solar Installation - 2024	34.4	312.5	334.9	0.9	2,304.7	13.0	2,317.7	234.0	12.0	246.0
3.6 3 Solar Electrical - 2024	16.9	152.0	212.3	0.4	795.5	7.3	802.8	80.8	6.7	87.5
3.8 4 Solar Gentie - 2024	1.8	16.2	16.6	0.1	423.8	0.4	424.2	43.0	0.4	43.5
3.3 S1 Substation Grading - 2023	4.8	49.2	39.2	0.1	303.2	2.0	305.2	36.2	1.8	38.0
3.5 S2 Substation Installation - 2023	4.5	43.0	55.0	0.1	290.0	1.8	291.8	29.5	1.7	31.2
3.5 S2 Substation Installation - 2024	4.2	40.6	54.7	0.1	290.0	1.7	291.7	29.5	1.5	31.0
3.7 S3 Substation Paving and Testing - 2024	1.3	15.3	15.5	0.1	183.0	0.5	183.5	18.6	0.5	19.1

Construction, Winter Daily Maximum, Mitigated with Tier 4 Equipment

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Phase	lb/day									
3.2 1 Solar Site Preparation - 2023	11.0	54.1	389.4	0.9	193.3	1.4	194.6	44.5	1.4	45.9
3.4 2 Solar Installation - 2023	13.7	82.0	416.6	0.9	388.5	1.5	390.0	42.8	1.5	44.3
3.4 2 Solar Installation - 2024	13.4	81.2	413.0	0.9	388.5	1.5	390.0	42.8	1.5	44.3
3.6 3 Solar Electrical - 2024	5.9	45.1	239.5	0.4	134.1	0.7	134.8	14.8	0.7	15.4
3.8 4 Solar Gentie - 2024	1.2	12.2	18.0	0.1	71.5	0.1	71.6	7.9	0.1	8.0
3.3 S1 Substation Grading - 2023	1.5	13.1	44.7	0.1	54.9	0.2	55.1	8.4	0.2	8.7
3.5 S2 Substation Installation - 2023	1.7	15.5	63.3	0.1	49.0	0.2	49.2	5.4	0.2	5.6
3.5 S2 Substation Installation - 2024	1.7	15.4	62.9	0.1	49.0	0.2	49.2	5.4	0.2	5.6
3.7 S3 Substation Paving and Testing - 2024	0.6	10.0	17.2	0.1	31.0	0.1	31.1	3.4	0.1	3.6

Stagecoach - Construction, CalEEMod Results of Emissions Estimates

Construction - Emissions Details from CalEEMod Results

Construction, Overall Daily Maximum, Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Phase	lb/day									

Stagecoach Facilities, Unmitigated

3.2 1 Solar Site Preparation - 2023	44.0	458.2	326.4	0.9	926.9	18.3	945.3	146.8	16.9	163.7
3.4 2 Solar Installation - 2023	35.8	329.2	352.1	1.0	2,304.7	14.0	2,318.6	234.0	12.9	246.9
3.4 2 Solar Installation - 2024	34.4	312.5	347.4	1.0	2,304.7	13.0	2,317.7	234.0	12.0	246.0
3.6 3 Solar Electrical - 2024	16.9	152.0	216.4	0.4	795.5	7.3	802.8	80.8	6.7	87.5
3.8 4 Solar Gentie - 2024	1.8	16.2	18.6	0.1	423.8	0.4	424.2	43.0	0.4	43.5

Solar - Year 1	79.8	787.5	678.5	1.8	3,231.6	32.3	3,263.9	380.8	29.8	410.6
Solar - Year 2	53.1	480.7	582.4	1.5	3,524.0	20.8	3,544.7	357.8	19.2	377.0

SCE Calcite Facilities, Unmitigated

3.3 S1 Substation Grading - 2023	4.8	49.2	40.6	0.1	303.2	2.0	305.2	36.2	1.8	38.0
3.5 S2 Substation Installation - 2023	4.5	43.0	56.4	0.1	290.0	1.8	291.8	29.5	1.7	31.2
3.5 S2 Substation Installation - 2024	4.2	40.6	55.9	0.1	290.0	1.7	291.7	29.5	1.5	31.0
3.7 S3 Substation Paving and Testing - 2024	1.3	15.3	16.0	0.1	183.0	0.5	183.5	18.6	0.5	19.1

Substation - Year 1	9.3	92.2	97.0	0.3	593.2	3.8	597.0	65.7	3.5	69.2
Substation - Year 2	5.5	55.9	71.9	0.2	473.0	2.1	475.2	48.1	2.0	50.1

Stagecoach - Construction, CalEEMod Results of Emissions Estimates

Construction - Emissions Details from CalEEMod Results

Construction, Overall Daily Maximum, Mitigated with Tier 4 Equipment

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Phase	lb/day									
Stagecoach Facilities, Mitigated										
3.2 1 Solar Site Preparation - 2023	11.0	54.1	393.9	0.9	193.3	1.4	194.6	44.5	1.4	45.9
3.4 2 Solar Installation - 2023	13.8	82.0	430.1	1.0	388.5	1.5	390.0	42.8	1.5	44.3
3.4 2 Solar Installation - 2024	13.4	81.2	425.5	1.0	388.5	1.5	390.0	42.8	1.5	44.3
3.6 3 Solar Electrical - 2024	5.9	45.1	243.7	0.4	134.1	0.7	134.8	14.8	0.7	15.4
3.8 4 Solar Gentie - 2024	1.2	12.2	20.1	0.1	71.5	0.1	71.6	7.9	0.1	8.0
Solar - Year 1	24.8	136.2	824.0	1.8	581.8	2.9	584.7	87.3	2.8	90.1
Solar - Year 2	20.5	138.5	689.2	1.5	594.1	2.3	596.5	65.5	2.3	67.7
SCE Calcite Facilities, Mitigated										
3.3 S1 Substation Grading - 2023	1.5	13.1	46.0	0.1	54.9	0.2	55.1	8.4	0.2	8.7
3.5 S2 Substation Installation - 2023	1.7	15.5	64.6	0.1	49.0	0.2	49.2	5.4	0.2	5.6
3.5 S2 Substation Installation - 2024	1.7	15.4	64.1	0.1	49.0	0.2	49.2	5.4	0.2	5.6
3.7 S3 Substation Paving and Testing - 2024	0.6	10.0	17.7	0.1	31.0	0.1	31.1	3.4	0.1	3.6
Substation - Year 1	3.3	28.6	110.6	0.3	103.8	0.4	104.3	13.9	0.4	14.3
Substation - Year 2	2.3	25.4	81.8	0.2	79.9	0.4	80.3	8.8	0.3	9.2

Stagecoach - Construction, Emissions Estimates

Construction - Schedule for Emissions Estimates

Average working schedule : 25 days/month
 Target commence construction : 7/1/2023

Phase	Sched. (+ mo)	Phase Start (estd.)	Phase End (estd.)	Duration (months)	Duration (work days)	No. of Workers	Month																					
							Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24
Ph 1, Site Prep, Access Roads	0.0	7/1/2023	12/23/2023	6	150	100	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Ph 2, PV Arrays, Collectors, BESS	3.0	9/30/2023	6/18/2024	9	225	300																						
Ph 3, Electrical and Restoration	12.0	6/30/2024	12/22/2024	6	150	100																						
Ph 4, Stagecoach Gen-tie	14.0	8/29/2024	12/24/2024	4	100	50																						
Ph s1, SCE Calcite - Survey, Grading, Fencing	3.0	9/30/2023	12/26/2023	3	75	30																						
Ph s2, SCE Calcite - Civil, MEER Install, Electrical	4.0	10/30/2023	7/19/2024	9	225	30																						
Ph s3, SCE Calcite - Paving and Testing	12.0	6/30/2024	10/24/2024	4	100	12																						

Stagecoach - Construction, Emissions Estimates

Construction - Equipment Assumptions, input to CalEEMod

Assumptions:

Project Description: administrative draft, May 2021.

- Work occurs 6 days a week, per applicant. Typical 12 hr/day for solar facility; 8 hr/day for gen-tie and SCE Calcite.
- On-road motor vehicle trips are counted as one-way in emissions calculations (except round-trip RT, where noted).
- Project Description Table 2-2: Onsite Water Truck trip activity of 66/day, over 18 months (18 mo * 25 day/mo * 66 trip/day) = 29,700 vendor roundtrips
- Project Description Table 2-3: Solar facility deliveries excluding water = 10,600 haul roundtrips .
- Stagecoach solar field and gen-tie combined disturbance approx 1,975 acres; SCE Calcite 75 acres: 2,050 acres modeled

Construction Schedule, and On-Road Vehicle Use

	Phase	Duration (work days)	Start	End	Avg No. of Workers	Worker Trip Count (1-way, daily)	Avg Vendor, Water Trips (1-way, daily)	Avg Haul Truck Trips (1-way, daily)	Vendor Sum Trips (1-way)	Haul Truck Sum Trips (1-way)
0	0									
1	Ph 1, Site Prep, Access Roads	150	7/1/2023	12/23/2023	100	200	60	24	9,000	3,600
2	Ph 2, PV Arrays, Collectors, BESS	225	9/30/2023	6/18/2024	300	600	160	60	36,000	13,500
3	Ph 3, Electrical and Restoration	150	6/30/2024	12/22/2024	100	200	60	24	9,000	3,600
4	Ph 4, Stagecoach Gen-tie	100	8/29/2024	12/24/2024	50	100	20	24	2,000	2,400
s1	Ph s1, SCE Calcite - Survey, Grading, F	75	9/30/2023	12/26/2023	30	60	20	20	1,500	1,500
s2	Ph s2, SCE Calcite - Civil, MEER Install	225	10/30/2023	7/19/2024	30	60	20	20	4,500	4,500
s3	Ph s3, SCE Calcite - Paving and Testing	100	6/30/2024	10/24/2024	12	24	20	20	2,000	2,000

Total RTs:

32,000	15,550
--------	--------

Offroad Equipment Use

		CalEEMod Type Offroad Equipment	Type	Rating (hp)	Load Factor	Quantity	Count per Phase
0							
1	Ph 1, Site Prep, Access Roads	Skid Steer Loaders	Offroad	65	0.37	2	
		Scraper	Offroad	367	0.48	13	
		Rubber Tired Dozer	Offroad	247	0.40	13	
		Grader	Offroad	187	0.41	13	
		Off-Highway Tractors	Offroad	124	0.44	20	
		Tractor/Loader/Backhoe	Offroad	97	0.37	2	
		Roller	Offroad	80	0.38	2	
							65
2	Ph 2, PV Arrays, Collectors, BESS	Tractor/Loader/Backhoe	Offroad	97	0.37	18	
		Rubber Tired Loaders	Offroad	203	0.36	6	
		Bore/Drill Rig (hyd ram/pile drv)	Offroad	221	0.50	13	
		Forklift	Offroad	89	0.20	16	
		Crane	Offroad	231	0.29	4	
		Aerial Lift	Offroad	63	0.31	4	
		Skid Steer Loaders	Offroad	65	0.37	6	
		Off-Highway Tractors	Offroad	124	0.44	20	
		Rubber Tired Dozer	Offroad	247	0.40	4	
		Trencher	Offroad	78	0.50	2	
		Welders	Offroad	46	0.45	2	
		Roller	Offroad	80	0.38	3	
							98
3	Ph 3, Electrical and Restoration	Skid Steer Loaders	Offroad	65	0.37	6	
		Forklift	Offroad	89	0.20	16	
		Off-Highway Tractors	Offroad	124	0.44	20	
		Crane	Offroad	231	0.29	2	
		Aerial Lift	Offroad	63	0.31	4	
		Other Construction Equip	Offroad	172	0.42	8	
		Trencher	Offroad	78	0.50	4	
		Welders	Offroad	46	0.45	2	
Roller	Offroad	80	0.38	4			
							66
4	Ph 4, Stagecoach Gen-tie	Skid Steer Loaders	Offroad	65	0.37	1	
		Crane	Offroad	231	0.29	1	
		Aerial Lift	Offroad	63	0.31	2	
		Welders	Offroad	46	0.45	1	
		Forklift	Offroad	89	0.20	1	
							6

s1	Ph s1, SCE Calcite - Survey, Grading, Fencing	Skid Steer Loaders	Offroad	65	0.37	1	
		Rubber Tired Dozer	Offroad	247	0.40	2	
		Tractor/Loader/Backhoe	Offroad	97	0.37	2	
		Grader	Offroad	187	0.41	1	
		Roller	Offroad	80	0.38	1	
		Scraper	Offroad	367	0.48	1	
		Other Construction Equip	Offroad	172	0.42	2	
		Aerial Lift	Offroad	63	0.31	1	
		Welders	Offroad	46	0.45	1	
		Forklift	Offroad	89	0.20	1	
							13
s2	Ph s2, SCE Calcite - Civil, MEER Install, Electrical	Skid Steer Loaders	Offroad	65	0.37	1	
		Other Construction Equip	Offroad	172	0.42	4	
		Excavator	Offroad	158	0.38	2	
		Bore/Drill Rig	Offroad	221	0.50	1	
		Crane	Offroad	231	0.29	2	
		Aerial Lift	Offroad	63	0.31	3	
		Welders	Offroad	46	0.45	1	
		Generator	Offroad	84	0.74	2	
		Forklift	Offroad	89	0.20	2	
		Tractor/Loader/Backhoe	Offroad	97	0.37	4	
							22
s3	Ph s3, SCE Calcite - Paving and Testing	Other Construction Equip	Offroad	172	0.42	1	
		Paver	Offroad	130	0.42	1	
		Aerial Lift	Offroad	63	0.31	2	
		Welders	Offroad	46	0.45	1	
		Roller	Offroad	80	0.38	1	
							6

Operation, Stationary Sources

Stationary Sources: Propane Generator Engine(s)

- Project overall, two 100-kW propane generator engines.

Propane (LPG) fired

100 kW, genset 2 engines, total
 134 hp 1 load factor, max during testing
 300 hours/year for testing per Project Description
 24 hours/day for worst case scenario
 393.54 hph/mmbtu (hph ->mmbtu conversion)
 453.592 g/lb

Per engine Per engine
 Hourly Daily

MDAQMD & AVAPCD Emissions Factors for ICE

Emission Reporting Unit (ERU)	1,000 gallons	EF (lb/gal)	(lb/hr)	(lb/day)
Heating Value (Btu/ERU)	91.5 MMBtu / 1,000 gals	0.08300 TOG	1.154	27.689
Emission Factor Units	pounds / 1,000 gals	0.13900 NOx	1.932	46.370
EF (lb/1000gal)	EF(lb/gal)	0.12900 CO	1.793	43.034
83.00 TOG	0.08 TOG	0.00035 SOx	0.005	0.117
139.00 NOx	0.139 NOx	0.00500 PM10/PM2.5	0.070	1.668
129.00 CO	0.129 CO			
0.35 SOx	0.00035 SOx			
5.00 PM10/PM2.5	0.005 PM10/PM2.5			

Fuel Combustion				Standby Generator Engines	TOG	NOx	CO	SO2	PM10/PM2.5	CO2e
Propane					(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
QT100	gal/hr	l/hr	ft3/hr		2.3074	3.8642	3.5862	0.00973	0.139	351.159314
Running at 100%	13.9	52.6	507	Standby Generator Engines	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)
					(300hr/yr)	(300hr/yr)	(300hr/yr)	(300hr/yr)	(300hr/yr)	(300hr/yr)
					692.22	1159.26	1075.86	2.919	41.7	105347.7942
				Annual 300hr/yr (lbs/yr)	692.22	1159.26	1075.86	2.92	41.70	105347.79
				Annual 300hr/yr (ton/yr)	0.35	0.58	0.54	0.00	0.02	
GHG Emissions EPA (ref 3)									MTCO2e =	47.79
100-year GWP LPG EF (lb/gal)					(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)
CH4	25	0.000594		Standby Generator Engines	(24hr/day)	(24hr/day)	(24hr/day)	(24hr/day)	(24hr/day)	(24hr/day)
N2O	298	0.00011			55.3776	92.7408	86.0688	0.23352	3.336	8427.823536
CO2	1	12.584		Annual 24hr/day (lbs/yr)	20212.82	33850.39	31415.11	85.23	1217.64	3076155.59
CO2e		12.63163 (lb/gal)								

(ref 3): https://www.epa.gov/sites/production/files/2015-07/documents/emission-factors_2014.pdf

Attachment 2

CalEEMod Output

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Stagecoach Solar plus Calcite Sub
Mojave Desert AQMD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	89,300.00	1000sqft	2,050.05	89,300,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Stagecoach facilities plus Calcite Substation

Land Use - Stagecoach solar field and gen-tie combined approx 1,975 acres plus Calcite substation 75 acres: 2,050 acres land use type. General Heavy Industry since over 5,000 ksf

Construction Phase - Sequence covers 18 months of activity

Off-road Equipment - Ph 1 up to 65 pcs equipment

Off-road Equipment - Ph 2 up to 98 pcs equipment

Off-road Equipment - Ph 3 up to 66 pcs equipment

Off-road Equipment - Ph 4 up to 6 pcs equipment

Off-road Equipment - Ph S1 up to 13 pcs equipment

Off-road Equipment - Ph S2 up to 22 pcs equipment

Off-road Equipment - Ph S3 up to 6 pcs equipment

Trips and VMT - up to 800 worker trips daily plus 10,600 heavy duty haul roundtrips for solar facility

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

On-road Fugitive Dust - all vehicle classes may travel final leg or 5 pct of trip on unpaved surface

Grading - Grading minimized as possible

Vehicle Trips - operational trips approximately 0.001 trip per ksf

Consumer Products - consumer products not applicable

Area Coating - architectural coatings not applicable

Energy Use - consumption of utility natural gas and grid electricity not applicable

Water And Wastewater - 0.6 acre feet annual outdoor water use. minimal grid electricity demand for indoor water use and minimal demand for wastewater treatment.

