

APPENDIX A: PROJECT EMISSIONS SUMMARY - CRITERIA POLLUTANTS AND GREENHOUSE GASES

Table 1
Project Emissions Summary - Criteria Pollutants and Greenhouse Gases
PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Daily Threshold

Construction Phase	Average Daily Emissions (lbs/day) ^a						
	ROG	CO	NOx	SOx	PM ₁₀ ^b	PM _{2.5} ^b	CO ₂ e
Project Emissions							
Construction Year 2026	1.66	22.8	16.1	0.04	0.79	0.47	3,589
Construction Year 2027	12.9	348	25.4	0.46	14.8	14.6	92,026
Construction Year 2028	1.17	15.7	11.2	0.03	0.51	0.32	2,478
Maximum Average Daily Emissions (lbs/day)	12.9	348	25.4	0.46	14.8	14.6	92,026
MDAQMD Significance Threshold (lbs/day)	137	548	137	137	82	65	548,000
Exceeds Daily Emission Threshold (Y/N)?	N	N	N	N	N	N	N

Notes:

^a To facilitate comparison to the MDAQMD's daily significance thresholds, the project's annual construction emissions were divided by the maximum number of days construction activity would occur during the year. This was determined using the schedule depicted in Appendix A, Table 3, as summarized below:

Total Days:	460
Total Months:	23
Months per Year:	
Construction Year 2026 =	3
Construction Year 2027 =	12
Construction Year 2028 =	8

^b PM₁₀ and PM_{2.5} emissions represent both exhaust and fugitive dust emissions.

Table 1
Project Emissions Summary - Criteria Pollutants and Greenhouse Gases
PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Yearly Threshold

Phase	Emissions (lbs/phase) ^a						
	ROG	CO	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂ e
Site Mobilization / Site Preparation	49.8	684	481	1.17	22.1	13.8	107,298
Ground Disturbing Activities	75.0	1,029	726	1.77	37.5	21.2	162,039
Electrical Equipment Replacement and Modification	3,244	85,277	7,415	115	3,617	3,539	22,375,165
Site Demobilization	24.9	342	240	0.59	11.0	6.90	53,649
2026 Total (lbs) ^c	100	1,371	965	2.35	47.1	28.0	215,325
2027 Total (lbs) ^c	3,106	83,443	6,104	111	3,559	3,502	22,086,338
2028 Total (lbs) ^c	188	2,520	1,793	4.34	81.3	51.2	396,489
Maximum Yearly Emissions (tons/year)	1.55	41.7	3.05	0.06	1.78	1.75	11,043
MDAQMD Significance Threshold (tons/year)	25	100	25	25	15	12	100,000
Exceeds Threshold (Y/N)?	N	N	N	N	N	N	N

Notes:

^a Emissions presented are the sum of all emissions occurring within the construction phase, regardless of whether an activity is occurring sequentially or concurrently.

^b PM₁₀ and PM_{2.5} emissions represent both exhaust and fugitive dust emissions.

^c Emissions were allotted to specific years based on the schedule depicted in Appendix A, Table 3, as summarized below:

Total Days:	460
Total Months:	23
Months per Year:	
Construction Year 2026 =	3
Construction Year 2027 =	12
Construction Year 2028 =	8

Table 2

Project Emissions Summary - Criteria Pollutants and Greenhouse Gases with Applicant-Proposed Measures*PG&E S-238 Hinkley Compressor Station Electrical Upgrades***Daily Threshold**

Construction Phase	Average Daily Emissions (lbs/day) ^{a, c}						
	ROG	CO	NOx	SOx	PM ₁₀ ^b	PM _{2.5} ^b	CO ₂ e
Project Emissions							
Construction Year 2026	1.66	22.8	11.5	0.04	0.41	0.15	3,589
Construction Year 2027	12.9	348	21.5	0.46	14.5	14.3	92,026
Construction Year 2028	1.17	15.7	8.03	0.03	0.26	0.10	2,478
Maximum Average Daily Emissions (lbs/day)	12.9	348	21.5	0.46	14.5	14.3	92,026
MDAQMD Significance Threshold (lbs/day)	137	548	137	137	82	65	548,000
Exceeds Daily Emission Threshold (Y/N)?	N	N	N	N	N	N	N

Notes:

^a To facilitate comparison to the MDAQMD's daily significance thresholds, the project's annual construction emissions were divided by the maximum number of days construction activity would occur during the year. This was determined using the schedule depicted in Appendix A, Table 3, as summarized below:

Total Days:	460
Total Months:	23
Months per Year:	
Construction Year 2026 =	3
Construction Year 2027 =	12
Construction Year 2028 =	8

^b PM₁₀ and PM_{2.5} emissions represent both exhaust and fugitive dust emissions.

^c Emissions incorporate Applicant-proposed Measures to reduce fugitive dust and construction equipment exhaust emissions, as applicable.

Table 2

Project Emissions Summary - Criteria Pollutants and Greenhouse Gases with Applicant-Proposed Measures*PG&E S-238 Hinkley Compressor Station Electrical Upgrades***Yearly Threshold**

Phase	Emissions (lbs/phase) ^a						
	ROG	CO	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂ e
Site Mobilization / Site Preparation	49.8	684	343	1.17	11.6	4.31	107,298
Ground Disturbing Activities	75.0	1,029	518	1.77	19.2	6.68	162,039
Electrical Equipment Replacement and Modification	3,244	85,277	6,098	115	3,515	3,447	22,375,165
Site Demobilization	24.9	342	171	0.59	5.82	2.15	53,649
2026 Total (lbs) ^{c, d}	100	1,371	688	2.35	24.4	8.76	215,325
2027 Total (lbs) ^{c, d}	3,106	83,443	5,157	111	3,485	3,435	22,086,338
2028 Total (lbs) ^{c, d}	188	2,520	1,285	4.34	42.1	15.7	396,489
Maximum Yearly Emissions (tons/year)	1.55	41.7	2.58	0.06	1.74	1.72	11,043
MDAQMD Significance Threshold (tons/year)	25	100	25	25	15	12	100,000
Exceeds Threshold (Y/N)?	N	N	N	N	N	N	N