Solid Waste - minimal demand for solid waste disposal

Land Use Change - up to 2050 acres land use change

Sequestration -

Construction Off-road Equipment Mitigation - Offroad equipment at Tier 4 standards. Dust control soil stabilizer or dust suppressant is 84 pct effective per SCAQMD guideline Table XI-D

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	44650000	0
tblAreaCoating	Area_Nonresidential_Interior	133950000	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	16.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	36.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	60.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	25.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	17.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	26.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	155,000.00	225.00
tblConstructionPhase	NumDays	155,000.00	100.00
tblConstructionPhase	NumDays	11,000.00	225.00
tblConstructionPhase	NumDays	11,000.00	100.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	6,000.00	150.00
tblConstructionPhase	NumDays	6,000.00	75.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	1.97	0.00
tblEnergyUse	T24NG	15.20	0.00
tblGrading	AcresOfGrading	5,850.00	1,975.00
tblGrading	AcresOfGrading	187.50	75.00
tblGrading	MaterialExported	0.00	3,000.00
tblGrading	MaterialImported	0.00	51,000.00
tblOffRoadEquipment	HorsePower	231.00	9.00
tblOffRoadEquipment	LoadFactor	0.29	0.56
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	16.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	13.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOffRoadEquipment	UsageHours	7.00	12.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	110,732.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripNumber	0.00	3,600.00
tblTripsAndVMT	HaulingTripNumber	6,750.00	1,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	13,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	4,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	3,600.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,000.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,400.00
tblTripsAndVMT	VendorTripLength	6.60	25.00
tblTripsAndVMT	VendorTripLength	6.60	25.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripNumber	0.00	60.00
tbITripsAndVMT	VendorTripNumber	0.00	20.00
tbITripsAndVMT	VendorTripNumber	14,636.00	160.00
tbITripsAndVMT	VendorTripNumber	0.00	20.00
tbITripsAndVMT	VendorTripNumber	0.00	60.00
tbITripsAndVMT	VendorTripNumber	0.00	20.00
tbITripsAndVMT	VendorTripNumber	14,636.00	20.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripNumber	163.00	200.00
tbITripsAndVMT	WorkerTripNumber	33.00	60.00
tbITripsAndVMT	WorkerTripNumber	37,506.00	600.00
tbITripsAndVMT	WorkerTripNumber	55.00	60.00
tbITripsAndVMT	WorkerTripNumber	165.00	200.00
tbITripsAndVMT	WorkerTripNumber	15.00	24.00
tbITripsAndVMT	WorkerTripNumber	37,506.00	100.00
tbIVehicleTrips	CC_TL	6.60	40.00
tbIVehicleTrips	CNW_TL	6.60	40.00
tbIVehicleTrips	CW_TL	14.70	40.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	6.42	1.0000e-003
tblVehicleTrips	SU_TR	5.09	1.0000e-003
tblVehicleTrips	WD_TR	3.93	1.0000e-003
tblWater	IndoorWaterUseRate	20,650,625,000.00	0.00
tblWater	OutdoorWaterUseRate	0.00	196,000.00

2.0 Emissions Summary

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	4.9815	50.4152	40.6955	0.1098	165.9429	2.0513	167.9943	21.0268	1.8898	22.9167	0.0000	9,803.4947	9,803.4947	2.4003	0.2305	9,932.1814
2024	4.2442	39.3138	46.9862	0.1193	259.9658	1.6863	261.6521	26.4321	1.5575	27.9895	0.0000	10,749.2201	10,749.2201	2.1643	0.3896	10,919.4257
Maximum	4.9815	50.4152	46.9862	0.1193	259.9658	2.0513	261.6521	26.4321	1.8898	27.9895	0.0000	10,749.2201	10,749.2201	2.4003	0.3896	10,919.4257

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	1.4375	8.2456	49.2623	0.1098	30.9880	0.1768	31.1648	5.2640	0.1749	5.4389	0.0000	9,803.4859	9,803.4859	2.4003	0.2305	9,932.1725
2024	1.6031	11.7910	55.5882	0.1193	43.9968	0.1926	44.1894	4.8811	0.1894	5.0704	0.0000	10,749.2120	10,749.2120	2.1643	0.3896	10,919.4176
Maximum	1.6031	11.7910	55.5882	0.1193	43.9968	0.1926	44.1894	5.2640	0.1894	5.4389	0.0000	10,749.2120	10,749.2120	2.4003	0.3896	10,919.4176

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	67.04	77.67	-19.58	0.00	82.39	90.12	82.46	78.62	89.43	79.36	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
5	7-1-2023	9-30-2023	19.9592	2.5902
6	10-1-2023	12-31-2023	35.5521	7.1030
7	1-1-2024	3-31-2024	15.2774	4.3536
8	4-1-2024	6-30-2024	13.4292	3.8032
9	7-1-2024	9-30-2024	7.8430	2.6941
		Highest	35.5521	7.1030

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	0.0760	7.4700e-003	0.8205	6.0000e-005		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003	0.0000	1.5957	1.5957	4.1900e-003	0.0000	1.7003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1278	0.3059	1.8430	4.4200e-003	0.4576	3.8300e-003	0.4614	0.1222	3.6000e-003	0.1258	0.0000	412.2112	412.2112	0.0174	0.0190	418.3124
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.3862	0.3862	3.0000e-005	0.0000	0.3882
Total	0.2038	0.3133	2.6634	4.4800e-003	0.4576	6.7600e-003	0.4643	0.1222	6.5300e-003	0.1287	0.0000	414.1931	414.1931	0.0216	0.0190	420.4008

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	- 8,835.500 0
Total	- 8,835.500 0

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1 Solar Site Preparation	Site Preparation	7/1/2023	12/22/2023	6	150	1
2	S1 Substation Grading	Site Preparation	9/30/2023	12/26/2023	6	75	S1
3	2 Solar Installation	Building Construction	9/30/2023	6/18/2024	6	225	2
4	S2 Substation Installation	Paving	10/30/2023	7/17/2024	6	225	S2
5	3 Solar Electrical	Trenching	7/1/2024	12/21/2024	6	150	3
6	S3 Substation Paving and Testing	Paving	7/1/2024	10/24/2024	6	100	S3
7	4 Solar Gentie	Building Construction	8/30/2024	12/24/2024	6	100	4

Acres of Grading (Site Preparation Phase): 1975

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1 Solar Site Preparation	Graders	13	12.00	187	0.41
1 Solar Site Preparation	Off-Highway Tractors	20	10.00	124	0.44
1 Solar Site Preparation	Rollers	2	12.00	80	0.38
1 Solar Site Preparation	Rubber Tired Dozers	13	12.00	247	0.40
1 Solar Site Preparation	Scrapers	13	12.00	367	0.48
1 Solar Site Preparation	Skid Steer Loaders	2	12.00	65	0.37
1 Solar Site Preparation	Tractors/Loaders/Backhoes	2	12.00	97	0.37
S1 Substation Grading	Aerial Lifts	1	8.00	63	0.31
S1 Substation Grading	Forklifts	1	8.00	89	0.20
S1 Substation Grading	Graders	1	8.00	187	0.41
S1 Substation Grading	Other Construction Equipment	2	8.00	172	0.42
S1 Substation Grading	Rollers	1	8.00	80	0.38
S1 Substation Grading	Rubber Tired Dozers	2	8.00	247	0.40
S1 Substation Grading	Scrapers	1	8.00	367	0.48
S1 Substation Grading	Skid Steer Loaders	1	8.00	65	0.37
S1 Substation Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
S1 Substation Grading	Welders	1	8.00	46	0.45
2 Solar Installation	Aerial Lifts	4	12.00	63	0.31
2 Solar Installation	Bore/Drill Rigs	13	12.00	221	0.50
2 Solar Installation	Cranes	4	10.00	231	0.29
2 Solar Installation	Forklifts	16	8.00	89	0.20
2 Solar Installation	Generator Sets	0	12.00	84	0.74
2 Solar Installation	Off-Highway Tractors	20	10.00	124	0.44
2 Solar Installation	Rollers	3	12.00	80	0.38
2 Solar Installation	Rubber Tired Dozers	6	12.00	247	0.40

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2 Solar Installation	Rubber Tired Dozers	4	12.00	247	0.40
2 Solar Installation	Skid Steer Loaders	6	12.00	65	0.37
2 Solar Installation	Tractors/Loaders/Backhoes	18	12.00	97	0.37
2 Solar Installation	Trenchers	2	12.00	78	0.50
2 Solar Installation	Welders	2	12.00	46	0.45
S2 Substation Installation	Aerial Lifts	3	8.00	63	0.31
S2 Substation Installation	Bore/Drill Rigs	1	8.00	221	0.50
S2 Substation Installation	Cranes	2	8.00	9	0.56
S2 Substation Installation	Excavators	2	8.00	158	0.38
S2 Substation Installation	Forklifts	2	8.00	89	0.20
S2 Substation Installation	Generator Sets	2	8.00	84	0.74
S2 Substation Installation	Other Construction Equipment	4	8.00	172	0.42
S2 Substation Installation	Pavers	0	8.00	130	0.42
S2 Substation Installation	Paving Equipment	0	8.00	132	0.36
S2 Substation Installation	Rollers	0	8.00	80	0.38
S2 Substation Installation	Skid Steer Loaders	1	8.00	65	0.37
S2 Substation Installation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
S2 Substation Installation	Welders	1	8.00	46	0.45
3 Solar Electrical	Aerial Lifts	4	12.00	63	0.31
3 Solar Electrical	Cranes	2	10.00	231	0.29
3 Solar Electrical	Forklifts	16	8.00	89	0.20
3 Solar Electrical	Off-Highway Tractors	20	10.00	124	0.44
3 Solar Electrical	Other Construction Equipment	8	12.00	172	0.42
3 Solar Electrical	Rollers	4	12.00	80	0.38
3 Solar Electrical	Skid Steer Loaders	6	12.00	65	0.37
3 Solar Electrical	Trenchers	4	12.00	78	0.50
3 Solar Electrical	Welders	2	12.00	46	0.45
S3 Substation Paving and Testing	Aerial Lifts	2	8.00	63	0.31
S3 Substation Paving and Testing	Other Construction Equipment	1	8.00	172	0.42

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

S3 Substation Paving and Testing	Pavers	1	8.00	130	0.42
S3 Substation Paving and Testing	Paving Equipment	0	8.00	132	0.36
S3 Substation Paving and Testing	Rollers	1	8.00	80	0.38
S3 Substation Paving and Testing	Welders	1	8.00	46	0.45
4 Solar Gentie	Aerial Lifts	2	8.00	63	0.31
4 Solar Gentie	Cranes	1	10.00	231	0.29
4 Solar Gentie	Forklifts	1	8.00	89	0.20
4 Solar Gentie	Generator Sets	0	8.00	84	0.74
4 Solar Gentie	Skid Steer Loaders	1	8.00	65	0.37
4 Solar Gentie	Tractors/Loaders/Backhoes	0	7.00	97	0.37
4 Solar Gentie	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1 Solar Site Preparation	65	200.00	60.00	3,600.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
S1 Substation Grading	13	60.00	20.00	1,500.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
2 Solar Installation	98	600.00	160.00	13,500.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
S2 Substation Installation	22	60.00	20.00	4,500.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
3 Solar Electrical	66	200.00	60.00	3,600.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
S3 Substation Paving and Testing	6	24.00	20.00	2,000.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
4 Solar Gentie	6	100.00	20.00	2,400.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 1 Solar Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8546	0.0000	9.8546	4.9543	0.0000	4.9543	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1587	33.4655	22.8957	0.0549		1.3624	1.3624		1.2535	1.2535	0.0000	4,826.540 8	4,826.540 8	1.5610	0.0000	4,865.565 8
Total	3.1587	33.4655	22.8957	0.0549	9.8546	1.3624	11.2170	4.9543	1.2535	6.2077	0.0000	4,826.540 8	4,826.540 8	1.5610	0.0000	4,865.565 8

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	6.9700e-003	0.4168	0.0750	2.4000e-003	6.1530	6.3400e-003	6.1593	0.6272	6.0600e-003	0.6332	0.0000	230.9646	230.9646	3.5000e-004	0.0363	241.7914
Vendor	0.0125	0.4002	0.1195	2.8200e-003	7.6969	5.2400e-003	7.7021	0.7869	5.0200e-003	0.7919	0.0000	268.3804	268.3804	6.7000e-004	0.0361	279.1539
Worker	0.1132	0.0971	1.1304	3.6800e-003	40.9500	1.9600e-003	40.9519	4.1577	1.8100e-003	4.1595	0.0000	341.8474	341.8474	5.8500e-003	8.1800e-003	344.4313
Total	0.1326	0.9140	1.3248	8.9000e-003	54.7998	0.0135	54.8134	5.5717	0.0129	5.5846	0.0000	841.1925	841.1925	6.8700e-003	0.0806	865.3766

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 1 Solar Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.4346	0.0000	4.4346	2.2294	0.0000	2.2294	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6797	3.1572	27.9561	0.0549		0.0899	0.0899		0.0899	0.0899	0.0000	4,826.535 1	4,826.535 1	1.5610	0.0000	4,865.560 0
Total	0.6797	3.1572	27.9561	0.0549	4.4346	0.0899	4.5244	2.2294	0.0899	2.3193	0.0000	4,826.535 1	4,826.535 1	1.5610	0.0000	4,865.560 0

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	6.9700e-003	0.4168	0.0750	2.4000e-003	1.0473	6.3400e-003	1.0536	0.1177	6.0600e-003	0.1237	0.0000	230.9646	230.9646	3.5000e-004	0.0363	241.7914
Vendor	0.0125	0.4002	0.1195	2.8200e-003	1.3147	5.2400e-003	1.3200	0.1500	5.0200e-003	0.1550	0.0000	268.3804	268.3804	6.7000e-004	0.0361	279.1539
Worker	0.1132	0.0971	1.1304	3.6800e-003	6.9119	1.9600e-003	6.9138	0.7611	1.8100e-003	0.7629	0.0000	341.8474	341.8474	5.8500e-003	8.1800e-003	344.4313
Total	0.1326	0.9140	1.3248	8.9000e-003	9.2738	0.0135	9.2874	1.0288	0.0129	1.0417	0.0000	841.1925	841.1925	6.8700e-003	0.0806	865.3766

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 S1 Substation Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4952	0.0000	0.4952	0.2531	0.0000	0.2531	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1556	1.5947	1.2623	2.5500e-003		0.0701	0.0701		0.0646	0.0646	0.0000	222.3981	222.3981	0.0704	0.0000	224.1584
Total	0.1556	1.5947	1.2623	2.5500e-003	0.4952	0.0701	0.5653	0.2531	0.0646	0.3178	0.0000	222.3981	222.3981	0.0704	0.0000	224.1584

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	2.9000e-003	0.1737	0.0312	1.0000e-003	2.5638	2.6400e-003	2.5664	0.2613	2.5300e-003	0.2638	0.0000	96.2353	96.2353	1.5000e-004	0.0151	100.7464
Vendor	2.0800e-003	0.0667	0.0199	4.7000e-004	1.2828	8.7000e-004	1.2837	0.1312	8.4000e-004	0.1320	0.0000	44.7301	44.7301	1.1000e-004	6.0200e-003	46.5257
Worker	0.0170	0.0146	0.1696	5.5000e-004	6.1425	2.9000e-004	6.1428	0.6237	2.7000e-004	0.6239	0.0000	51.2771	51.2771	8.8000e-004	1.2300e-003	51.6647
Total	0.0220	0.2549	0.2207	2.0200e-003	9.9891	3.8000e-003	9.9929	1.0161	3.6400e-003	1.0197	0.0000	192.2424	192.2424	1.1400e-003	0.0224	198.9368

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 S1 Substation Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2229	0.0000	0.2229	0.1139	0.0000	0.1139	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0335	0.2396	1.4653	2.5500e-003		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003	0.0000	222.3978	222.3978	0.0704	0.0000	224.1582
Total	0.0335	0.2396	1.4653	2.5500e-003	0.2229	4.1200e-003	0.2270	0.1139	4.1200e-003	0.1180	0.0000	222.3978	222.3978	0.0704	0.0000	224.1582

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	2.9000e-003	0.1737	0.0312	1.0000e-003	0.4364	2.6400e-003	0.4390	0.0490	2.5300e-003	0.0516	0.0000	96.2353	96.2353	1.5000e-004	0.0151	100.7464
Vendor	2.0800e-003	0.0667	0.0199	4.7000e-004	0.2191	8.7000e-004	0.2200	0.0250	8.4000e-004	0.0258	0.0000	44.7301	44.7301	1.1000e-004	6.0200e-003	46.5257
Worker	0.0170	0.0146	0.1696	5.5000e-004	1.0368	2.9000e-004	1.0371	0.1142	2.7000e-004	0.1144	0.0000	51.2771	51.2771	8.8000e-004	1.2300e-003	51.6647
Total	0.0220	0.2549	0.2207	2.0200e-003	1.6923	3.8000e-003	1.6961	0.1882	3.6400e-003	0.1918	0.0000	192.2424	192.2424	1.1400e-003	0.0224	198.9368

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1879	11.7591	11.4453	0.0247		0.5334	0.5334		0.4912	0.4912	0.0000	2,166.7599	2,166.7599	0.6960	0.0000	2,184.1598
Total	1.1879	11.7591	11.4453	0.0247		0.5334	0.5334		0.4912	0.4912	0.0000	2,166.7599	2,166.7599	0.6960	0.0000	2,184.1598

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	9.1700e-003	0.5488	0.0987	3.1700e-003	8.1014	8.3400e-003	8.1098	0.8258	7.9800e-003	0.8337	0.0000	304.1034	304.1034	4.6000e-004	0.0478	318.3587
Vendor	0.0175	0.5620	0.1678	3.9500e-003	10.8098	7.3600e-003	10.8172	1.1051	7.0400e-003	1.1122	0.0000	376.9254	376.9254	9.4000e-004	0.0507	392.0561
Worker	0.1788	0.1534	1.7861	5.8200e-003	64.7009	3.1000e-003	64.7040	6.5691	2.8600e-003	6.5720	0.0000	540.1189	540.1189	9.2500e-003	0.0129	544.2015
Total	0.2055	1.2642	2.0525	0.0129	83.6122	0.0188	83.6310	8.5000	0.0179	8.5179	0.0000	1,221.1477	1,221.1477	0.0107	0.1114	1,254.6162

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2023

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	0.3191	1.9954	14.5266	0.0247		0.0404	0.0404		0.0404	0.0404	0.0000	2,166.7574	2,166.7574	0.6960	0.0000	2,184.1572
Total	0.3191	1.9954	14.5266	0.0247		0.0404	0.0404		0.0404	0.0404	0.0000	2,166.7574	2,166.7574	0.6960	0.0000	2,184.1572

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	9.1700e-003	0.5488	0.0987	3.1700e-003	1.3789	8.3400e-003	1.3873	0.1549	7.9800e-003	0.1629	0.0000	304.1034	304.1034	4.6000e-004	0.0478	318.3587
Vendor	0.0175	0.5620	0.1678	3.9500e-003	1.8465	7.3600e-003	1.8538	0.2107	7.0400e-003	0.2178	0.0000	376.9254	376.9254	9.4000e-004	0.0507	392.0561
Worker	0.1788	0.1534	1.7861	5.8200e-003	10.9207	3.1000e-003	10.9238	1.2025	2.8600e-003	1.2054	0.0000	540.1189	540.1189	9.2500e-003	0.0129	544.2015
Total	0.2055	1.2642	2.0525	0.0129	14.1461	0.0188	14.1649	1.5682	0.0179	1.5861	0.0000	1,221.1477	1,221.1477	0.0107	0.1114	1,254.6162

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2024

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	2.1263	20.5717	21.1447	0.0457		0.9164	0.9164		0.8439	0.8439	0.0000	4,007.4519	4,007.4519	1.2870	0.0000	4,039.6261
Total	2.1263	20.5717	21.1447	0.0457		0.9164	0.9164		0.8439	0.8439	0.0000	4,007.4519	4,007.4519	1.2870	0.0000	4,039.6261

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	0.0168	1.0013	0.1809	5.7100e-003	14.9723	0.0153	14.9876	1.5261	0.0147	1.5407	0.0000	548.8615	548.8615	8.6000e-004	0.0863	574.5906
Vendor	0.0306	1.0222	0.2898	7.1500e-003	19.9776	0.0135	19.9912	2.0424	0.0130	2.0554	0.0000	681.1431	681.1431	1.6000e-003	0.0915	708.4389
Worker	0.3071	0.2487	3.0454	0.0104	119.5739	5.4200e-003	119.5793	12.1404	4.9900e-003	12.1454	0.0000	972.6488	972.6488	0.0152	0.0219	979.5643
Total	0.3545	2.2722	3.5161	0.0233	154.5238	0.0343	154.5581	15.7089	0.0326	15.7414	0.0000	2,202.6534	2,202.6534	0.0177	0.1997	2,262.5938

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2024

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	0.5898	3.6876	26.8467	0.0457		0.0746	0.0746		0.0746	0.0746	0.0000	4,007.447 2	4,007.447 2	1.2870	0.0000	4,039.621 3
Total	0.5898	3.6876	26.8467	0.0457		0.0746	0.0746		0.0746	0.0746	0.0000	4,007.447 2	4,007.447 2	1.2870	0.0000	4,039.621 3

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	0.0168	1.0013	0.1809	5.7100e-003	2.5484	0.0153	2.5637	0.2863	0.0147	0.3010	0.0000	548.8615	548.8615	8.6000e-004	0.0863	574.5906
Vendor	0.0306	1.0222	0.2898	7.1500e-003	3.4124	0.0135	3.4260	0.3894	0.0130	0.4024	0.0000	681.1431	681.1431	1.6000e-003	0.0915	708.4389
Worker	0.3071	0.2487	3.0454	0.0104	20.1826	5.4200e-003	20.1880	2.2224	4.9900e-003	2.2274	0.0000	972.6488	972.6488	0.0152	0.0219	979.5643
Total	0.3545	2.2722	3.5161	0.0233	26.1434	0.0343	26.1777	2.8981	0.0326	2.9307	0.0000	2,202.653 4	2,202.653 4	0.0177	0.1997	2,262.593 8

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1035	0.9792	1.3352	2.2400e-003		0.0466	0.0466		0.0435	0.0435	0.0000	194.7988	194.7988	0.0534	0.0000	196.1334
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1035	0.9792	1.3352	2.2400e-003		0.0466	0.0466		0.0435	0.0435	0.0000	194.7988	194.7988	0.0534	0.0000	196.1334

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	2.0900e-003	0.1250	0.0225	7.2000e-004	1.8459	1.9000e-003	1.8478	0.1882	1.8200e-003	0.1900	0.0000	69.2894	69.2894	1.1000e-004	0.0109	72.5374
Vendor	1.5000e-003	0.0480	0.0143	3.4000e-004	0.9236	6.3000e-004	0.9243	0.0944	6.0000e-004	0.0950	0.0000	32.2057	32.2057	8.0000e-005	4.3300e-003	33.4985
Worker	0.0122	0.0105	0.1221	4.0000e-004	4.4226	2.1000e-004	4.4228	0.4490	2.0000e-004	0.4492	0.0000	36.9195	36.9195	6.3000e-004	8.8000e-004	37.1986
Total	0.0158	0.1835	0.1589	1.4600e-003	7.1921	2.7400e-003	7.1949	0.7316	2.6200e-003	0.7342	0.0000	138.4146	138.4146	8.2000e-004	0.0161	143.2345

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2023

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	0.0294	0.2368	1.5572	2.2400e-003		3.5300e-003	3.5300e-003		3.5300e-003	3.5300e-003	0.0000	194.7985	194.7985	0.0534	0.0000	196.1331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0294	0.2368	1.5572	2.2400e-003		3.5300e-003	3.5300e-003		3.5300e-003	3.5300e-003	0.0000	194.7985	194.7985	0.0534	0.0000	196.1331

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	2.0900e-003	0.1250	0.0225	7.2000e-004	0.3142	1.9000e-003	0.3161	0.0353	1.8200e-003	0.0371	0.0000	69.2894	69.2894	1.1000e-004	0.0109	72.5374
Vendor	1.5000e-003	0.0480	0.0143	3.4000e-004	0.1578	6.3000e-004	0.1584	0.0180	6.0000e-004	0.0186	0.0000	32.2057	32.2057	8.0000e-005	4.3300e-003	33.4985
Worker	0.0122	0.0105	0.1221	4.0000e-004	0.7465	2.1000e-004	0.7467	0.0822	2.0000e-004	0.0824	0.0000	36.9195	36.9195	6.3000e-004	8.8000e-004	37.1986
Total	0.0158	0.1835	0.1589	1.4600e-003	1.2184	2.7400e-003	1.2212	0.1355	2.6200e-003	0.1381	0.0000	138.4146	138.4146	8.2000e-004	0.0161	143.2345

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2024

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	0.3108	2.9058	4.2318	7.0900e-003		0.1329	0.1329		0.1241	0.1241	0.0000	617.0996	617.0996	0.1687	0.0000	621.3164
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.3108	2.9058	4.2318	7.0900e-003		0.1329	0.1329		0.1241	0.1241	0.0000	617.0996	617.0996	0.1687	0.0000	621.3164

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	6.5500e-003	0.3909	0.0706	2.2300e-003	5.8453	5.9800e-003	5.8513	0.5958	5.7200e-003	0.6015	0.0000	214.2815	214.2815	3.4000e-004	0.0337	224.3265
Vendor	4.4800e-003	0.1497	0.0424	1.0500e-003	2.9248	1.9800e-003	2.9268	0.2990	1.9000e-003	0.3009	0.0000	99.7222	99.7222	2.3000e-004	0.0134	103.7184
Worker	0.0360	0.0291	0.3567	1.2200e-003	14.0049	6.3000e-004	14.0055	1.4219	5.8000e-004	1.4225	0.0000	113.9198	113.9198	1.7800e-003	2.5700e-003	114.7298
Total	0.0470	0.5697	0.4698	4.5000e-003	22.7750	8.5900e-003	22.7836	2.3167	8.2000e-003	2.3249	0.0000	427.9235	427.9235	2.3500e-003	0.0496	442.7746

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2024

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	0.0932	0.7500	4.9311	7.0900e-003		0.0112	0.0112		0.0112	0.0112	0.0000	617.0988	617.0988	0.1687	0.0000	621.3157
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0932	0.7500	4.9311	7.0900e-003		0.0112	0.0112		0.0112	0.0112	0.0000	617.0988	617.0988	0.1687	0.0000	621.3157

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	6.5500e-003	0.3909	0.0706	2.2300e-003	0.9949	5.9800e-003	1.0009	0.1118	5.7200e-003	0.1175	0.0000	214.2815	214.2815	3.4000e-004	0.0337	224.3265
Vendor	4.4800e-003	0.1497	0.0424	1.0500e-003	0.4996	1.9800e-003	0.5016	0.0570	1.9000e-003	0.0589	0.0000	99.7222	99.7222	2.3000e-004	0.0134	103.7184
Worker	0.0360	0.0291	0.3567	1.2200e-003	2.3639	6.3000e-004	2.3645	0.2603	5.8000e-004	0.2609	0.0000	113.9198	113.9198	1.7800e-003	2.5700e-003	114.7298
Total	0.0470	0.5697	0.4698	4.5000e-003	3.8584	8.5900e-003	3.8670	0.4291	8.2000e-003	0.4373	0.0000	427.9235	427.9235	2.3500e-003	0.0496	442.7746

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 3 Solar Electrical - 2024

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	1.1327	10.5190	14.7634	0.0227		0.5340	0.5340		0.4922	0.4922	0.0000	1,987.8748	1,987.8748	0.6335	0.0000	2,003.7134
Total	1.1327	10.5190	14.7634	0.0227		0.5340	0.5340		0.4922	0.4922	0.0000	1,987.8748	1,987.8748	0.6335	0.0000	2,003.7134

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	6.8900e-003	0.4115	0.0744	2.3500e-003	6.1530	6.2900e-003	6.1593	0.6272	6.0200e-003	0.6332	0.0000	225.5595	225.5595	3.5000e-004	0.0355	236.1331
Vendor	0.0118	0.3938	0.1117	2.7500e-003	7.6969	5.2200e-003	7.7021	0.7869	4.9900e-003	0.7919	0.0000	262.4267	262.4267	6.2000e-004	0.0352	272.9431
Worker	0.1052	0.0852	1.0429	3.5600e-003	40.9500	1.8600e-003	40.9518	4.1577	1.7100e-003	4.1594	0.0000	333.0989	333.0989	5.2100e-003	7.5100e-003	335.4672
Total	0.1238	0.8905	1.2290	8.6600e-003	54.7998	0.0134	54.8132	5.5717	0.0127	5.5844	0.0000	821.0851	821.0851	6.1800e-003	0.0782	844.5434

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 3 Solar Electrical - 2024

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	0.3088	2.5011	16.8074	0.0227		0.0370	0.0370		0.0370	0.0370	0.0000	1,987.8724	1,987.8724	0.6335	0.0000	2,003.7110
Total	0.3088	2.5011	16.8074	0.0227		0.0370	0.0370		0.0370	0.0370	0.0000	1,987.8724	1,987.8724	0.6335	0.0000	2,003.7110

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	6.8900e-003	0.4115	0.0744	2.3500e-003	1.0473	6.2900e-003	1.0536	0.1177	6.0200e-003	0.1237	0.0000	225.5595	225.5595	3.5000e-004	0.0355	236.1331
Vendor	0.0118	0.3938	0.1117	2.7500e-003	1.3147	5.2200e-003	1.3199	0.1500	4.9900e-003	0.1550	0.0000	262.4267	262.4267	6.2000e-004	0.0352	272.9431
Worker	0.1052	0.0852	1.0429	3.5600e-003	6.9119	1.8600e-003	6.9137	0.7611	1.7100e-003	0.7628	0.0000	333.0989	333.0989	5.2100e-003	7.5100e-003	335.4672
Total	0.1238	0.8905	1.2290	8.6600e-003	9.2738	0.0134	9.2872	1.0288	0.0127	1.0415	0.0000	821.0851	821.0851	6.1800e-003	0.0782	844.5434

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 S3 Substation Paving and Testing - 2024

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	0.0483	0.4455	0.6303	9.7000e-004		0.0197	0.0197		0.0183	0.0183	0.0000	83.4732	83.4732	0.0249	0.0000	84.0961
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0483	0.4455	0.6303	9.7000e-004		0.0197	0.0197		0.0183	0.0183	0.0000	83.4732	83.4732	0.0249	0.0000	84.0961

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	3.8300e-003	0.2286	0.0413	1.3000e-003	3.4183	3.5000e-003	3.4218	0.3484	3.3500e-003	0.3518	0.0000	125.3108	125.3108	2.0000e-004	0.0197	131.1851
Vendor	2.6200e-003	0.0875	0.0248	6.1000e-004	1.7104	1.1600e-003	1.7116	0.1749	1.1100e-003	0.1760	0.0000	58.3171	58.3171	1.4000e-004	7.8300e-003	60.6540
Worker	8.4100e-003	6.8100e-003	0.0834	2.8000e-004	3.2760	1.5000e-004	3.2762	0.3326	1.4000e-004	0.3328	0.0000	26.6479	26.6479	4.2000e-004	6.0000e-004	26.8374
Total	0.0149	0.3229	0.1496	2.1900e-003	8.4047	4.8100e-003	8.4095	0.8559	4.6000e-003	0.8605	0.0000	210.2758	210.2758	7.6000e-004	0.0281	218.6765

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 S3 Substation Paving and Testing - 2024

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	0.0146	0.1806	0.7153	9.7000e-004		1.5300e-003	1.5300e-003		1.5300e-003	1.5300e-003	0.0000	83.4731	83.4731	0.0249	0.0000	84.0960
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0146	0.1806	0.7153	9.7000e-004		1.5300e-003	1.5300e-003		1.5300e-003	1.5300e-003	0.0000	83.4731	83.4731	0.0249	0.0000	84.0960