Notes:

^a Emissions presented are the sum of all emissions occurring within the construction phase, regardless of whether an activity is occurring sequentially or concurrently.^b PM₁₀ and PM_{2.5} emissions represent both exhaust and fugitive dust emissions.^c Emissions were allotted to specific years based on the schedule depicted in Appendix A, Table 3, as summarized below:

Total Days: 460

Total Months: 23

Months per Year:

Construction Year 2026 = 3

Construction Year 2027 = 12

Construction Year 2028 = 8

^d Emissions incorporate Applicant-proposed Measures to reduce fugitive dust and construction equipment exhaust emissions, as applicable.

Table 3

Preliminary Construction Schedule ^a

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Construction Phase	Duration (Days)	2026												2027											
		Months in which Activity Occurs												Months in which Activity Occurs											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Mobilization / Site Preparation	40										1	1													
Ground Disturbing Activities	60											1	1	1											
Electrical Equipment Replacement and Modification	360													1	1	1	1	1	1	1	1	1	1	1	1
Site Demobilization	40																								
Maximum Days of Activity per Month ^b	460																								
Overlapping Phases		0	0	0	0	0	0	0	0	0	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1

Notes:

^a This schedule depicts the periods during which construction activities could occur. It is expected that construction activities will actually occur intermittently within the identified periods. The final project construction : a full Notice to Proceed, all Applicant-proposed measures and any other environmental mitigation measures have been taken into account, materials needed for construction have been delivered and are ready for instal initiate construction.

^b The maximum days of activity per month was estimated assuming an even distribution of days within the months in which activities are expected to occur.

Table 3

Preliminary Construction Schedule ^a

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Construction Phase	2028												2026											
	Months in which Activity Occurs												Approximate Days of Activity per Month											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Mobilization / Site Preparation																						20	20	
Ground Disturbing Activities																							20	20
Electrical Equipment Replacement and Modification	1	1	1	1	1	1																		
Site Demobilization								1	1															
Maximum Days of Activity per Month ^b													0	0	0	0	0	0	0	0	0	20	20	20
Overlapping Phases	1	1	1	1	1	1	1	1	0	0	0	0												

Notes:

^a This schedule depicts the periods during which construction aschedule can only be determined once the Commission's staff issue a full Notice to Proceed, all Applicant-proposed measures and ilation, and PG&E's contractors have mobilized and are ready to initiate construction.

^b The maximum days of activity per month was estimated assur

Table 3

Preliminary Construction Schedule ^a

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Construction Phase	2027												2028											
	Approximate Days of Activity per Month												Approximate Days of Activity per Month											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Site Mobilization / Site Preparation																								
Ground Disturbing Activities	20																							
Electrical Equipment Replacement and Modification	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20						
Site Demobilization																			20	20				
Maximum Days of Activity per Month ^b	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0	0	0	0
Overlapping Phases																								

Notes:

^a This schedule depicts the periods during which construction activities are planned to occur, from the time a full Notice to Proceed is issued until the project is completed. All Applicant-proposed measures and conditions must be met before construction can begin.

^b The maximum days of activity per month was estimated assuming a 20-day month.

Table 4

Construction Emissions

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Equipment Power Rating (hp) ^d	Equipment Load Factor ^d	Quantity per Day	Number of Days Used ^e	Hours per Day	Miles per Day per Vehicle	Number of Months with Activities			Emission f
								2026	2027	2028	ROG
Site Mobilization / Site Preparation											
Skid Steer	Skid Steer Loader	71	0.37	1	39	10	NA	2	0	0	0.13
Backhoe	Tractors/Loaders/Backhoe	84	0.37	1	39	10	NA	2	0	0	0.18
Large Generator	Generator Large	50	0.74	2	39	10	NA	2	0	0	0.34
Small Honda Generator	Generator Small	7	0.74	2	19	5	NA	2	0	0	0.54
6-ton Forklift	Rough Terrain Forklift	96	0.40	1	39	10	NA	2	0	0	0.12
Water Truck	Onsite Heavy-Duty Diesel	NA	NA	1	39	NA	2	2	0	0	0.12
185 cfm Air Compressor	Air Compressor (Jackhammer)	37	0.48	2	39	10	NA	2	0	0	0.51
Dump Truck	Onsite Heavy-Duty Diesel	NA	NA	1	9	NA	2	2	0	0	0.12
Worker Commutes	Offsite Light-duty Auto/Truck	NA	NA	18	39	NA	20	2	0	0	0.01
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	NA	NA	1	13	NA	20	2	0	0	0.01
Ground Disturbing Activities											
Skid Steer	Skid Steer Loader	71	0.37	1	58	10	NA	2	1	0	0.13
Backhoe	Tractors/Loaders/Backhoe	84	0.37	1	58	10	NA	2	1	0	0.18
Large Generator	Generator Large	50	0.74	2	58	10	NA	2	1	0	0.34
Small Honda Generator	Generator Small	7	0.74	2	29	5	NA	2	1	0	0.54
6-ton Forklift	Rough Terrain Forklift	96	0.40	1	58	10	NA	2	1	0	0.12
Water Truck	Onsite Heavy-Duty Diesel	NA	NA	1	58	NA	2	2	1	0	0.12
185 cfm Air Compressor	Air Compressor (Jackhammer)	37	0.48	2	58	10	NA	2	1	0	0.51
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	NA	NA	1	56	4	2	2	1	0	0.12
Dump Truck	Onsite Heavy-Duty Diesel	NA	NA	1	14	NA	2	2	1	0	0.12
Handheld Asphalt Saw	Concrete/Industrial Saw	33	0.73	1	2	5	NA	2	1	0	0.41
Fugitive Dust	Grading	NA	NA	^g	NA	NA	NA	2	1	0	NA
Worker Commutes	Offsite Light-duty Auto/Truck	NA	NA	18	58	NA	20	2	1	0	0.01
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	NA	NA	1	20	NA	20	2	1	0	0.01
Electrical Equipment Replacement and Modification											
Temporary Generator	PERP Generators ^h	302	--	22	160	24	NA	0	8	0	--
Skid Steer	Skid Steer Loader	71	0.37	1	347	10	NA	0	12	6	0.13
Backhoe	Tractors/Loaders/Backhoe	84	0.37	1	347	10	NA	0	12	6	0.18
Large Generator	Generator Large	50	0.74	2	347	10	NA	0	12	6	0.34
Small Honda Generator	Generator Small	7	0.74	2	173	5	NA	0	12	6	0.54
Manlift	Aerial Lift	46	0.31	1	52	5	NA	0	12	6	0.15
Weld Machine	Welder	46	0.45	2	69	10	NA	0	12	6	0.47
6-ton Forklift	Rough Terrain Forklift	96	0.40	1	347	10	NA	0	12	6	0.12
1/2-Ton Boom Truck	Onsite Heavy-Duty Diesel	NA	NA	1	171	NA	1	0	12	6	0.12
Water Truck	Onsite Heavy-Duty Diesel	NA	NA	1	347	NA	2	0	12	6	0.12
185 cfm Air Compressor	Air Compressor (Jackhammer)	37	0.48	2	347	10	NA	0	12	6	0.51
Vacuum Truck Offsite	Offsite Heavy-Duty Diesel	NA	NA	1	24	NA	20	0	12	6	0.01
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	NA	NA	2	24	NA	2	0	12	6	0.12
Dump Truck	Onsite Heavy-Duty Diesel	NA	NA	1	83	NA	2	0	12	6	0.12
Concrete Pump Truck	Offsite Heavy-Duty Diesel	NA	NA	1	12	NA	20	0	12	6	0.01
Concrete Truck	Offsite Heavy-Duty Diesel	NA	NA	1	12	NA	20	0	12	6	0.01

Table 4

Construction Emissions

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	actors (g/hp-hr for equipment, g/mile for vehicles, lb/ton for truck loading, and lb/mile for grading)						Emissions (lbs/phase) ^b				
		CO	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	ROG	CO	NOx	SOx	PM ₁₀ ^c
Site Mobilization / Site Preparation												
Skid Steer	Skid Steer Loader	3.25	1.81	0.01	0.05	0.05	530.27	2.99	72.51	40.38	0.11	1.14
Backhoe	Tractors/Loaders/Backhoe	3.48	1.89	0.01	0.06	0.06	531.36	4.86	92.03	49.83	0.13	1.67
Large Generator	Generator Large	3.73	3.38	0.01	0.08	0.07	570.28	21.28	234.85	212.88	0.44	4.97
Small Honda Generator	Generator Small	2.86	4.32	0.01	0.17	0.16	570.30	1.18	6.29	9.51	0.02	0.38
6-ton Forklift	Rough Terrain Forklift	3.22	1.64	0.01	0.03	0.03	530.54	3.76	105.18	53.67	0.16	1.08
Water Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.02	0.18	1.87	0.00	0.08
185 cfm Air Compressor	Air Compressor (Jackhammer)	4.82	3.65	0.01	0.10	0.09	570.26	15.47	145.69	110.16	0.21	2.99
Dump Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.00	0.04	0.45	0.00	0.02
Worker Commutes	Offsite Light-duty Auto/Truck	0.90	0.05	0.00	0.31	0.08	268.65	0.27	27.51	1.52	0.08	9.54
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.00	0.05	0.68	0.01	0.23
Ground Disturbing Activities												
Skid Steer	Skid Steer Loader	3.25	1.81	0.01	0.05	0.05	530.27	4.49	108.77	60.57	0.17	1.71
Backhoe	Tractors/Loaders/Backhoe	3.48	1.89	0.01	0.06	0.06	531.36	7.30	138.04	74.75	0.20	2.50
Large Generator	Generator Large	3.73	3.38	0.01	0.08	0.07	570.28	31.91	352.27	319.32	0.66	7.46
Small Honda Generator	Generator Small	2.86	4.32	0.01	0.17	0.16	570.30	1.78	9.43	14.26	0.03	0.57
6-ton Forklift	Rough Terrain Forklift	3.22	1.64	0.01	0.03	0.03	530.54	5.63	157.76	80.50	0.24	1.62
Water Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.03	0.27	2.80	0.01	0.11
185 cfm Air Compressor	Air Compressor (Jackhammer)	4.82	3.65	0.01	0.10	0.09	570.26	23.20	218.53	165.24	0.32	4.49
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.03	0.26	2.71	0.01	0.11
Dump Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.01	0.06	0.67	0.00	0.03
Handheld Asphalt Saw	Concrete/Industrial Saw	4.32	3.53	0.01	0.09	0.08	576.33	0.25	2.62	2.14	0.00	0.05
Fugitive Dust	Grading	NA	NA	NA	0.60	0.06	NA	NA	NA	NA	NA	4.24
Worker Commutes	Offsite Light-duty Auto/Truck	0.90	0.05	0.00	0.31	0.08	268.65	0.40	41.27	2.28	0.12	14.31
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.01	0.07	1.02	0.01	0.35
Electrical Equipment Replacement and Modification												
Temporary Generator	PERP Generators ^h	--	--	--	--	--	--	2,756.08	78,745.03	2,756.08	103.24	3,406.19
Skid Steer	Skid Steer Loader	3.25	1.81	0.01	0.05	0.05	530.27	26.95	652.60	363.40	1.01	10.26
Backhoe	Tractors/Loaders/Backhoe	3.48	1.89	0.01	0.06	0.06	531.36	43.78	828.24	448.50	1.19	14.99
Large Generator	Generator Large	3.73	3.38	0.01	0.08	0.07	570.28	191.48	2,113.62	1,915.91	3.97	44.75
Small Honda Generator	Generator Small	2.86	4.32	0.01	0.17	0.16	570.30	10.66	56.58	85.55	0.16	3.44
Manlift	Aerial Lift	3.08	2.87	0.01	0.02	0.02	588.90	1.24	25.13	23.49	0.04	0.17
Weld Machine	Welder	4.49	3.57	0.01	0.10	0.09	570.26	29.20	282.13	224.17	0.44	5.97
6-ton Forklift	Rough Terrain Forklift	3.22	1.64	0.01	0.03	0.03	530.54	33.81	946.58	482.99	1.47	9.70
1/2-Ton Boom Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.04	0.40	4.14	0.01	0.17
Water Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.18	1.61	16.81	0.04	0.69
185 cfm Air Compressor	Air Compressor (Jackhammer)	4.82	3.65	0.01	0.10	0.09	570.26	139.22	1,311.20	991.42	1.90	26.92
Vacuum Truck Offsite	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.01	0.09	1.25	0.01	0.43
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.02	0.22	2.32	0.01	0.09
Dump Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.04	0.39	4.03	0.01	0.16
Concrete Pump Truck	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.00	0.04	0.63	0.01	0.21
Concrete Truck	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.00	0.04	0.63	0.01	0.21