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	3.8300e-003	0.2286	0.0413	1.3000e-003	0.5818	3.5000e-003	0.5853	0.0654	3.3500e-003	0.0687	0.0000	125.3108	125.3108	2.0000e-004	0.0197	131.1851
Vendor	2.6200e-003	0.0875	0.0248	6.1000e-004	0.2922	1.1600e-003	0.2933	0.0333	1.1100e-003	0.0345	0.0000	58.3171	58.3171	1.4000e-004	7.8300e-003	60.6540
Worker	8.4100e-003	6.8100e-003	0.0834	2.8000e-004	0.5530	1.5000e-004	0.5531	0.0609	1.4000e-004	0.0610	0.0000	26.6479	26.6479	4.2000e-004	6.0000e-004	26.8374
Total	0.0149	0.3229	0.1496	2.1900e-003	1.4269	4.8100e-003	1.4317	0.1596	4.6000e-003	0.1642	0.0000	210.2758	210.2758	7.6000e-004	0.0281	218.6765

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 4 Solar Gentie - 2024

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	0.0438	0.4262	0.4296	8.4000e-004		0.0163	0.0163		0.0152	0.0152	0.0000	71.6596	71.6596	0.0211	0.0000	72.1870
Total	0.0438	0.4262	0.4296	8.4000e-004		0.0163	0.0163		0.0152	0.0152	0.0000	71.6596	71.6596	0.0211	0.0000	72.1870

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	4.5900e-003	0.2743	0.0496	1.5700e-003	4.1020	4.2000e-003	4.1062	0.4181	4.0100e-003	0.4221	0.0000	150.3730	150.3730	2.4000e-004	0.0236	157.4221
Vendor	2.6200e-003	0.0875	0.0248	6.1000e-004	1.7104	1.1600e-003	1.7116	0.1749	1.1100e-003	0.1760	0.0000	58.3171	58.3171	1.4000e-004	7.8300e-003	60.6540
Worker	0.0351	0.0284	0.3477	1.1900e-003	13.6500	6.2000e-004	13.6506	1.3859	5.7000e-004	1.3865	0.0000	111.0330	111.0330	1.7400e-003	2.5000e-003	111.8224
Total	0.0423	0.3902	0.4220	3.3700e-003	19.4624	5.9800e-003	19.4684	1.9789	5.6900e-003	1.9846	0.0000	319.7230	319.7230	2.1200e-003	0.0340	329.8985

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 4 Solar Gentie - 2024

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	0.0142	0.2260	0.5013	8.4000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	71.6596	71.6596	0.0211	0.0000	72.1869
Total	0.0142	0.2260	0.5013	8.4000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	71.6596	71.6596	0.0211	0.0000	72.1869

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	4.5900e-003	0.2743	0.0496	1.5700e-003	0.6982	4.2000e-003	0.7024	0.0785	4.0100e-003	0.0825	0.0000	150.3730	150.3730	2.4000e-004	0.0236	157.4221
Vendor	2.6200e-003	0.0875	0.0248	6.1000e-004	0.2922	1.1600e-003	0.2933	0.0333	1.1100e-003	0.0345	0.0000	58.3171	58.3171	1.4000e-004	7.8300e-003	60.6540
Worker	0.0351	0.0284	0.3477	1.1900e-003	2.3040	6.2000e-004	2.3046	0.2537	5.7000e-004	0.2543	0.0000	111.0330	111.0330	1.7400e-003	2.5000e-003	111.8224
Total	0.0423	0.3902	0.4220	3.3700e-003	3.2943	5.9800e-003	3.3003	0.3655	5.6900e-003	0.3712	0.0000	319.7230	319.7230	2.1200e-003	0.0340	329.8985

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1278	0.3059	1.8430	4.4200e-003	0.4576	3.8300e-003	0.4614	0.1222	3.6000e-003	0.1258	0.0000	412.2112	412.2112	0.0174	0.0190	418.3124
Unmitigated	0.1278	0.3059	1.8430	4.4200e-003	0.4576	3.8300e-003	0.4614	0.1222	3.6000e-003	0.1258	0.0000	412.2112	412.2112	0.0174	0.0190	418.3124

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	89.30	89.30	89.30	1,212,541	1,212,541
Total	89.30	89.30	89.30	1,212,541	1,212,541

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	40.00	40.00	40.00	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.526992	0.056742	0.174739	0.140288	0.030240	0.007815	0.006009	0.021774	0.000488	0.000160	0.028107	0.000925	0.005722

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0760	7.4700e-003	0.8205	6.0000e-005		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003	0.0000	1.5957	1.5957	4.1900e-003	0.0000	1.7003
Unmitigated	0.0760	7.4700e-003	0.8205	6.0000e-005		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003	0.0000	1.5957	1.5957	4.1900e-003	0.0000	1.7003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0760	7.4700e-003	0.8205	6.0000e-005		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003	0.0000	1.5957	1.5957	4.1900e-003	0.0000	1.7003
Total	0.0760	7.4700e-003	0.8205	6.0000e-005		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003	0.0000	1.5957	1.5957	4.1900e-003	0.0000	1.7003

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0760	7.4700e-003	0.8205	6.0000e-005		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003	0.0000	1.5957	1.5957	4.1900e-003	0.0000	1.7003
Total	0.0760	7.4700e-003	0.8205	6.0000e-005		2.9300e-003	2.9300e-003		2.9300e-003	2.9300e-003	0.0000	1.5957	1.5957	4.1900e-003	0.0000	1.7003

7.0 Water Detail

7.1 Mitigation Measures Water

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.3862	3.0000e-005	0.0000	0.3882
Unmitigated	0.3862	3.0000e-005	0.0000	0.3882

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	0 / 0.196	0.3862	3.0000e-005	0.0000	0.3882
Total		0.3862	3.0000e-005	0.0000	0.3882

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	0 / 0.196	0.3862	3.0000e-005	0.0000	0.3882
Total		0.3862	3.0000e-005	0.0000	0.3882

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	- 8,835.500 0	0.0000	0.0000	- 8,835.500 0

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	2050 / 0	- 8,835.500 0	0.0000	0.0000	- 8,835.500 0
Total		- 8,835.500 0	0.0000	0.0000	- 8,835.500 0

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stagecoach Solar plus Calcite Sub

Mojave Desert AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	89,300.00	1000sqft	2,050.05	89,300,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Stagecoach facilities plus Calcite Substation

Land Use - Stagecoach solar field and gen-tie combined approx 1,975 acres plus Calcite substation 75 acres: 2,050 acres land use type. General Heavy Industry since over 5,000 ksf

Construction Phase - Sequence covers 18 months of activity

Off-road Equipment - Ph 1 up to 65 pcs equipment

Off-road Equipment - Ph 2 up to 98 pcs equipment

Off-road Equipment - Ph 3 up to 66 pcs equipment

Off-road Equipment - Ph 4 up to 6 pcs equipment

Off-road Equipment - Ph S1 up to 13 pcs equipment

Off-road Equipment - Ph S2 up to 22 pcs equipment

Off-road Equipment - Ph S3 up to 6 pcs equipment

Trips and VMT - up to 800 worker trips daily plus 10,600 heavy duty haul roundtrips for solar facility

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

On-road Fugitive Dust - all vehicle classes may travel final leg or 5 pct of trip on unpaved surface

Grading - Grading minimized as possible

Vehicle Trips - operational trips approximately 0.001 trip per ksf

Consumer Products - consumer products not applicable

Area Coating - architectural coatings not applicable

Energy Use - consumption of utility natural gas and grid electricity not applicable

Water And Wastewater - 0.6 acre feet annual outdoor water use. minimal grid electricity demand for indoor water use and minimal demand for wastewater treatment.

Solid Waste - minimal demand for solid waste disposal

Land Use Change - up to 2050 acres land use change

Sequestration -

Construction Off-road Equipment Mitigation - Offroad equipment at Tier 4 standards. Dust control soil stabilizer or dust suppressant is 84 pct effective per SCAQMD guideline Table XI-D

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	44650000	0
tblAreaCoating	Area_Nonresidential_Interior	133950000	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	16.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	36.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	60.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	25.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	17.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	26.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	155,000.00	225.00
tblConstructionPhase	NumDays	155,000.00	100.00
tblConstructionPhase	NumDays	11,000.00	225.00
tblConstructionPhase	NumDays	11,000.00	100.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	6,000.00	150.00
tblConstructionPhase	NumDays	6,000.00	75.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	1.97	0.00
tblEnergyUse	T24NG	15.20	0.00
tblGrading	AcresOfGrading	5,850.00	1,975.00
tblGrading	AcresOfGrading	187.50	75.00
tblGrading	MaterialExported	0.00	3,000.00
tblGrading	MaterialImported	0.00	51,000.00
tblOffRoadEquipment	HorsePower	231.00	9.00
tblOffRoadEquipment	LoadFactor	0.29	0.56
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	16.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	13.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOffRoadEquipment	UsageHours	7.00	12.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	110,732.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripNumber	0.00	3,600.00
tblTripsAndVMT	HaulingTripNumber	6,750.00	1,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	13,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	4,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	3,600.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,000.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,400.00
tblTripsAndVMT	VendorTripLength	6.60	25.00
tblTripsAndVMT	VendorTripLength	6.60	25.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripNumber	0.00	60.00
tbITripsAndVMT	VendorTripNumber	0.00	20.00
tbITripsAndVMT	VendorTripNumber	14,636.00	160.00
tbITripsAndVMT	VendorTripNumber	0.00	20.00
tbITripsAndVMT	VendorTripNumber	0.00	60.00
tbITripsAndVMT	VendorTripNumber	0.00	20.00
tbITripsAndVMT	VendorTripNumber	14,636.00	20.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripNumber	163.00	200.00
tbITripsAndVMT	WorkerTripNumber	33.00	60.00
tbITripsAndVMT	WorkerTripNumber	37,506.00	600.00
tbITripsAndVMT	WorkerTripNumber	55.00	60.00
tbITripsAndVMT	WorkerTripNumber	165.00	200.00
tbITripsAndVMT	WorkerTripNumber	15.00	24.00
tbITripsAndVMT	WorkerTripNumber	37,506.00	100.00
tbIVehicleTrips	CC_TL	6.60	40.00
tbIVehicleTrips	CNW_TL	6.60	40.00
tbIVehicleTrips	CW_TL	14.70	40.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	6.42	1.0000e-003
tblVehicleTrips	SU_TR	5.09	1.0000e-003
tblVehicleTrips	WD_TR	3.93	1.0000e-003
tblWater	IndoorWaterUseRate	20,650,625,000.00	0.00
tblWater	OutdoorWaterUseRate	0.00	196,000.00

2.0 Emissions Summary

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2023	89.0595	876.8744	775.4597	2.0849	3,824.7919	36.1213	3,860.9133	446.5100	33.3014	479.8113	0.0000	205,848.3341	205,848.3341	47.1059	5.5691	208,685.5715
2024	38.6550	351.2332	403.3315	1.0953	2,594.6642	14.6779	2,609.3421	263.4593	13.5545	277.0138	0.0000	108,787.4497	108,787.4497	21.9209	3.6292	110,416.9605
Maximum	89.0595	876.8744	775.4597	2.0849	3,824.7919	36.1213	3,860.9133	446.5100	33.3014	479.8113	0.0000	205,848.3341	205,848.3341	47.1059	5.5691	208,685.5715

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					
2023	28.0126	161.9483	934.5771	2.0849	685.6426	3.3200	688.9626	101.1547	3.2784	104.4331	0.0000	205,848.3340	205,848.3340	47.1059	5.5691	208,685.5714
2024	15.0624	94.7303	489.6205	1.0953	437.4779	1.7220	439.1999	48.1995	1.6944	49.8938	0.0000	108,787.4497	108,787.4497	21.9209	3.6292	110,416.9604
Maximum	28.0126	161.9483	934.5771	2.0849	685.6426	3.3200	688.9626	101.1547	3.2784	104.4331	0.0000	205,848.3340	205,848.3340	47.1059	5.5691	208,685.5714

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	66.27	79.10	-20.82	0.00	82.50	90.07	82.56	78.96	89.39	79.61	0.00	0.00	0.00	0.00	0.00	0.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.7619	1.5405	11.3955	0.0261	2.5594	0.0211	2.5804	0.6823	0.0198	0.7021		2,680.7248	2,680.7248	0.1055	0.1107	2,716.3548
Total	1.6062	1.6235	20.5116	0.0268	2.5594	0.0536	2.6129	0.6823	0.0523	0.7346		2,700.2684	2,700.2684	0.1567	0.1107	2,737.1798

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	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.7619	1.5405	11.3955	0.0261	2.5594	0.0211	2.5804	0.6823	0.0198	0.7021		2,680.7248	2,680.7248	0.1055	0.1107	2,716.3548
Total	1.6062	1.6235	20.5116	0.0268	2.5594	0.0536	2.6129	0.6823	0.0523	0.7346		2,700.2684	2,700.2684	0.1567	0.1107	2,737.1798

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1 Solar Site Preparation	Site Preparation	7/1/2023	12/22/2023	6	150	1
2	S1 Substation Grading	Site Preparation	9/30/2023	12/26/2023	6	75	S1
3	2 Solar Installation	Building Construction	9/30/2023	6/18/2024	6	225	2
4	S2 Substation Installation	Paving	10/30/2023	7/17/2024	6	225	S2
5	3 Solar Electrical	Trenching	7/1/2024	12/21/2024	6	150	3
6	S3 Substation Paving and Testing	Paving	7/1/2024	10/24/2024	6	100	S3
7	4 Solar Gentie	Building Construction	8/30/2024	12/24/2024	6	100	4

Acres of Grading (Site Preparation Phase): 1975

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1 Solar Site Preparation	Graders	13	12.00	187	0.41
1 Solar Site Preparation	Off-Highway Tractors	20	10.00	124	0.44
1 Solar Site Preparation	Rollers	2	12.00	80	0.38
1 Solar Site Preparation	Rubber Tired Dozers	13	12.00	247	0.40

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

1 Solar Site Preparation	Scrapers	13	12.00	367	0.48
1 Solar Site Preparation	Skid Steer Loaders	2	12.00	65	0.37
1 Solar Site Preparation	Tractors/Loaders/Backhoes	2	12.00	97	0.37
S1 Substation Grading	Aerial Lifts	1	8.00	63	0.31
S1 Substation Grading	Forklifts	1	8.00	89	0.20
S1 Substation Grading	Graders	1	8.00	187	0.41
S1 Substation Grading	Other Construction Equipment	2	8.00	172	0.42
S1 Substation Grading	Rollers	1	8.00	80	0.38
S1 Substation Grading	Rubber Tired Dozers	2	8.00	247	0.40
S1 Substation Grading	Scrapers	1	8.00	367	0.48
S1 Substation Grading	Skid Steer Loaders	1	8.00	65	0.37
S1 Substation Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
S1 Substation Grading	Welders	1	8.00	46	0.45
2 Solar Installation	Aerial Lifts	4	12.00	63	0.31
2 Solar Installation	Bore/Drill Rigs	13	12.00	221	0.50
2 Solar Installation	Cranes	4	10.00	231	0.29
2 Solar Installation	Forklifts	16	8.00	89	0.20
2 Solar Installation	Generator Sets	0	12.00	84	0.74
2 Solar Installation	Off-Highway Tractors	20	10.00	124	0.44
2 Solar Installation	Rollers	3	12.00	80	0.38
2 Solar Installation	Rubber Tired Dozers	6	12.00	247	0.40
2 Solar Installation	Rubber Tired Dozers	4	12.00	247	0.40
2 Solar Installation	Skid Steer Loaders	6	12.00	65	0.37
2 Solar Installation	Tractors/Loaders/Backhoes	18	12.00	97	0.37
2 Solar Installation	Trenchers	2	12.00	78	0.50
2 Solar Installation	Welders	2	12.00	46	0.45
S2 Substation Installation	Aerial Lifts	3	8.00	63	0.31
S2 Substation Installation	Bore/Drill Rigs	1	8.00	221	0.50
S2 Substation Installation	Cranes	2	8.00	9	0.56

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

S2 Substation Installation	Excavators	2	8.00	158	0.38
S2 Substation Installation	Forklifts	2	8.00	89	0.20
S2 Substation Installation	Generator Sets	2	8.00	84	0.74
S2 Substation Installation	Other Construction Equipment	4	8.00	172	0.42
S2 Substation Installation	Pavers	0	8.00	130	0.42
S2 Substation Installation	Paving Equipment	0	8.00	132	0.36
S2 Substation Installation	Rollers	0	8.00	80	0.38
S2 Substation Installation	Skid Steer Loaders	1	8.00	65	0.37
S2 Substation Installation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
S2 Substation Installation	Welders	1	8.00	46	0.45
3 Solar Electrical	Aerial Lifts	4	12.00	63	0.31
3 Solar Electrical	Cranes	2	10.00	231	0.29
3 Solar Electrical	Forklifts	16	8.00	89	0.20
3 Solar Electrical	Off-Highway Tractors	20	10.00	124	0.44
3 Solar Electrical	Other Construction Equipment	8	12.00	172	0.42
3 Solar Electrical	Rollers	4	12.00	80	0.38
3 Solar Electrical	Skid Steer Loaders	6	12.00	65	0.37
3 Solar Electrical	Trenchers	4	12.00	78	0.50
3 Solar Electrical	Welders	2	12.00	46	0.45
S3 Substation Paving and Testing	Aerial Lifts	2	8.00	63	0.31
S3 Substation Paving and Testing	Other Construction Equipment	1	8.00	172	0.42
S3 Substation Paving and Testing	Pavers	1	8.00	130	0.42
S3 Substation Paving and Testing	Paving Equipment	0	8.00	132	0.36
S3 Substation Paving and Testing	Rollers	1	8.00	80	0.38
S3 Substation Paving and Testing	Welders	1	8.00	46	0.45
4 Solar Gentie	Aerial Lifts	2	8.00	63	0.31
4 Solar Gentie	Cranes	1	10.00	231	0.29
4 Solar Gentie	Forklifts	1	8.00	89	0.20
4 Solar Gentie	Generator Sets	0	8.00	84	0.74