Table 4

Construction Emissions

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type		Emissions (metric tons/phase) ^b	Weight Factor ^f		
		PM _{2.5} ^c	CO ₂ e	2026	2027	2028
Site Mobilization / Site Preparation						
Skid Steer	Skid Steer Loader	1.05	5.37	1	0	0
Backhoe	Tractors/Loaders/Backhoe	1.53	6.37	1	0	0
Large Generator	Generator Large	4.59	16.28	1	0	0
Small Honda Generator	Generator Small	0.35	0.57	1	0	0
6-ton Forklift	Rough Terrain Forklift	0.98	7.86	1	0	0
Water Truck	Onsite Heavy-Duty Diesel	0.02	0.23	1	0	0
185 cfm Air Compressor	Air Compressor (Jackhammer)	2.75	7.82	1	0	0
Dump Truck	Onsite Heavy-Duty Diesel	0.01	0.06	1	0	0
Worker Commutes	Offsite Light-duty Auto/Truck	2.44	3.73	1	0	0
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.07	0.38	1	0	0
Ground Disturbing Activities						
Skid Steer	Skid Steer Loader	1.58	8.06	0.67	0.33	0
Backhoe	Tractors/Loaders/Backhoe	2.30	9.56	0.67	0.33	0
Large Generator	Generator Large	6.89	24.42	0.67	0.33	0
Small Honda Generator	Generator Small	0.53	0.85	0.67	0.33	0
6-ton Forklift	Rough Terrain Forklift	1.47	11.79	0.67	0.33	0
Water Truck	Onsite Heavy-Duty Diesel	0.03	0.35	0.67	0.33	0
185 cfm Air Compressor	Air Compressor (Jackhammer)	4.12	11.72	0.67	0.33	0
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	0.03	0.34	0.67	0.33	0
Dump Truck	Onsite Heavy-Duty Diesel	0.01	0.08	0.67	0.33	0
Handheld Asphalt Saw	Concrete/Industrial Saw	0.05	0.16	0.67	0.33	0
Fugitive Dust	Grading	0.46	NA	0.67	0.33	0
Worker Commutes	Offsite Light-duty Auto/Truck	3.67	5.60	0.67	0.33	0
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.10	0.57	0.67	0.33	0
Electrical Equipment Replacement and Modification						
Temporary Generator	PERP Generators ^h	3,406.19	9,682.84	0	1	0
Skid Steer	Skid Steer Loader	9.45	48.37	0	0.67	0.33
Backhoe	Tractors/Loaders/Backhoe	13.80	57.35	0	0.67	0.33
Large Generator	Generator Large	41.35	146.54	0	0.67	0.33
Small Honda Generator	Generator Small	3.17	5.12	0	0.67	0.33
Manlift	Aerial Lift	0.16	2.18	0	0.67	0.33
Weld Machine	Welder	5.53	16.24	0	0.67	0.33
6-ton Forklift	Rough Terrain Forklift	8.82	70.74	0	0.67	0.33
1/2-Ton Boom Truck	Onsite Heavy-Duty Diesel	0.05	0.51	0	0.67	0.33
Water Truck	Onsite Heavy-Duty Diesel	0.21	2.09	0	0.67	0.33
185 cfm Air Compressor	Air Compressor (Jackhammer)	24.74	70.34	0	0.67	0.33
Vacuum Truck Offsite	Offsite Heavy-Duty Diesel	0.12	0.70	0	0.67	0.33
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	0.03	0.29	0	0.67	0.33
Dump Truck	Onsite Heavy-Duty Diesel	0.05	0.50	0	0.67	0.33
Concrete Pump Truck	Offsite Heavy-Duty Diesel	0.06	0.35	0	0.67	0.33
Concrete Truck	Offsite Heavy-Duty Diesel	0.06	0.35	0	0.67	0.33

Table 4

Construction Emissions

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Equipment Power Rating (hp) ^d	Equipment Load Factor ^d	Quantity per Day	Number of Days Used ^e	Hours per Day	Miles per Day per Vehicle	Number of Months with Activities			Emission ^f
								2026	2027	2028	
Jumping Jack	Plate Compactor	8	0.43	1	151	5	NA	0	12	6	0.55
Handheld Asphalt Saw	Concrete/Industrial Saw	33	0.73	1	14	5	NA	0	12	6	0.41
Handheld Core Drill	Other General Industrial Equipment	35	0.34	1	16	5	NA	0	12	6	0.45
Vibraplate	Plate Compactor	8	0.43	1	151	5	NA	0	12	6	0.55
Fugitive Dust	Truck Loading	NA	NA	1	NA	NA	NA	0	12	6	NA
Worker Commutes	Offsite Light-duty Auto/Truck	NA	NA	18	347	NA	20	0	12	6	0.01
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	NA	NA	2	117	NA	20	0	12	6	0.01
Demobilization											
Skid Steer	Skid Steer Loader	71	0.37	1	19	10	NA	0	0	2	0.13
Backhoe	Tractors/Loaders/Backhoe	84	0.37	1	19	10	NA	0	0	2	0.18
Large Generator	Generator Large	50	0.74	2	19	10	NA	0	0	2	0.34
Small Honda Generator	Generator Small	7	0.74	2	10	5	NA	0	0	2	0.54
6-ton Forklift	Rough Terrain Forklift	96	0.40	1	19	10	NA	0	0	2	0.12
Water Truck	Onsite Heavy-Duty Diesel	NA	NA	1	19	NA	2	0	0	2	0.12
185 cfm Air Compressor	Air Compressor (Jackhammer)	37	0.48	2	19	10	NA	0	0	2	0.51
Dump Truck	Onsite Heavy-Duty Diesel	NA	NA	1	5	NA	2	0	0	2	0.12
Worker Commutes	Offsite Light-duty Auto/Truck	NA	NA	18	19	NA	20	0	0	2	0.01
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	NA	NA	1	7	NA	20	0	0	2	0.01

Notes:

NA = Parameter not required for computing emissions.

^a Unless otherwise noted, equipment/vehicle list and daily use provided by PG&E.^b The following conversion factors were used to estimate emissions:

1 lb =	453.6	g
1 ton =	2,000	lbs
1 metric ton =	1,000,000	g
1 yd ³ =	1.2641662	tons

^c PM₁₀ and PM_{2.5} emissions include only paved road fugitive dust emissions, as it is assumed all onsite and offsite travel will be on paved roads.^d Unless otherwise indicated, default equipment power ratings and load factors were used, as taken from Table G-12 of Appendix G of the *CalEEMod User's Guide* (ICF 2022). The small generator was assumed to be 7 hp and^e A number of vehicles and equipment will be used for only a portion of the total duration for each phase.^f The weight factors are used to calculate annual emissions below and are derived based on the months of activity per year during the construction period.^g Fugitive Dust emissions from Grading activities are a result of smoothing ungraded areas and were estimated per the details provided below:

Activity	Year	Area Graded (acres/phase) ¹	Grader VMT (miles/phase) ²	Emission Factors (lb/mile)		Emissions (lb/phase)	
				PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5}
Grading	2026	2.7	1.83	1.543	0.167	2.8	0.3
Grading	2027	1.3	0.92	1.543	0.167	1.4	0.2
Grading	2028	0	0.00	1.543	0.167	0.0	0.0

Notes:

¹ Total area to be graded is as follows, as provided by PG&E: 4 acres.² Vehicle miles traveled by graders estimated as follows, per methodology provided in Section 4.4.1 of Appendix C of the *CalEEMod User's Guide* (ICF 2022):VMT (mile/phase) = Area Graded (acres/phase) / Wb (ft) X 43,560 (ft²/acre) / 5,280 (ft/mile), where

Wb is the blade width of the grader; the CalEEMod default for Wb is = 12 ft.

Table 4

Construction Emissions

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Factors (g/hp-hr for equipment, g/mile for vehicles, lb/ton for truck loading, and lb/mile for grading)						Emissions (lbs/phase) ^b				
		CO	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	ROG	CO	NOx	SOx	PM ₁₀ ^c
Jumping Jack	Plate Compactor	3.47	4.14	0.01	0.16	0.15	570.31	3.13	19.87	23.72	0.05	0.93
Handheld Asphalt Saw	Concrete/Industrial Saw	4.32	3.53	0.01	0.09	0.08	576.33	1.50	15.71	12.84	0.03	0.31
Handheld Core Drill	Other General Industrial Equipment	4.59	3.59	0.01	0.11	0.10	589.87	0.95	9.64	7.53	0.01	0.24
Vibraplate	Plate Compactor	3.47	4.14	0.01	0.16	0.15	570.31	3.13	19.87	23.72	0.05	0.93
Fugitive Dust	Truck Loading	NA	NA	NA	0.00026	0.00004	NA	NA	NA	NA	NA	0.18
Worker Commutes	Offsite Light-duty Auto/Truck	0.90	0.05	0.00	0.31	0.08	268.65	2.42	247.62	13.69	0.73	85.84
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.09	0.87	12.20	0.14	4.15
Demobilization												
Skid Steer	Skid Steer Loader	3.25	1.81	0.01	0.05	0.05	530.27	1.50	36.26	20.19	0.06	0.57
Backhoe	Tractors/Loaders/Backhoe	3.48	1.89	0.01	0.06	0.06	531.36	2.43	46.01	24.92	0.07	0.83
Large Generator	Generator Large	3.73	3.38	0.01	0.08	0.07	570.28	10.64	117.42	106.44	0.22	2.49
Small Honda Generator	Generator Small	2.86	4.32	0.01	0.17	0.16	570.30	0.59	3.14	4.75	0.01	0.19
6-ton Forklift	Rough Terrain Forklift	3.22	1.64	0.01	0.03	0.03	530.54	1.88	52.59	26.83	0.08	0.54
Water Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.01	0.09	0.93	0.00	0.04
185 cfm Air Compressor	Air Compressor (Jackhammer)	4.82	3.65	0.01	0.10	0.09	570.26	7.73	72.84	55.08	0.11	1.50
Dump Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.00	0.02	0.22	0.00	0.01
Worker Commutes	Offsite Light-duty Auto/Truck	0.90	0.05	0.00	0.31	0.08	268.65	0.13	13.76	0.76	0.04	4.77
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.00	0.02	0.34	0.00	0.12

Notes:

NA = Parameter not required for computing emissions.