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4 Solar Gentie	Skid Steer Loaders	1	8.00	65	0.37
4 Solar Gentie	Tractors/Loaders/Backhoes	0	7.00	97	0.37
4 Solar Gentie	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1 Solar Site Preparation	65	200.00	60.00	3,600.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
S1 Substation Grading	13	60.00	20.00	1,500.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
2 Solar Installation	98	600.00	160.00	13,500.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
S2 Substation Installation	22	60.00	20.00	4,500.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
3 Solar Electrical	66	200.00	60.00	3,600.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
S3 Substation Paving and Testing	6	24.00	20.00	2,000.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
4 Solar Gentie	6	100.00	20.00	2,400.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 1 Solar Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					131.3939	0.0000	131.3939	66.0571	0.0000	66.0571			0.0000			0.0000
Off-Road	42.1161	446.2070	305.2762	0.7326		18.1659	18.1659		16.7127	16.7127		70,938.00 68	70,938.00 68	22.9428		71,511.57 65
Total	42.1161	446.2070	305.2762	0.7326	131.3939	18.1659	149.5599	66.0571	16.7127	82.7698		70,938.00 68	70,938.00 68	22.9428		71,511.57 65

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	0.0952	5.2303	0.9928	0.0321	89.3130	0.0845	89.3974	9.0901	0.0808	9.1709		3,393.414 1	3,393.414 1	5.2900e- 003	0.5334	3,552.486 0
Vendor	0.1712	5.0171	1.5839	0.0375	111.7162	0.0699	111.7861	11.4018	0.0669	11.4687		3,943.059 5	3,943.059 5	0.0100	0.5294	4,101.082 0
Worker	1.6641	1.1767	18.5483	0.0538	594.4866	0.0262	594.5128	60.2890	0.0241	60.3131		5,507.359 8	5,507.359 8	0.0914	0.1129	5,543.278 9
Total	1.9305	11.4241	21.1251	0.1234	795.5158	0.1806	795.6963	80.7809	0.1718	80.9527		12,843.83 34	12,843.83 34	0.1067	1.1757	13,196.84 69

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 1 Solar Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					59.1273	0.0000	59.1273	29.7257	0.0000	29.7257			0.0000			0.0000
Off-Road	9.0625	42.0960	372.7488	0.7326		1.1982	1.1982		1.1982	1.1982	0.0000	70,938.00 67	70,938.00 67	22.9428		71,511.57 64
Total	9.0625	42.0960	372.7488	0.7326	59.1273	1.1982	60.3254	29.7257	1.1982	30.9239	0.0000	70,938.00 67	70,938.00 67	22.9428		71,511.57 64

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	0.0952	5.2303	0.9928	0.0321	15.1404	0.0845	15.2248	1.6886	0.0808	1.7694		3,393.414 1	3,393.414 1	5.2900e-003	0.5334	3,552.486 0
Vendor	0.1712	5.0171	1.5839	0.0375	19.0004	0.0699	19.0703	2.1500	0.0669	2.2168		3,943.059 5	3,943.059 5	0.0100	0.5294	4,101.082 0
Worker	1.6641	1.1767	18.5483	0.0538	100.0027	0.0262	100.0289	10.9457	0.0241	10.9698		5,507.359 8	5,507.359 8	0.0914	0.1129	5,543.278 9
Total	1.9305	11.4241	21.1251	0.1234	134.1435	0.1806	134.3240	14.7843	0.1718	14.9561		12,843.83 34	12,843.83 34	0.1067	1.1757	13,196.84 69

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 S1 Substation Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.2059	0.0000	13.2059	6.7503	0.0000	6.7503			0.0000			0.0000
Off-Road	4.1496	42.5259	33.6625	0.0679		1.8684	1.8684		1.7234	1.7234		6,537.384 0	6,537.384 0	2.0699		6,589.130 4
Total	4.1496	42.5259	33.6625	0.0679	13.2059	1.8684	15.0743	6.7503	1.7234	8.4736		6,537.384 0	6,537.384 0	2.0699		6,589.130 4

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	0.0793	4.3586	0.8274	0.0267	74.4275	0.0704	74.4979	7.5751	0.0673	7.6424		2,827.845 1	2,827.845 1	4.4100e- 003	0.4445	2,960.405 0
Vendor	0.0571	1.6724	0.5280	0.0125	37.2387	0.0233	37.2620	3.8006	0.0223	3.8229		1,314.353 2	1,314.353 2	3.3300e- 003	0.1765	1,367.027 3
Worker	0.4992	0.3530	5.5645	0.0161	178.3460	7.8600e- 003	178.3539	18.0867	7.2400e- 003	18.0939		1,652.207 9	1,652.207 9	0.0274	0.0339	1,662.983 7
Total	0.6356	6.3840	6.9198	0.0554	290.0122	0.1016	290.1137	29.4624	0.0969	29.5592		5,794.406 2	5,794.406 2	0.0352	0.6548	5,990.416 0

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 S1 Substation Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.9426	0.0000	5.9426	3.0376	0.0000	3.0376			0.0000			0.0000
Off-Road	0.8926	6.3882	39.0759	0.0679		0.1099	0.1099		0.1099	0.1099	0.0000	6,537.384 0	6,537.384 0	2.0699		6,589.130 4
Total	0.8926	6.3882	39.0759	0.0679	5.9426	0.1099	6.0526	3.0376	0.1099	3.1476	0.0000	6,537.384 0	6,537.384 0	2.0699		6,589.130 4

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	0.0793	4.3586	0.8274	0.0267	12.6170	0.0704	12.6874	1.4072	0.0673	1.4745		2,827.845 1	2,827.845 1	4.4100e- 003	0.4445	2,960.405 0
Vendor	0.0571	1.6724	0.5280	0.0125	6.3335	0.0233	6.3568	0.7167	0.0223	0.7389		1,314.353 2	1,314.353 2	3.3300e- 003	0.1765	1,367.027 3
Worker	0.4992	0.3530	5.5645	0.0161	30.0008	7.8600e- 003	30.0087	3.2837	7.2400e- 003	3.2910		1,652.207 9	1,652.207 9	0.0274	0.0339	1,662.983 7
Total	0.6356	6.3840	6.9198	0.0554	48.9512	0.1016	49.0528	5.4076	0.0969	5.5044		5,794.406 2	5,794.406 2	0.0352	0.6548	5,990.416 0

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	30.0733	297.6985	289.7539	0.6258		13.5033	13.5033		12.4362	12.4362		60,466.93 60	60,466.93 60	19.4228		60,952.50 67
Total	30.0733	297.6985	289.7539	0.6258		13.5033	13.5033		12.4362	12.4362		60,466.93 60	60,466.93 60	19.4228		60,952.50 67

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	0.2380	13.0758	2.4821	0.0801	223.2824	0.2112	223.4936	22.7253	0.2020	22.9273		8,483.535 3	8,483.535 3	0.0132	1.3334	8,881.215 1
Vendor	0.4565	13.3789	4.2237	0.1001	297.9098	0.1864	298.0961	30.4048	0.1783	30.5831		10,514.82 53	10,514.82 53	0.0267	1.4118	10,936.21 87
Worker	4.9924	3.5301	55.6450	0.1614	1,783.459 9	0.0786	1,783.538 5	180.8668	0.0724	180.9392		16,522.07 95	16,522.07 95	0.2741	0.3386	16,629.83 67
Total	5.6868	29.9848	62.3508	0.3416	2,304.652 0	0.4762	2,305.128 2	233.9969	0.4527	234.4496		35,520.44 01	35,520.44 01	0.3140	3.0838	36,447.27 05

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2023

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	8.0793	50.5156	367.7630	0.6258		1.0214	1.0214		1.0214	1.0214	0.0000	60,466.93 59	60,466.93 59	19.4228		60,952.50 67
Total	8.0793	50.5156	367.7630	0.6258		1.0214	1.0214		1.0214	1.0214	0.0000	60,466.93 59	60,466.93 59	19.4228		60,952.50 67

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	0.2380	13.0758	2.4821	0.0801	37.8509	0.2112	38.0621	4.2216	0.2020	4.4236		8,483.535 3	8,483.535 3	0.0132	1.3334	8,881.215 1
Vendor	0.4565	13.3789	4.2237	0.1001	50.6678	0.1864	50.8542	5.7332	0.1783	5.9115		10,514.82 53	10,514.82 53	0.0267	1.4118	10,936.21 87
Worker	4.9924	3.5301	55.6450	0.1614	300.0080	0.0786	300.0866	32.8372	0.0724	32.9095		16,522.07 95	16,522.07 95	0.2741	0.3386	16,629.83 67
Total	5.6868	29.9848	62.3508	0.3416	388.5267	0.4762	389.0029	42.7919	0.4527	43.2446		35,520.44 01	35,520.44 01	0.3140	3.0838	36,447.27 05

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2024

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	29.1267	281.8044	289.6531	0.6263		12.5537	12.5537		11.5608	11.5608		60,513.14 50	60,513.14 50	19.4334		60,998.97 98
Total	29.1267	281.8044	289.6531	0.6263		12.5537	12.5537		11.5608	11.5608		60,513.14 50	60,513.14 50	19.4334		60,998.97 98

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	0.2354	12.9106	2.4619	0.0783	223.2824	0.2098	223.4921	22.7253	0.2007	22.9260		8,284.977 9	8,284.977 9	0.0133	1.3022	8,673.357 6
Vendor	0.4315	13.1731	3.9388	0.0979	297.9097	0.1854	298.0951	30.4048	0.1773	30.5821		10,281.51 16	10,281.51 16	0.0246	1.3785	10,692.90 47
Worker	4.6310	3.0993	51.3362	0.1560	1,783.459 9	0.0742	1,783.534 1	180.8668	0.0683	180.9352		16,095.44 76	16,095.44 76	0.2432	0.3111	16,194.22 34
Total	5.2979	29.1829	57.7369	0.3321	2,304.652 0	0.4694	2,305.121 4	233.9969	0.4463	234.4433		34,661.93 71	34,661.93 71	0.2811	2.9917	35,560.48 58

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2024

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	8.0793	50.5156	367.7630	0.6263		1.0214	1.0214		1.0214	1.0214	0.0000	60,513.14 49	60,513.14 49	19.4334		60,998.97 98
Total	8.0793	50.5156	367.7630	0.6263		1.0214	1.0214		1.0214	1.0214	0.0000	60,513.14 49	60,513.14 49	19.4334		60,998.97 98

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	0.2354	12.9106	2.4619	0.0783	37.8509	0.2098	38.0607	4.2215	0.2007	4.4222		8,284.977 9	8,284.977 9	0.0133	1.3022	8,673.357 6
Vendor	0.4315	13.1731	3.9388	0.0979	50.6678	0.1854	50.8531	5.7332	0.1773	5.9105		10,281.51 16	10,281.51 16	0.0246	1.3785	10,692.90 47
Worker	4.6310	3.0993	51.3362	0.1560	300.0080	0.0742	300.0822	32.8372	0.0683	32.9055		16,095.44 76	16,095.44 76	0.2432	0.3111	16,194.22 34
Total	5.2979	29.1829	57.7369	0.3321	388.5267	0.4694	388.9960	42.7919	0.4463	43.2382		34,661.93 71	34,661.93 71	0.2811	2.9917	35,560.48 58

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8319	36.2661	49.4517	0.0829		1.7239	1.7239		1.6109	1.6109		7,952.9215	7,952.9215	2.1795		8,007.4085
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	3.8319	36.2661	49.4517	0.0829		1.7239	1.7239		1.6109	1.6109		7,952.9215	7,952.9215	2.1795		8,007.4085

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	0.0793	4.3586	0.8274	0.0267	74.4275	0.0704	74.4979	7.5751	0.0673	7.6424		2,827.8451	2,827.8451	4.4100e-003	0.4445	2,960.4050
Vendor	0.0571	1.6724	0.5280	0.0125	37.2387	0.0233	37.2620	3.8006	0.0223	3.8229		1,314.3532	1,314.3532	3.3300e-003	0.1765	1,367.0273
Worker	0.4992	0.3530	5.5645	0.0161	178.3460	7.8600e-003	178.3539	18.0867	7.2400e-003	18.0939		1,652.2079	1,652.2079	0.0274	0.0339	1,662.9837
Total	0.6356	6.3840	6.9198	0.0554	290.0122	0.1016	290.1137	29.4624	0.0969	29.5592		5,794.4062	5,794.4062	0.0352	0.6548	5,990.4160

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2023

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	1.0897	8.7716	57.6740	0.0829		0.1307	0.1307		0.1307	0.1307	0.0000	7,952.9215	7,952.9215	2.1795		8,007.4085
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0897	8.7716	57.6740	0.0829		0.1307	0.1307		0.1307	0.1307	0.0000	7,952.9215	7,952.9215	2.1795		8,007.4085

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	0.0793	4.3586	0.8274	0.0267	12.6170	0.0704	12.6874	1.4072	0.0673	1.4745		2,827.8451	2,827.8451	4.4100e-003	0.4445	2,960.4050
Vendor	0.0571	1.6724	0.5280	0.0125	6.3335	0.0233	6.3568	0.7167	0.0223	0.7389		1,314.3532	1,314.3532	3.3300e-003	0.1765	1,367.0273
Worker	0.4992	0.3530	5.5645	0.0161	30.0008	7.8600e-003	30.0087	3.2837	7.2400e-003	3.2910		1,652.2079	1,652.2079	0.0274	0.0339	1,662.9837
Total	0.6356	6.3840	6.9198	0.0554	48.9512	0.1016	49.0528	5.4076	0.0969	5.5044		5,794.4062	5,794.4062	0.0352	0.6548	5,990.4160

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2024

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	3.6349	33.9857	49.4949	0.0829		1.5543	1.5543		1.4515	1.4515		7,955.9747	7,955.9747	2.1746		8,010.3402
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	3.6349	33.9857	49.4949	0.0829		1.5543	1.5543		1.4515	1.4515		7,955.9747	7,955.9747	2.1746		8,010.3402

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	0.0785	4.3035	0.8206	0.0261	74.4275	0.0699	74.4974	7.5751	0.0669	7.6420		2,761.6593	2,761.6593	4.4300e-003	0.4341	2,891.1192
Vendor	0.0539	1.6466	0.4924	0.0122	37.2387	0.0232	37.2619	3.8006	0.0222	3.8228		1,285.1889	1,285.1889	3.0700e-003	0.1723	1,336.6131
Worker	0.4631	0.3099	5.1336	0.0156	178.3460	7.4200e-003	178.3534	18.0867	6.8300e-003	18.0935		1,609.5448	1,609.5448	0.0243	0.0311	1,619.4223
Total	0.5955	6.2601	6.4466	0.0539	290.0122	0.1005	290.1127	29.4624	0.0959	29.5583		5,656.3930	5,656.3930	0.0318	0.6375	5,847.1546

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2024

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	1.0897	8.7716	57.6740	0.0829		0.1307	0.1307		0.1307	0.1307	0.0000	7,955.9746	7,955.9746	2.1746		8,010.3402
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0897	8.7716	57.6740	0.0829		0.1307	0.1307		0.1307	0.1307	0.0000	7,955.9746	7,955.9746	2.1746		8,010.3402

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	0.0785	4.3035	0.8206	0.0261	12.6170	0.0699	12.6869	1.4072	0.0669	1.4741		2,761.6593	2,761.6593	4.4300e-003	0.4341	2,891.1192
Vendor	0.0539	1.6466	0.4924	0.0122	6.3335	0.0232	6.3566	0.7167	0.0222	0.7388		1,285.1889	1,285.1889	3.0700e-003	0.1723	1,336.6131
Worker	0.4631	0.3099	5.1336	0.0156	30.0008	7.4200e-003	30.0082	3.2837	6.8300e-003	3.2906		1,609.5448	1,609.5448	0.0243	0.0311	1,619.4223
Total	0.5955	6.2601	6.4466	0.0539	48.9512	0.1005	49.0518	5.4076	0.0959	5.5035		5,656.3930	5,656.3930	0.0318	0.6375	5,847.1546

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 3 Solar Electrical - 2024

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	15.1020	140.2529	196.8459	0.3030		7.1205	7.1205		6.5623	6.5623		29,216.75 83	29,216.75 83	9.3115		29,449.54 60
Total	15.1020	140.2529	196.8459	0.3030		7.1205	7.1205		6.5623	6.5623		29,216.75 83	29,216.75 83	9.3115		29,449.54 60

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	0.0942	5.1642	0.9848	0.0313	89.3130	0.0839	89.3969	9.0901	0.0803	9.1704		3,313.991 2	3,313.991 2	5.3200e- 003	0.5209	3,469.343 1
Vendor	0.1618	4.9399	1.4771	0.0367	111.7162	0.0695	111.7857	11.4018	0.0665	11.4683		3,855.566 8	3,855.566 8	9.2200e- 003	0.5169	4,009.839 3
Worker	1.5437	1.0331	17.1121	0.0520	594.4866	0.0247	594.5114	60.2890	0.0228	60.3117		5,365.149 2	5,365.149 2	0.0811	0.1037	5,398.074 5
Total	1.7997	11.1372	19.5739	0.1200	795.5157	0.1782	795.6939	80.7809	0.1696	80.9504		12,534.70 72	12,534.70 72	0.0956	1.1415	12,877.25 68

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 3 Solar Electrical - 2024

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	4.1176	33.3481	224.0987	0.3030		0.4932	0.4932		0.4932	0.4932	0.0000	29,216.75 83	29,216.75 83	9.3115		29,449.54 60
Total	4.1176	33.3481	224.0987	0.3030		0.4932	0.4932		0.4932	0.4932	0.0000	29,216.75 83	29,216.75 83	9.3115		29,449.54 60

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	0.0942	5.1642	0.9848	0.0313	15.1404	0.0839	15.2243	1.6886	0.0803	1.7689		3,313.991 2	3,313.991 2	5.3200e- 003	0.5209	3,469.343 1
Vendor	0.1618	4.9399	1.4771	0.0367	19.0004	0.0695	19.0699	2.1500	0.0665	2.2165		3,855.566 8	3,855.566 8	9.2200e- 003	0.5169	4,009.839 3
Worker	1.5437	1.0331	17.1121	0.0520	100.0027	0.0247	100.0274	10.9457	0.0228	10.9685		5,365.149 2	5,365.149 2	0.0811	0.1037	5,398.074 5
Total	1.7997	11.1372	19.5739	0.1200	134.1434	0.1782	134.3216	14.7843	0.1696	14.9538		12,534.70 72	12,534.70 72	0.0956	1.1415	12,877.25 68

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 S3 Substation Paving and Testing - 2024

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	0.9663	8.9105	12.6051	0.0194		0.3934	0.3934		0.3657	0.3657		1,840.2699	1,840.2699	0.5493		1,854.0012
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9663	8.9105	12.6051	0.0194		0.3934	0.3934		0.3657	0.3657		1,840.2699	1,840.2699	0.5493		1,854.0012

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	0.0785	4.3035	0.8206	0.0261	74.4275	0.0699	74.4974	7.5751	0.0669	7.6420		2,761.6593	2,761.6593	4.4300e-003	0.4341	2,891.1192
Vendor	0.0539	1.6466	0.4924	0.0122	37.2387	0.0232	37.2619	3.8006	0.0222	3.8228		1,285.1889	1,285.1889	3.0700e-003	0.1723	1,336.6131
Worker	0.1852	0.1240	2.0535	6.2400e-003	71.3384	2.9700e-003	71.3414	7.2347	2.7300e-003	7.2374		643.8179	643.8179	9.7300e-003	0.0124	647.7689
Total	0.3176	6.0741	3.3664	0.0446	183.0046	0.0961	183.1006	18.6104	0.0918	18.7022		4,690.6662	4,690.6662	0.0172	0.6188	4,875.5012

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 S3 Substation Paving and Testing - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2929	3.6126	14.3068	0.0194		0.0306	0.0306		0.0306	0.0306	0.0000	1,840.2699	1,840.2699	0.5493		1,854.0012
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2929	3.6126	14.3068	0.0194		0.0306	0.0306		0.0306	0.0306	0.0000	1,840.2699	1,840.2699	0.5493		1,854.0012

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	0.0785	4.3035	0.8206	0.0261	12.6170	0.0699	12.6869	1.4072	0.0669	1.4741		2,761.6593	2,761.6593	4.4300e-003	0.4341	2,891.1192
Vendor	0.0539	1.6466	0.4924	0.0122	6.3335	0.0232	6.3566	0.7167	0.0222	0.7388		1,285.1889	1,285.1889	3.0700e-003	0.1723	1,336.6131
Worker	0.1852	0.1240	2.0535	6.2400e-003	12.0003	2.9700e-003	12.0033	1.3135	2.7300e-003	1.3162		643.8179	643.8179	9.7300e-003	0.0124	647.7689
Total	0.3176	6.0741	3.3664	0.0446	30.9508	0.0961	31.0468	3.4373	0.0918	3.5291		4,690.6662	4,690.6662	0.0172	0.6188	4,875.5012

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 4 Solar Gentie - 2024

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	0.8763	8.5237	8.5915	0.0167		0.3256	0.3256		0.3033	0.3033		1,579.8247	1,579.8247	0.4650		1,591.4502
Total	0.8763	8.5237	8.5915	0.0167		0.3256	0.3256		0.3033	0.3033		1,579.8247	1,579.8247	0.4650		1,591.4502

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	0.0942	5.1642	0.9848	0.0313	89.3130	0.0839	89.3969	9.0901	0.0803	9.1704		3,313.9912	3,313.9912	5.3200e-003	0.5209	3,469.3431
Vendor	0.0539	1.6466	0.4924	0.0122	37.2387	0.0232	37.2619	3.8006	0.0222	3.8228		1,285.1889	1,285.1889	3.0700e-003	0.1723	1,336.6131
Worker	0.7718	0.5165	8.5560	0.0260	297.2433	0.0124	297.2557	30.1445	0.0114	30.1559		2,682.5746	2,682.5746	0.0405	0.0518	2,699.0372
Total	0.9199	7.3274	10.0331	0.0695	423.7950	0.1195	423.9144	43.0352	0.1138	43.1490		7,281.7547	7,281.7547	0.0489	0.7450	7,504.9934

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 4 Solar Gentie - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2848	4.5194	10.0259	0.0167		0.0262	0.0262		0.0262	0.0262	0.0000	1,579.8247	1,579.8247	0.4650		1,591.4502
Total	0.2848	4.5194	10.0259	0.0167		0.0262	0.0262		0.0262	0.0262	0.0000	1,579.8247	1,579.8247	0.4650		1,591.4502

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	0.0942	5.1642	0.9848	0.0313	15.1404	0.0839	15.2243	1.6886	0.0803	1.7689		3,313.9912	3,313.9912	5.3200e-003	0.5209	3,469.3431
Vendor	0.0539	1.6466	0.4924	0.0122	6.3335	0.0232	6.3566	0.7167	0.0222	0.7388		1,285.1889	1,285.1889	3.0700e-003	0.1723	1,336.6131
Worker	0.7718	0.5165	8.5560	0.0260	50.0013	0.0124	50.0137	5.4729	0.0114	5.4843		2,682.5746	2,682.5746	0.0405	0.0518	2,699.0372
Total	0.9199	7.3274	10.0331	0.0695	71.4752	0.1195	71.5946	7.8781	0.1138	7.9920		7,281.7547	7,281.7547	0.0489	0.7450	7,504.9934

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7619	1.5405	11.3955	0.0261	2.5594	0.0211	2.5804	0.6823	0.0198	0.7021		2,680.7248	2,680.7248	0.1055	0.1107	2,716.3548
Unmitigated	0.7619	1.5405	11.3955	0.0261	2.5594	0.0211	2.5804	0.6823	0.0198	0.7021		2,680.7248	2,680.7248	0.1055	0.1107	2,716.3548

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	89.30	89.30	89.30	1,212,541	1,212,541
Total	89.30	89.30	89.30	1,212,541	1,212,541

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	40.00	40.00	40.00	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.526992	0.056742	0.174739	0.140288	0.030240	0.007815	0.006009	0.021774	0.000488	0.000160	0.028107	0.000925	0.005722

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250
Unmitigated	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250
Total	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250
Total	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250

7.0 Water Detail

7.1 Mitigation Measures Water

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stagecoach Solar plus Calcite Sub

Mojave Desert AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	89,300.00	1000sqft	2,050.05	89,300,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Stagecoach facilities plus Calcite Substation

Land Use - Stagecoach solar field and gen-tie combined approx 1,975 acres plus Calcite substation 75 acres: 2,050 acres land use type. General Heavy Industry since over 5,000 ksf

Construction Phase - Sequence covers 18 months of activity

Off-road Equipment - Ph 1 up to 65 pcs equipment

Off-road Equipment - Ph 2 up to 98 pcs equipment

Off-road Equipment - Ph 3 up to 66 pcs equipment

Off-road Equipment - Ph 4 up to 6 pcs equipment

Off-road Equipment - Ph S1 up to 13 pcs equipment

Off-road Equipment - Ph S2 up to 22 pcs equipment

Off-road Equipment - Ph S3 up to 6 pcs equipment

Trips and VMT - up to 800 worker trips daily plus 10,600 heavy duty haul roundtrips for solar facility

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

On-road Fugitive Dust - all vehicle classes may travel final leg or 5 pct of trip on unpaved surface

Grading - Grading minimized as possible

Vehicle Trips - operational trips approximately 0.001 trip per ksf

Consumer Products - consumer products not applicable

Area Coating - architectural coatings not applicable

Energy Use - consumption of utility natural gas and grid electricity not applicable

Water And Wastewater - 0.6 acre feet annual outdoor water use. minimal grid electricity demand for indoor water use and minimal demand for wastewater treatment.

Solid Waste - minimal demand for solid waste disposal

Land Use Change - up to 2050 acres land use change

Sequestration -

Construction Off-road Equipment Mitigation - Offroad equipment at Tier 4 standards. Dust control soil stabilizer or dust suppressant is 84 pct effective per SCAQMD guideline Table XI-D

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	44650000	0
tblAreaCoating	Area_Nonresidential_Interior	133950000	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	16.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	36.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	60.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	25.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	14.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	17.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	26.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	155,000.00	225.00
tblConstructionPhase	NumDays	155,000.00	100.00
tblConstructionPhase	NumDays	11,000.00	225.00
tblConstructionPhase	NumDays	11,000.00	100.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	6,000.00	150.00
tblConstructionPhase	NumDays	6,000.00	75.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	1.97	0.00
tblEnergyUse	T24NG	15.20	0.00
tblGrading	AcresOfGrading	5,850.00	1,975.00
tblGrading	AcresOfGrading	187.50	75.00
tblGrading	MaterialExported	0.00	3,000.00
tblGrading	MaterialImported	0.00	51,000.00
tblOffRoadEquipment	HorsePower	231.00	9.00
tblOffRoadEquipment	LoadFactor	0.29	0.56
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	16.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	13.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	18.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOffRoadEquipment	UsageHours	7.00	12.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOffRoadEquipment	UsageHours	8.00	12.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	HaulingPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	VendorPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblOnRoadDust	WorkerPercentPave	100.00	95.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	110,732.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripLength	20.00	50.00
tblTripsAndVMT	HaulingTripNumber	0.00	3,600.00
tblTripsAndVMT	HaulingTripNumber	6,750.00	1,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	13,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	4,500.00
tblTripsAndVMT	HaulingTripNumber	0.00	3,600.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,000.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,400.00
tblTripsAndVMT	VendorTripLength	6.60	25.00
tblTripsAndVMT	VendorTripLength	6.60	25.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripLength	6.60	25.00
tbITripsAndVMT	VendorTripNumber	0.00	60.00
tbITripsAndVMT	VendorTripNumber	0.00	20.00
tbITripsAndVMT	VendorTripNumber	14,636.00	160.00
tbITripsAndVMT	VendorTripNumber	0.00	20.00
tbITripsAndVMT	VendorTripNumber	0.00	60.00
tbITripsAndVMT	VendorTripNumber	0.00	20.00
tbITripsAndVMT	VendorTripNumber	14,636.00	20.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripLength	16.80	40.00
tbITripsAndVMT	WorkerTripNumber	163.00	200.00
tbITripsAndVMT	WorkerTripNumber	33.00	60.00
tbITripsAndVMT	WorkerTripNumber	37,506.00	600.00
tbITripsAndVMT	WorkerTripNumber	55.00	60.00
tbITripsAndVMT	WorkerTripNumber	165.00	200.00
tbITripsAndVMT	WorkerTripNumber	15.00	24.00
tbITripsAndVMT	WorkerTripNumber	37,506.00	100.00
tbIVehicleTrips	CC_TL	6.60	40.00
tbIVehicleTrips	CNW_TL	6.60	40.00
tbIVehicleTrips	CW_TL	14.70	40.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	6.42	1.0000e-003
tblVehicleTrips	SU_TR	5.09	1.0000e-003
tblVehicleTrips	WD_TR	3.93	1.0000e-003
tblWater	IndoorWaterUseRate	20,650,625,000.00	0.00
tblWater	OutdoorWaterUseRate	0.00	196,000.00

2.0 Emissions Summary

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2023	89.0158	879.6944	754.7359	2.0572	3,824.7919	36.1218	3,860.9138	446.5100	33.3019	479.8118	0.0000	203,014.4773	203,014.4773	47.0675	5.5829	205,854.8596
2024	38.6480	353.0790	389.6250	1.0761	2,594.6642	14.6783	2,609.3424	263.4593	13.5549	277.0142	0.0000	106,810.8416	106,810.8416	21.8973	3.6380	108,442.3927
Maximum	89.0158	879.6944	754.7359	2.0572	3,824.7919	36.1218	3,860.9138	446.5100	33.3019	479.8118	0.0000	203,014.4773	203,014.4773	47.0675	5.5829	205,854.8596

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					
2023	27.9689	164.7684	913.8533	2.0572	685.6426	3.3205	688.9631	101.1547	3.2789	104.4336	0.0000	203,014.4771	203,014.4771	47.0675	5.5829	205,854.8594
2024	15.0553	96.5761	475.9140	1.0761	437.4779	1.7223	439.2002	48.1995	1.6947	49.8941	0.0000	106,810.8415	106,810.8415	21.8973	3.6380	108,442.3926
Maximum	27.9689	164.7684	913.8533	2.0572	685.6426	3.3205	688.9631	101.1547	3.2789	104.4336	0.0000	203,014.4771	203,014.4771	47.0675	5.5829	205,854.8594

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	66.30	78.80	-21.44	0.00	82.50	90.07	82.56	78.96	89.39	79.61	0.00	0.00	0.00	0.00	0.00	0.00

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6940	1.6289	9.5144	0.0238	2.5594	0.0211	2.5804	0.6823	0.0198	0.7021		2,446.9947	2,446.9947	0.1033	0.1127	2,483.1555
Total	1.5384	1.7119	18.6304	0.0245	2.5594	0.0536	2.6129	0.6823	0.0523	0.7346		2,466.5382	2,466.5382	0.1545	0.1127	2,503.9805

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	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6940	1.6289	9.5144	0.0238	2.5594	0.0211	2.5804	0.6823	0.0198	0.7021		2,446.9947	2,446.9947	0.1033	0.1127	2,483.1555
Total	1.5384	1.7119	18.6304	0.0245	2.5594	0.0536	2.6129	0.6823	0.0523	0.7346		2,466.5382	2,466.5382	0.1545	0.1127	2,503.9805

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1 Solar Site Preparation	Site Preparation	7/1/2023	12/22/2023	6	150	1
2	S1 Substation Grading	Site Preparation	9/30/2023	12/26/2023	6	75	S1
3	2 Solar Installation	Building Construction	9/30/2023	6/18/2024	6	225	2
4	S2 Substation Installation	Paving	10/30/2023	7/17/2024	6	225	S2
5	3 Solar Electrical	Trenching	7/1/2024	12/21/2024	6	150	3
6	S3 Substation Paving and Testing	Paving	7/1/2024	10/24/2024	6	100	S3
7	4 Solar Gentie	Building Construction	8/30/2024	12/24/2024	6	100	4

Acres of Grading (Site Preparation Phase): 1975

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1 Solar Site Preparation	Graders	13	12.00	187	0.41
1 Solar Site Preparation	Off-Highway Tractors	20	10.00	124	0.44
1 Solar Site Preparation	Rollers	2	12.00	80	0.38
1 Solar Site Preparation	Rubber Tired Dozers	13	12.00	247	0.40