^a Unless otherwise noted, equipment/vehicle list and daily use provided t^b The following conversion factors were used to estimate emissions:

1 lb =	453.6
1 ton =	2,000
1 metric ton =	1,000,000
1 yd ³ =	1.2641662

^c PM₁₀ and PM_{2.5} emissions include only paved road fugitive dust emissio^d Unless otherwise indicated, default equipment power ratings and load fid the large generator was assumed to be 50 hp, as PG&E indicated that two different generator sizes would be used.^e A number of vehicles and equipment will be used for only a portion of tl^f The weight factors are used to calculate annual emissions below and are^g Fugitive Dust emissions from Grading activities are a result of smoothin

Activity	Year
Grading	2026
Grading	2027
Grading	2028

Notes:

¹ Total area to be graded is as follows, as provided by PG&E:² Vehicle miles traveled by graders estimated as follows, per methodologVMT (mile/phase) = Area Graded (acres/phase) / Wb (ft) X 43,560 (ft²)/
Wb is the blade width of the grader; the CalEEMod default for Wb is =

Table 4

Construction Emissions

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Emissions (metric tons/phase) ^b		Weight Factor ^f		
		PM _{2.5} ^c	CO ₂ e	2026	2027	2028
Jumping Jack	Plate Compactor	0.85	1.48	0	0.67	0.33
Handheld Asphalt Saw	Concrete/Industrial Saw	0.28	0.95	0	0.67	0.33
Handheld Core Drill	Other General Industrial Equipment	0.22	0.56	0	0.67	0.33
Vibraplate	Plate Compactor	0.85	1.48	0	0.67	0.33
Fugitive Dust	Truck Loading	0.03	NA	0	0.67	0.33
Worker Commutes	Offsite Light-duty Auto/Truck	22.00	33.58	0	0.67	0.33
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	1.21	6.80	0	0.67	0.33
Demobilization						
Skid Steer	Skid Steer Loader	0.53	2.69	0	0	1
Backhoe	Tractors/Loaders/Backhoe	0.77	3.19	0	0	1
Large Generator	Generator Large	2.30	8.14	0	0	1
Small Honda Generator	Generator Small	0.18	0.28	0	0	1
6-ton Forklift	Rough Terrain Forklift	0.49	3.93	0	0	1
Water Truck	Onsite Heavy-Duty Diesel	0.01	0.12	0	0	1
185 cfm Air Compressor	Air Compressor (Jackhammer)	1.37	3.91	0	0	1
Dump Truck	Onsite Heavy-Duty Diesel	0.00	0.03	0	0	1
Worker Commutes	Offsite Light-duty Auto/Truck	1.22	1.87	0	0	1
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.03	0.19	0	0	1

Notes:

NA = Parameter not required for computing emissions.

^a Unless otherwise noted, equipment/vehicle list and daily use provided t^b The following conversion factors were used to estimate emissions:

1 lb =	453.6
1 ton =	2,000
1 metric ton =	1,000,000
1 yd ³ =	1.2641662

^c PM₁₀ and PM_{2.5} emissions include only paved road fugitive dust emissio^d Unless otherwise indicated, default equipment power ratings and load f^e A number of vehicles and equipment will be used for only a portion of tl^f The weight factors are used to calculate annual emissions below and are^g Fugitive Dust emissions from Grading activities are a result of smoothin

Activity	Year
Grading	2026
Grading	2027
Grading	2028

Notes:

¹ Total area to be graded is as follows, as provided by PG&E:

² Vehicle miles traveled by graders estimated as follows, per methodolog
 VMT (mile/phase) = Area Graded (acres/phase) / Wb (ft) X 43,560 (ft²)
 Wb is the blade width of the grader; the CalEEMod default for Wb is =

Table 4

Construction Emissions

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Equipment Power Rating (hp) ^d	Equipment Load Factor ^d	Quantity per Day	Number of Days Used ^e	Hours per Day	Miles per Day per Vehicle	Number of Months with Activities			Emission f
								2026	2027	2028	

^h Information and emissions for the temporary Portable Equipment Registration Program (PERP) equipment is detailed in Appendix A, Tables 6a and 6b. The temporary generators were assumed to be utilized entirely within the project area.

ⁱ Fugitive Dust emissions from Truck Dumping/Loading activities are a result of trenching and foundation work. Volumes were provided by PG&E, as follows:

Activity	Volume (yd ³)	Weight (tons)
Excavated Soil	443	560
Backfill	108	137

Annual Emissions Summary

Year ^a	Emissions (lbs/year)						Emissions (metric tons/year)
	ROG	CO	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂ e
2026	100	1,371	965	2	47	28	98
2027	3,106	83,443	6,104	111	3,559	3,502	10,018
2028	188	2,520	1,793	4	81	51	180

Notes:

^a Yearly emissions were estimated using a weight factor based on the schedule and months of activity per year.

Table 4
Construction Emissions
PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions												
Equipment / Vehicle List ^a	Equipment / Vehicle Type	Emission Factors (g/hp-hr for equipment, g/mile for vehicles, lb/ton for truck loading, and lb/mile for grading)						Emissions (lbs/phase) ^b				
		CO	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	ROG	CO	NOx	SOx	PM ₁₀ ^c

^b Information and emissions for the temporary Portable Equipment Register are provided for a single calendar year to provide the most conservative emissions estimate, although they are expected to be used intermittently throughout the project.