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

1 Solar Site Preparation	Scrapers	13	12.00	367	0.48
1 Solar Site Preparation	Skid Steer Loaders	2	12.00	65	0.37
1 Solar Site Preparation	Tractors/Loaders/Backhoes	2	12.00	97	0.37
S1 Substation Grading	Aerial Lifts	1	8.00	63	0.31
S1 Substation Grading	Forklifts	1	8.00	89	0.20
S1 Substation Grading	Graders	1	8.00	187	0.41
S1 Substation Grading	Other Construction Equipment	2	8.00	172	0.42
S1 Substation Grading	Rollers	1	8.00	80	0.38
S1 Substation Grading	Rubber Tired Dozers	2	8.00	247	0.40
S1 Substation Grading	Scrapers	1	8.00	367	0.48
S1 Substation Grading	Skid Steer Loaders	1	8.00	65	0.37
S1 Substation Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
S1 Substation Grading	Welders	1	8.00	46	0.45
2 Solar Installation	Aerial Lifts	4	12.00	63	0.31
2 Solar Installation	Bore/Drill Rigs	13	12.00	221	0.50
2 Solar Installation	Cranes	4	10.00	231	0.29
2 Solar Installation	Forklifts	16	8.00	89	0.20
2 Solar Installation	Generator Sets	0	12.00	84	0.74
2 Solar Installation	Off-Highway Tractors	20	10.00	124	0.44
2 Solar Installation	Rollers	3	12.00	80	0.38
2 Solar Installation	Rubber Tired Dozers	6	12.00	247	0.40
2 Solar Installation	Rubber Tired Dozers	4	12.00	247	0.40
2 Solar Installation	Skid Steer Loaders	6	12.00	65	0.37
2 Solar Installation	Tractors/Loaders/Backhoes	18	12.00	97	0.37
2 Solar Installation	Trenchers	2	12.00	78	0.50
2 Solar Installation	Welders	2	12.00	46	0.45
S2 Substation Installation	Aerial Lifts	3	8.00	63	0.31
S2 Substation Installation	Bore/Drill Rigs	1	8.00	221	0.50
S2 Substation Installation	Cranes	2	8.00	9	0.56

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

S2 Substation Installation	Excavators	2	8.00	158	0.38
S2 Substation Installation	Forklifts	2	8.00	89	0.20
S2 Substation Installation	Generator Sets	2	8.00	84	0.74
S2 Substation Installation	Other Construction Equipment	4	8.00	172	0.42
S2 Substation Installation	Pavers	0	8.00	130	0.42
S2 Substation Installation	Paving Equipment	0	8.00	132	0.36
S2 Substation Installation	Rollers	0	8.00	80	0.38
S2 Substation Installation	Skid Steer Loaders	1	8.00	65	0.37
S2 Substation Installation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
S2 Substation Installation	Welders	1	8.00	46	0.45
3 Solar Electrical	Aerial Lifts	4	12.00	63	0.31
3 Solar Electrical	Cranes	2	10.00	231	0.29
3 Solar Electrical	Forklifts	16	8.00	89	0.20
3 Solar Electrical	Off-Highway Tractors	20	10.00	124	0.44
3 Solar Electrical	Other Construction Equipment	8	12.00	172	0.42
3 Solar Electrical	Rollers	4	12.00	80	0.38
3 Solar Electrical	Skid Steer Loaders	6	12.00	65	0.37
3 Solar Electrical	Trenchers	4	12.00	78	0.50
3 Solar Electrical	Welders	2	12.00	46	0.45
S3 Substation Paving and Testing	Aerial Lifts	2	8.00	63	0.31
S3 Substation Paving and Testing	Other Construction Equipment	1	8.00	172	0.42
S3 Substation Paving and Testing	Pavers	1	8.00	130	0.42
S3 Substation Paving and Testing	Paving Equipment	0	8.00	132	0.36
S3 Substation Paving and Testing	Rollers	1	8.00	80	0.38
S3 Substation Paving and Testing	Welders	1	8.00	46	0.45
4 Solar Gentie	Aerial Lifts	2	8.00	63	0.31
4 Solar Gentie	Cranes	1	10.00	231	0.29
4 Solar Gentie	Forklifts	1	8.00	89	0.20
4 Solar Gentie	Generator Sets	0	8.00	84	0.74

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4 Solar Gentie	Skid Steer Loaders	1	8.00	65	0.37
4 Solar Gentie	Tractors/Loaders/Backhoes	0	7.00	97	0.37
4 Solar Gentie	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1 Solar Site Preparation	65	200.00	60.00	3,600.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
S1 Substation Grading	13	60.00	20.00	1,500.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
2 Solar Installation	98	600.00	160.00	13,500.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
S2 Substation Installation	22	60.00	20.00	4,500.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
3 Solar Electrical	66	200.00	60.00	3,600.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
S3 Substation Paving and Testing	6	24.00	20.00	2,000.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT
4 Solar Gentie	6	100.00	20.00	2,400.00	40.00	25.00	50.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 1 Solar Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					131.3939	0.0000	131.3939	66.0571	0.0000	66.0571			0.0000			0.0000
Off-Road	42.1161	446.2070	305.2762	0.7326		18.1659	18.1659		16.7127	16.7127		70,938.00 68	70,938.00 68	22.9428		71,511.57 65
Total	42.1161	446.2070	305.2762	0.7326	131.3939	18.1659	149.5599	66.0571	16.7127	82.7698		70,938.00 68	70,938.00 68	22.9428		71,511.57 65

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	0.0898	5.5117	1.0095	0.0321	89.3130	0.0845	89.3975	9.0901	0.0809	9.1710		3,396.236 2	3,396.236 2	5.0400e- 003	0.5338	3,555.435 2
Vendor	0.1670	5.3010	1.6118	0.0376	111.7162	0.0700	111.7861	11.4018	0.0669	11.4687		3,946.542 3	3,946.542 3	9.6600e- 003	0.5306	4,104.911 3
Worker	1.6647	1.2062	13.9982	0.0477	594.4866	0.0262	594.5128	60.2890	0.0241	60.3131		4,884.853 4	4,884.853 4	0.0836	0.1142	4,920.987 0
Total	1.9214	12.0190	16.6194	0.1174	795.5158	0.1807	795.6964	80.7809	0.1719	80.9528		12,227.63 19	12,227.63 19	0.0983	1.1787	12,581.33 35

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 1 Solar Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					59.1273	0.0000	59.1273	29.7257	0.0000	29.7257			0.0000			0.0000
Off-Road	9.0625	42.0960	372.7488	0.7326		1.1982	1.1982		1.1982	1.1982	0.0000	70,938.00 67	70,938.00 67	22.9428		71,511.57 64
Total	9.0625	42.0960	372.7488	0.7326	59.1273	1.1982	60.3254	29.7257	1.1982	30.9239	0.0000	70,938.00 67	70,938.00 67	22.9428		71,511.57 64

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	0.0898	5.5117	1.0095	0.0321	15.1404	0.0845	15.2249	1.6886	0.0809	1.7695		3,396.236 2	3,396.236 2	5.0400e- 003	0.5338	3,555.435 2
Vendor	0.1670	5.3010	1.6118	0.0376	19.0004	0.0700	19.0704	2.1500	0.0669	2.2169		3,946.542 3	3,946.542 3	9.6600e- 003	0.5306	4,104.911 3
Worker	1.6647	1.2062	13.9982	0.0477	100.0027	0.0262	100.0289	10.9457	0.0241	10.9698		4,884.853 4	4,884.853 4	0.0836	0.1142	4,920.987 0
Total	1.9214	12.0190	16.6194	0.1174	134.1435	0.1807	134.3241	14.7843	0.1719	14.9562		12,227.63 19	12,227.63 19	0.0983	1.1787	12,581.33 35

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 S1 Substation Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					13.2059	0.0000	13.2059	6.7503	0.0000	6.7503			0.0000			0.0000
Off-Road	4.1496	42.5259	33.6625	0.0679		1.8684	1.8684		1.7234	1.7234		6,537.384 0	6,537.384 0	2.0699		6,589.130 4
Total	4.1496	42.5259	33.6625	0.0679	13.2059	1.8684	15.0743	6.7503	1.7234	8.4736		6,537.384 0	6,537.384 0	2.0699		6,589.130 4

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	0.0748	4.5931	0.8412	0.0267	74.4275	0.0704	74.4979	7.5751	0.0674	7.6425		2,830.196 8	2,830.196 8	4.2000e-003	0.4448	2,962.862 7
Vendor	0.0557	1.7670	0.5373	0.0125	37.2387	0.0233	37.2620	3.8006	0.0223	3.8229		1,315.514 1	1,315.514 1	3.2200e-003	0.1769	1,368.303 8
Worker	0.4994	0.3619	4.1995	0.0143	178.3460	7.8600e-003	178.3539	18.0867	7.2400e-003	18.0939		1,465.456 0	1,465.456 0	0.0251	0.0343	1,476.296 1
Total	0.6299	6.7220	5.5780	0.0536	290.0122	0.1016	290.1138	29.4624	0.0969	29.5593		5,611.166 9	5,611.166 9	0.0325	0.6560	5,807.462 5

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 S1 Substation Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.9426	0.0000	5.9426	3.0376	0.0000	3.0376			0.0000			0.0000
Off-Road	0.8926	6.3882	39.0759	0.0679		0.1099	0.1099		0.1099	0.1099	0.0000	6,537.384 0	6,537.384 0	2.0699		6,589.130 4
Total	0.8926	6.3882	39.0759	0.0679	5.9426	0.1099	6.0526	3.0376	0.1099	3.1476	0.0000	6,537.384 0	6,537.384 0	2.0699		6,589.130 4

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	0.0748	4.5931	0.8412	0.0267	12.6170	0.0704	12.6874	1.4072	0.0674	1.4746		2,830.196 8	2,830.196 8	4.2000e-003	0.4448	2,962.862 7
Vendor	0.0557	1.7670	0.5373	0.0125	6.3335	0.0233	6.3568	0.7167	0.0223	0.7390		1,315.514 1	1,315.514 1	3.2200e-003	0.1769	1,368.303 8
Worker	0.4994	0.3619	4.1995	0.0143	30.0008	7.8600e-003	30.0087	3.2837	7.2400e-003	3.2910		1,465.456 0	1,465.456 0	0.0251	0.0343	1,476.296 1
Total	0.6299	6.7220	5.5780	0.0536	48.9512	0.1016	49.0529	5.4076	0.0969	5.5045		5,611.166 9	5,611.166 9	0.0325	0.6560	5,807.462 5

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	30.0733	297.6985	289.7539	0.6258		13.5033	13.5033		12.4362	12.4362		60,466.93 60	60,466.93 60	19.4228		60,952.50 67
Total	30.0733	297.6985	289.7539	0.6258		13.5033	13.5033		12.4362	12.4362		60,466.93 60	60,466.93 60	19.4228		60,952.50 67

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	0.2245	13.7793	2.5237	0.0802	223.2824	0.2113	223.4937	22.7253	0.2021	22.9274		8,490.590 4	8,490.590 4	0.0126	1.3345	8,888.588 0
Vendor	0.4452	14.1361	4.2981	0.1002	297.9098	0.1866	298.0963	30.4048	0.1784	30.5833		10,524.11 27	10,524.11 27	0.0258	1.4150	10,946.43 01
Worker	4.9941	3.6187	41.9945	0.1432	1,783.459 9	0.0786	1,783.538 5	180.8668	0.0724	180.9392		14,654.56 03	14,654.56 03	0.2509	0.3427	14,762.96 09
Total	5.6637	31.5340	48.8163	0.3236	2,304.652 0	0.4764	2,305.128 5	233.9969	0.4530	234.4499		33,669.26 34	33,669.26 34	0.2892	3.0922	34,597.97 90

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2023

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	8.0793	50.5156	367.7630	0.6258		1.0214	1.0214		1.0214	1.0214	0.0000	60,466.93 59	60,466.93 59	19.4228		60,952.50 67
Total	8.0793	50.5156	367.7630	0.6258		1.0214	1.0214		1.0214	1.0214	0.0000	60,466.93 59	60,466.93 59	19.4228		60,952.50 67

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	0.2245	13.7793	2.5237	0.0802	37.8509	0.2113	38.0622	4.2216	0.2021	4.4237		8,490.590 4	8,490.590 4	0.0126	1.3345	8,888.588 0
Vendor	0.4452	14.1361	4.2981	0.1002	50.6678	0.1866	50.8543	5.7332	0.1784	5.9117		10,524.11 27	10,524.11 27	0.0258	1.4150	10,946.43 01
Worker	4.9941	3.6187	41.9945	0.1432	300.0080	0.0786	300.0866	32.8372	0.0724	32.9095		14,654.56 03	14,654.56 03	0.2509	0.3427	14,762.96 09
Total	5.6637	31.5340	48.8163	0.3236	388.5267	0.4764	389.0032	42.7919	0.4530	43.2449		33,669.26 34	33,669.26 34	0.2892	3.0922	34,597.97 90

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2024

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	29.1267	281.8044	289.6531	0.6263		12.5537	12.5537		11.5608	11.5608		60,513.1450	60,513.1450	19.4334		60,998.9798
Total	29.1267	281.8044	289.6531	0.6263		12.5537	12.5537		11.5608	11.5608		60,513.1450	60,513.1450	19.4334		60,998.9798

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	0.2219	13.6054	2.5036	0.0783	223.2824	0.2099	223.4923	22.7253	0.2008	22.9261		8,291.9236	8,291.9236	0.0127	1.3033	8,680.6162
Vendor	0.4202	13.9158	4.0194	0.0979	297.9097	0.1855	298.0953	30.4048	0.1775	30.5823		10,290.7031	10,290.7031	0.0238	1.3814	10,702.9596
Worker	4.6525	3.1755	38.7428	0.1384	1,783.4599	0.0742	1,783.5341	180.8668	0.0683	180.9352		14,280.7117	14,280.7117	0.2234	0.3147	14,380.0801
Total	5.2947	30.6967	45.2657	0.3147	2,304.6520	0.4697	2,305.1216	233.9969	0.4466	234.4435		32,863.3384	32,863.3384	0.2598	2.9994	33,763.6559

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 2 Solar Installation - 2024

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	8.0793	50.5156	367.7630	0.6263		1.0214	1.0214		1.0214	1.0214	0.0000	60,513.14 49	60,513.14 49	19.4334		60,998.97 98
Total	8.0793	50.5156	367.7630	0.6263		1.0214	1.0214		1.0214	1.0214	0.0000	60,513.14 49	60,513.14 49	19.4334		60,998.97 98

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	0.2219	13.6054	2.5036	0.0783	37.8509	0.2099	38.0608	4.2215	0.2008	4.4224		8,291.923 6	8,291.923 6	0.0127	1.3033	8,680.616 2
Vendor	0.4202	13.9158	4.0194	0.0979	50.6678	0.1855	50.8533	5.7332	0.1775	5.9107		10,290.70 31	10,290.70 31	0.0238	1.3814	10,702.95 96
Worker	4.6525	3.1755	38.7428	0.1384	300.0080	0.0742	300.0822	32.8372	0.0683	32.9055		14,280.71 17	14,280.71 17	0.2234	0.3147	14,380.08 01
Total	5.2947	30.6967	45.2657	0.3147	388.5267	0.4697	388.9963	42.7919	0.4466	43.2385		32,863.33 84	32,863.33 84	0.2598	2.9994	33,763.65 59

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.8319	36.2661	49.4517	0.0829		1.7239	1.7239		1.6109	1.6109		7,952.9215	7,952.9215	2.1795		8,007.4085
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	3.8319	36.2661	49.4517	0.0829		1.7239	1.7239		1.6109	1.6109		7,952.9215	7,952.9215	2.1795		8,007.4085

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	0.0748	4.5931	0.8412	0.0267	74.4275	0.0704	74.4979	7.5751	0.0674	7.6425		2,830.1968	2,830.1968	4.2000e-003	0.4448	2,962.8627
Vendor	0.0557	1.7670	0.5373	0.0125	37.2387	0.0233	37.2620	3.8006	0.0223	3.8229		1,315.5141	1,315.5141	3.2200e-003	0.1769	1,368.3038
Worker	0.4994	0.3619	4.1995	0.0143	178.3460	7.8600e-003	178.3539	18.0867	7.2400e-003	18.0939		1,465.4560	1,465.4560	0.0251	0.0343	1,476.2961
Total	0.6299	6.7220	5.5780	0.0536	290.0122	0.1016	290.1138	29.4624	0.0969	29.5593		5,611.1669	5,611.1669	0.0325	0.6560	5,807.4625

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2023

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	1.0897	8.7716	57.6740	0.0829		0.1307	0.1307		0.1307	0.1307	0.0000	7,952.9215	7,952.9215	2.1795		8,007.4085
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0897	8.7716	57.6740	0.0829		0.1307	0.1307		0.1307	0.1307	0.0000	7,952.9215	7,952.9215	2.1795		8,007.4085

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	0.0748	4.5931	0.8412	0.0267	12.6170	0.0704	12.6874	1.4072	0.0674	1.4746		2,830.1968	2,830.1968	4.2000e-003	0.4448	2,962.8627
Vendor	0.0557	1.7670	0.5373	0.0125	6.3335	0.0233	6.3568	0.7167	0.0223	0.7390		1,315.5141	1,315.5141	3.2200e-003	0.1769	1,368.3038
Worker	0.4994	0.3619	4.1995	0.0143	30.0008	7.8600e-003	30.0087	3.2837	7.2400e-003	3.2910		1,465.4560	1,465.4560	0.0251	0.0343	1,476.2961
Total	0.6299	6.7220	5.5780	0.0536	48.9512	0.1016	49.0529	5.4076	0.0969	5.5045		5,611.1669	5,611.1669	0.0325	0.6560	5,807.4625

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2024

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	3.6349	33.9857	49.4949	0.0829		1.5543	1.5543		1.4515	1.4515		7,955.9747	7,955.9747	2.1746		8,010.3402
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	3.6349	33.9857	49.4949	0.0829		1.5543	1.5543		1.4515	1.4515		7,955.9747	7,955.9747	2.1746		8,010.3402

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	0.0740	4.5351	0.8345	0.0261	74.4275	0.0700	74.4974	7.5751	0.0669	7.6420		2,763.9745	2,763.9745	4.2200e-003	0.4344	2,893.5387
Vendor	0.0525	1.7395	0.5024	0.0122	37.2387	0.0232	37.2619	3.8006	0.0222	3.8228		1,286.3379	1,286.3379	2.9700e-003	0.1727	1,337.8700
Worker	0.4653	0.3176	3.8743	0.0138	178.3460	7.4200e-003	178.3534	18.0867	6.8300e-003	18.0935		1,428.0712	1,428.0712	0.0223	0.0315	1,438.0080
Total	0.5918	6.5922	5.2112	0.0522	290.0122	0.1006	290.1127	29.4624	0.0960	29.5583		5,478.3836	5,478.3836	0.0295	0.6386	5,669.4167

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 S2 Substation Installation - 2024

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	1.0897	8.7716	57.6740	0.0829		0.1307	0.1307		0.1307	0.1307	0.0000	7,955.9746	7,955.9746	2.1746		8,010.3402
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0897	8.7716	57.6740	0.0829		0.1307	0.1307		0.1307	0.1307	0.0000	7,955.9746	7,955.9746	2.1746		8,010.3402

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	0.0740	4.5351	0.8345	0.0261	12.6170	0.0700	12.6869	1.4072	0.0669	1.4741		2,763.9745	2,763.9745	4.2200e-003	0.4344	2,893.5387
Vendor	0.0525	1.7395	0.5024	0.0122	6.3335	0.0232	6.3567	0.7167	0.0222	0.7388		1,286.3379	1,286.3379	2.9700e-003	0.1727	1,337.8700
Worker	0.4653	0.3176	3.8743	0.0138	30.0008	7.4200e-003	30.0082	3.2837	6.8300e-003	3.2906		1,428.0712	1,428.0712	0.0223	0.0315	1,438.0080
Total	0.5918	6.5922	5.2112	0.0522	48.9512	0.1006	49.0518	5.4076	0.0960	5.5035		5,478.3836	5,478.3836	0.0295	0.6386	5,669.4167

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 3 Solar Electrical - 2024

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	15.1020	140.2529	196.8459	0.3030		7.1205	7.1205		6.5623	6.5623		29,216.75 83	29,216.75 83	9.3115		29,449.54 60
Total	15.1020	140.2529	196.8459	0.3030		7.1205	7.1205		6.5623	6.5623		29,216.75 83	29,216.75 83	9.3115		29,449.54 60

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	0.0888	5.4422	1.0014	0.0313	89.3130	0.0840	89.3969	9.0901	0.0803	9.1704		3,316.769 4	3,316.769 4	5.0700e- 003	0.5213	3,472.246 5
Vendor	0.1576	5.2184	1.5073	0.0367	111.7162	0.0696	111.7857	11.4018	0.0666	11.4684		3,859.013 7	3,859.013 7	8.9000e- 003	0.5180	4,013.609 9
Worker	1.5509	1.0585	12.9143	0.0461	594.4866	0.0247	594.5114	60.2890	0.0228	60.3117		4,760.237 2	4,760.237 2	0.0745	0.1049	4,793.360 0
Total	1.7972	11.7191	15.4229	0.1142	795.5157	0.1783	795.6940	80.7809	0.1697	80.9505		11,936.02 03	11,936.02 03	0.0884	1.1442	12,279.21 64

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 3 Solar Electrical - 2024

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	4.1176	33.3481	224.0987	0.3030		0.4932	0.4932		0.4932	0.4932	0.0000	29,216.75 83	29,216.75 83	9.3115		29,449.54 60
Total	4.1176	33.3481	224.0987	0.3030		0.4932	0.4932		0.4932	0.4932	0.0000	29,216.75 83	29,216.75 83	9.3115		29,449.54 60

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	0.0888	5.4422	1.0014	0.0313	15.1404	0.0840	15.2243	1.6886	0.0803	1.7689		3,316.769 4	3,316.769 4	5.0700e- 003	0.5213	3,472.246 5
Vendor	0.1576	5.2184	1.5073	0.0367	19.0004	0.0696	19.0700	2.1500	0.0666	2.2165		3,859.013 7	3,859.013 7	8.9000e- 003	0.5180	4,013.609 9
Worker	1.5509	1.0585	12.9143	0.0461	100.0027	0.0247	100.0274	10.9457	0.0228	10.9685		4,760.237 2	4,760.237 2	0.0745	0.1049	4,793.360 0
Total	1.7972	11.7191	15.4229	0.1142	134.1434	0.1783	134.3217	14.7843	0.1697	14.9539		11,936.02 03	11,936.02 03	0.0884	1.1442	12,279.21 64

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 S3 Substation Paving and Testing - 2024

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	0.9663	8.9105	12.6051	0.0194		0.3934	0.3934		0.3657	0.3657		1,840.2699	1,840.2699	0.5493		1,854.0012
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9663	8.9105	12.6051	0.0194		0.3934	0.3934		0.3657	0.3657		1,840.2699	1,840.2699	0.5493		1,854.0012

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	0.0740	4.5351	0.8345	0.0261	74.4275	0.0700	74.4974	7.5751	0.0669	7.6420		2,763.9745	2,763.9745	4.2200e-003	0.4344	2,893.5387
Vendor	0.0525	1.7395	0.5024	0.0122	37.2387	0.0232	37.2619	3.8006	0.0222	3.8228		1,286.3379	1,286.3379	2.9700e-003	0.1727	1,337.8700
Worker	0.1861	0.1270	1.5497	5.5400e-003	71.3384	2.9700e-003	71.3414	7.2347	2.7300e-003	7.2374		571.2285	571.2285	8.9300e-003	0.0126	575.2032
Total	0.3126	6.4016	2.8867	0.0439	183.0046	0.0961	183.1007	18.6104	0.0919	18.7022		4,621.5409	4,621.5409	0.0161	0.6197	4,806.6119

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 S3 Substation Paving and Testing - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2929	3.6126	14.3068	0.0194		0.0306	0.0306		0.0306	0.0306	0.0000	1,840.2699	1,840.2699	0.5493		1,854.0012
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2929	3.6126	14.3068	0.0194		0.0306	0.0306		0.0306	0.0306	0.0000	1,840.2699	1,840.2699	0.5493		1,854.0012

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	0.0740	4.5351	0.8345	0.0261	12.6170	0.0700	12.6869	1.4072	0.0669	1.4741		2,763.9745	2,763.9745	4.2200e-003	0.4344	2,893.5387
Vendor	0.0525	1.7395	0.5024	0.0122	6.3335	0.0232	6.3567	0.7167	0.0222	0.7388		1,286.3379	1,286.3379	2.9700e-003	0.1727	1,337.8700
Worker	0.1861	0.1270	1.5497	5.5400e-003	12.0003	2.9700e-003	12.0033	1.3135	2.7300e-003	1.3162		571.2285	571.2285	8.9300e-003	0.0126	575.2032
Total	0.3126	6.4016	2.8867	0.0439	30.9508	0.0961	31.0469	3.4373	0.0919	3.5292		4,621.5409	4,621.5409	0.0161	0.6197	4,806.6119

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 4 Solar Gentie - 2024

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	0.8763	8.5237	8.5915	0.0167		0.3256	0.3256		0.3033	0.3033		1,579.8247	1,579.8247	0.4650		1,591.4502
Total	0.8763	8.5237	8.5915	0.0167		0.3256	0.3256		0.3033	0.3033		1,579.8247	1,579.8247	0.4650		1,591.4502

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	0.0888	5.4422	1.0014	0.0313	89.3130	0.0840	89.3969	9.0901	0.0803	9.1704		3,316.7694	3,316.7694	5.0700e-003	0.5213	3,472.2465
Vendor	0.0525	1.7395	0.5024	0.0122	37.2387	0.0232	37.2619	3.8006	0.0222	3.8228		1,286.3379	1,286.3379	2.9700e-003	0.1727	1,337.8700
Worker	0.7754	0.5292	6.4571	0.0231	297.2433	0.0124	297.2557	30.1445	0.0114	30.1559		2,380.1186	2,380.1186	0.0372	0.0525	2,396.6800
Total	0.9167	7.7109	7.9610	0.0666	423.7950	0.1195	423.9145	43.0352	0.1139	43.1491		6,983.2259	6,983.2259	0.0453	0.7464	7,206.7965

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 4 Solar Gentie - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2848	4.5194	10.0259	0.0167		0.0262	0.0262		0.0262	0.0262	0.0000	1,579.8247	1,579.8247	0.4650		1,591.4502
Total	0.2848	4.5194	10.0259	0.0167		0.0262	0.0262		0.0262	0.0262	0.0000	1,579.8247	1,579.8247	0.4650		1,591.4502

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	0.0888	5.4422	1.0014	0.0313	15.1404	0.0840	15.2243	1.6886	0.0803	1.7689		3,316.7694	3,316.7694	5.0700e-003	0.5213	3,472.2465
Vendor	0.0525	1.7395	0.5024	0.0122	6.3335	0.0232	6.3567	0.7167	0.0222	0.7388		1,286.3379	1,286.3379	2.9700e-003	0.1727	1,337.8700
Worker	0.7754	0.5292	6.4571	0.0231	50.0013	0.0124	50.0137	5.4729	0.0114	5.4843		2,380.1186	2,380.1186	0.0372	0.0525	2,396.6800
Total	0.9167	7.7109	7.9610	0.0666	71.4752	0.1195	71.5947	7.8781	0.1139	7.9920		6,983.2259	6,983.2259	0.0453	0.7464	7,206.7965

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6940	1.6289	9.5144	0.0238	2.5594	0.0211	2.5804	0.6823	0.0198	0.7021		2,446.9947	2,446.9947	0.1033	0.1127	2,483.1555
Unmitigated	0.6940	1.6289	9.5144	0.0238	2.5594	0.0211	2.5804	0.6823	0.0198	0.7021		2,446.9947	2,446.9947	0.1033	0.1127	2,483.1555

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	89.30	89.30	89.30	1,212,541	1,212,541
Total	89.30	89.30	89.30	1,212,541	1,212,541

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	40.00	40.00	40.00	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.526992	0.056742	0.174739	0.140288	0.030240	0.007815	0.006009	0.021774	0.000488	0.000160	0.028107	0.000925	0.005722

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250
Unmitigated	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250
Total	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250
Total	0.8443	0.0830	9.1161	6.8000e-004		0.0325	0.0325		0.0325	0.0325		19.5435	19.5435	0.0513		20.8250

7.0 Water Detail

7.1 Mitigation Measures Water

Stagecoach Solar plus Calcite Sub - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

Attachment 3

Avoided GHG Emissions

Cover Sheet

Proposed Near-Term Method for Estimating Generation Fuel Displacement by Avoided Use of Grid Electricity

California Energy Commission, Energy Assessments Division

7-23-15

Summary: The following data sheets contain a functional calculator for estimating generation fuel displacement by avoided use of grid electricity over a five-year period. The avoided electricity is converted to carbon dioxide emissions using the carbon content of the fuel source, natural gas.

The intended audience is the general public, load serving entity resource planning staff, and electric industry stakeholders.

Source of Data: Quarterly Fuel and Energy Report

Key Caveats:

1. These values are produced with data submitted in Spring 2014 pursuant to the Forms and Instructions for Submitting Electricity Resource Plans prepared in support of the *2013 Integrated Energy Policy Report* (CEC-200-2012-007-SF).
2. The heat rates are extrapolated using the historical trend of California's flexible natural gas-fired resources. The method assumes that these resources make up the marginal resource class and would be the resources reduced in use on an annual average basis in response to reductions in electricity demand. Changes to the resource stack, such as increasing renewable energy and the subsequent change to the operation of the grid and its existing resources is not accounted for in the heat rate estimates.
3. A line loss factor of 1.08460, the equivalent of line losses of 7.8 percent, is used to convert the annual average heat rates to onsite adjusted annual average heat rates.
4. Since this method uses annual averages, it is inappropriate for estimating short-term grid variations, including day-to-day

operational changes and seasonal variation. Further, this method is inappropriate for estimating large-scale changes to the electric grid, actions that result in the displacement of terawatt-hours. In addition, direct comparison of new and old emissions may be a more appropriate and accurate measure of emission reductions when generation resources are replaced on a one-for-one basis.

Author:

Bryan Neff, Supply Analysis Office, Energy Assessments Division, 916-654-4414. bryan.neff@energy.ca.gov

Full Report: <http://energy.ca.gov/2015publications/CEC-200-2015-002/CEC-200-2015-002.pdf>

Basis: CEC (2015) Proposed Near-Term Method for Estimating Generation Fuel Displacement by Avoided Use of Grid Electricity

Example: Solar PV Project assumptions: Lucerne Valley capacity factor of ~27% during off-peak hours; assume ~0% on-peak capacity factor when conventional peaking resources are generating.

Average Annual Emissions Equivalent (metric tonnes CO2)	187,120	Typ Ann. Export (MWh) 493,854
Total kWh Savings (10-yrs)	4,938,537,600	
Avoided Emissions Displacement Factor (kg CO2/MWh)	378.90	

Inputs: Generator Size (kW)	200,000
Off-Peak Capacity Factor (Percentage)	29.0%
Off-Peak Export (Percentage)	100%
On-Peak Capacity Factor (Percentage)	0.0%
On-Peak Export (Percentage)	100%
Total Capacity Factor	26.2%

Year	Estimated Energy Generation				Annual Total (mmBtu)	Annual Total (metric tonnes CO2)
	Export		Onsite			
	Load Following (kWh)	Peaking (kWh)	Load Following (kWh)	Peaking (kWh)		
2020	493,853,760	-	-	-	3,545,150	188,141.21
2021	493,853,760	-	-	-	3,541,652	187,955.58
2022	493,853,760	-	-	-	3,538,154	187,769.95
2023	493,853,760	-	-	-	3,534,656	187,584.31
2024	493,853,760	-	-	-	3,531,158	187,398.68
2025	493,853,760	-	-	-	3,527,660	187,213.04
2026	493,853,760	-	-	-	3,524,162	187,027.41
2027	493,853,760	-	-	-	3,520,665	186,841.77
2028	493,853,760	-	-	-	3,517,167	186,656.14
2029	493,853,760	-	-	-	3,513,669	186,470.50
2030	493,853,760	-	-	-	3,510,171	186,284.87
10-yrs Totals	4,938,537,600	-	-	-	35,259,114	1,871,202

Year	Btu/kWh	Btu/kWh	Btu/kWh	Btu/kWh
	Export		Onsite	
	Load Following	Peaking	Load Following	Peaking
2014	7,221	10,554	7,832	11,446
2015	7,214	10,534	7,824	11,426
2016	7,207	10,515	7,817	11,405
2017	7,200	10,496	7,809	11,384
2018	7,193	10,477	7,801	11,363
2019	7,186	10,458	7,794	11,343
2020	7,179	10,439	7,786	11,322
2021	7,171	10,420	7,778	11,301
2022	7,164	10,401	7,770	11,281
2023	7,157	10,382	7,763	11,260
2024	7,150	10,362	7,755	11,239
2025	7,143	10,343	7,747	11,218
2026	7,136	10,324	7,740	11,198
2027	7,129	10,305	7,732	11,177
2028	7,122	10,286	7,724	11,156
2029	7,115	10,267	7,717	11,136
2030	7,108	10,248	7,709	11,115

Conversion Factors	
1 mmBtu NG	117 lbs. CO2
1 lb	0.45359 kg
1000 kg	1 metric tonne

Percentage of Load Balancing Energy From Peaking Resources
2.8%