^c Fugitive Dust emissions from Truck Dumping/Loading activities are a res

Activity	Volume (yd ³)
Excavated Soil	443
Backfill	108

Annual Emissions Summary	
Year ^a	
	ROG
2026	100
2027	3,106
2028	188

Notes:
^a Yearly emissions were estimated using a weight factor based on the sch

Table 4
Construction Emissions
PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Emissions (metric tons/phase) ^b		Weight Factor ^f		
		PM _{2.5} ^c	CO ₂ e	2026	2027	2028

^h Information and emissions for the temporary Portable Equipment Register for a total duration not to exceed 8 months.

ⁱ Fugitive Dust emissions from Truck Dumping/Loading activities are a res

Activity	Volume (yd ³)
Excavated Soil	443
Backfill	108

Annual Emissions Summary

Year ^a	
	ROG
2026	100
2027	3,106
2028	188

Notes:
^a Yearly emissions were estimated using a weight factor based on the sch

Table 5

Construction Emissions with Applicant Proposed Measures

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Equipment Power Rating (hp) ^d	Equipment Load Factor ^d	Quantity per Day	Number of Days Used ^e	Hours per Day	Miles per Day per Vehicle	Number of Months with Activities			Emission f
								2026	2027	2028	ROG
Site Mobilization / Site Preparation											
Skid Steer	Skid Steer Loader	71	0.37	1	39	10	NA	2	0	0	0.13
Backhoe	Tractors/Loaders/Backhoe	84	0.37	1	39	10	NA	2	0	0	0.18
Large Generator	Generator Large	50	0.74	2	39	10	NA	2	0	0	0.34
Small Honda Generator	Generator Small	7	0.74	2	19	5	NA	2	0	0	0.54
6-ton Forklift	Rough Terrain Forklift	96	0.40	1	39	10	NA	2	0	0	0.12
Water Truck	Onsite Heavy-Duty Diesel	NA	NA	1	39	NA	2	2	0	0	0.12
185 cfm Air Compressor	Air Compressor (Jackhammer)	37	0.48	2	39	10	NA	2	0	0	0.51
Dump Truck	Onsite Heavy-Duty Diesel	NA	NA	1	9	NA	2	2	0	0	0.12
Worker Commutes	Offsite Light-duty Auto/Truck	NA	NA	18	39	NA	20	2	0	0	0.01
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	NA	NA	1	13	NA	20	2	0	0	0.01
Ground Disturbing Activities											
Skid Steer	Skid Steer Loader	71	0.37	1	58	10	NA	2	1	0	0.13
Backhoe	Tractors/Loaders/Backhoe	84	0.37	1	58	10	NA	2	1	0	0.18
Large Generator	Generator Large	50	0.74	2	58	10	NA	2	1	0	0.34
Small Honda Generator	Generator Small	7	0.74	2	29	5	NA	2	1	0	0.54
6-ton Forklift	Rough Terrain Forklift	96	0.40	1	58	10	NA	2	1	0	0.12
Water Truck	Onsite Heavy-Duty Diesel	NA	NA	1	58	NA	2	2	1	0	0.12
185 cfm Air Compressor	Air Compressor (Jackhammer)	37	0.48	2	58	10	NA	2	1	0	0.51
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	NA	NA	1	56	4	2	2	1	0	0.12
Dump Truck	Onsite Heavy-Duty Diesel	NA	NA	1	14	NA	2	2	1	0	0.12
Handheld Asphalt Saw	Concrete/Industrial Saw	33	0.73	1	2	5	NA	2	1	0	0.41
Fugitive Dust	Grading	NA	NA	^g	NA	NA	NA	2	1	0	NA
Worker Commutes	Offsite Light-duty Auto/Truck	NA	NA	18	58	NA	20	2	1	0	0.01
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	NA	NA	1	20	NA	20	2	1	0	0.01
Electrical Equipment Replacement and Modification											
Temporary Generator	PERP Generators ^h	302	--	22	160	24	NA	0	8	0	--
Skid Steer	Skid Steer Loader	71	0.37	1	347	10	NA	0	12	6	0.13
Backhoe	Tractors/Loaders/Backhoe	84	0.37	1	347	10	NA	0	12	6	0.18
Large Generator	Generator Large	50	0.74	2	347	10	NA	0	12	6	0.34
Small Honda Generator	Generator Small	7	0.74	2	173	5	NA	0	12	6	0.54
Manlift	Aerial Lift	46	0.31	1	52	5	NA	0	12	6	0.15
Weld Machine	Welder	46	0.45	2	69	10	NA	0	12	6	0.47
6-ton Forklift	Rough Terrain Forklift	96	0.40	1	347	10	NA	0	12	6	0.12
1/2-Ton Boom Truck	Onsite Heavy-Duty Diesel	NA	NA	1	171	NA	1	0	12	6	0.12
Water Truck	Onsite Heavy-Duty Diesel	NA	NA	1	347	NA	2	0	12	6	0.12
185 cfm Air Compressor	Air Compressor (Jackhammer)	37	0.48	2	347	10	NA	0	12	6	0.51
Vacuum Truck Offsite	Offsite Heavy-Duty Diesel	NA	NA	1	24	NA	20	0	12	6	0.01
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	NA	NA	2	24	NA	2	0	12	6	0.12
Dump Truck	Onsite Heavy-Duty Diesel	NA	NA	1	83	NA	2	0	12	6	0.12
Concrete Pump Truck	Offsite Heavy-Duty Diesel	NA	NA	1	12	NA	20	0	12	6	0.01
Concrete Truck	Offsite Heavy-Duty Diesel	NA	NA	1	12	NA	20	0	12	6	0.01

Table 5

Construction Emissions with Applicant Proposed Measures

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	actors (g/hp-hr for equipment, g/mile for vehicles, lb/ton for truck loading, and lb/mile for grading)						Emissions (lbs/phase) ^b				
		CO	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	ROG	CO	NOx	SOx	PM ₁₀ ^c
Site Mobilization / Site Preparation												
Skid Steer	Skid Steer Loader	3.25	2.74	0.01	0.01	0.01	530.27	2.99	72.51	61.23	0.11	0.22
Backhoe	Tractors/Loaders/Backhoe	3.48	0.26	0.01	0.01	0.01	531.36	4.86	92.03	6.87	0.13	0.26
Large Generator	Generator Large	3.73	2.74	0.01	0.01	0.01	570.28	21.28	234.85	172.47	0.44	0.63
Small Honda Generator	Generator Small	2.86	2.75	0.01	0.01	0.01	570.30	1.18	6.29	6.05	0.02	0.02
6-ton Forklift	Rough Terrain Forklift	3.22	0.26	0.01	0.01	0.01	530.54	3.76	105.18	8.49	0.16	0.33
Water Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.02	0.18	1.87	0.00	0.08
185 cfm Air Compressor	Air Compressor (Jackhammer)	4.82	2.75	0.01	0.01	0.01	570.26	15.47	145.69	83.09	0.21	0.30
Dump Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.00	0.04	0.45	0.00	0.02
Worker Commutes	Offsite Light-duty Auto/Truck	0.90	0.05	0.00	0.31	0.08	268.65	0.27	27.51	1.52	0.08	9.54
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.00	0.05	0.68	0.01	0.23
Ground Disturbing Activities												
Skid Steer	Skid Steer Loader	3.25	2.74	0.01	0.01	0.01	530.27	4.49	108.77	91.84	0.17	0.34
Backhoe	Tractors/Loaders/Backhoe	3.48	0.26	0.01	0.01	0.01	531.36	7.30	138.04	10.31	0.20	0.40
Large Generator	Generator Large	3.73	2.74	0.01	0.01	0.01	570.28	31.91	352.27	258.70	0.66	0.94
Small Honda Generator	Generator Small	2.86	2.75	0.01	0.01	0.01	570.30	1.78	9.43	9.07	0.03	0.03
6-ton Forklift	Rough Terrain Forklift	3.22	0.26	0.01	0.01	0.01	530.54	5.63	157.76	12.74	0.24	0.49
Water Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.03	0.27	2.80	0.01	0.11
185 cfm Air Compressor	Air Compressor (Jackhammer)	4.82	2.75	0.01	0.01	0.01	570.26	23.20	218.53	124.63	0.32	0.45
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.03	0.26	2.71	0.01	0.11
Dump Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.01	0.06	0.67	0.00	0.03
Handheld Asphalt Saw	Concrete/Industrial Saw	4.32	2.75	0.01	0.01	0.01	576.33	0.25	2.62	1.67	0.00	0.01
Fugitive Dust	Grading	NA	NA	NA	0.60	0.06	NA	NA	NA	NA	NA	1.65
Worker Commutes	Offsite Light-duty Auto/Truck	0.90	0.05	0.00	0.31	0.08	268.65	0.40	41.27	2.28	0.12	14.31
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.01	0.07	1.02	0.01	0.35
Electrical Equipment Replacement and Modification												
Temporary Generator	PERP Generators ^h	--	--	--	--	--	--	2,756.08	78,745.03	2,756.08	103.24	3,406.19
Skid Steer	Skid Steer Loader	3.25	2.74	0.01	0.01	0.01	530.27	26.95	652.60	551.04	1.01	2.01
Backhoe	Tractors/Loaders/Backhoe	3.48	0.26	0.01	0.01	0.01	531.36	43.78	828.24	61.86	1.19	2.38
Large Generator	Generator Large	3.73	2.74	0.01	0.01	0.01	570.28	191.48	2,113.62	1,552.21	3.97	5.67
Small Honda Generator	Generator Small	2.86	2.75	0.01	0.01	0.01	570.30	10.66	56.58	54.41	0.16	0.20
Manlift	Aerial Lift	3.08	2.75	0.01	0.01	0.01	588.90	1.24	25.13	22.48	0.04	0.08
Weld Machine	Welder	4.49	2.75	0.01	0.01	0.01	570.26	29.20	282.13	172.68	0.44	0.63
6-ton Forklift	Rough Terrain Forklift	3.22	0.26	0.01	0.01	0.01	530.54	33.81	946.58	76.43	1.47	2.94
1/2-Ton Boom Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.04	0.40	4.14	0.01	0.17
Water Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.18	1.61	16.81	0.04	0.69
185 cfm Air Compressor	Air Compressor (Jackhammer)	4.82	2.75	0.01	0.01	0.01	570.26	139.22	1,311.20	747.78	1.90	2.72
Vacuum Truck Offsite	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.01	0.09	1.25	0.01	0.43
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.02	0.22	2.32	0.01	0.09
Dump Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.04	0.39	4.03	0.01	0.16
Concrete Pump Truck	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.00	0.04	0.63	0.01	0.21
Concrete Truck	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.00	0.04	0.63	0.01	0.21

Table 5

Construction Emissions with Applicant Proposed Measures

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type		Emissions (metric tons/phase) ^b	Weight Factor ^f		
		PM _{2.5} ^c	CO ₂ e	2026	2027	2028
Site Mobilization / Site Preparation						
Skid Steer	Skid Steer Loader	0.22	5.37	1	0	0
Backhoe	Tractors/Loaders/Backhoe	0.26	6.37	1	0	0
Large Generator	Generator Large	0.63	16.28	1	0	0
Small Honda Generator	Generator Small	0.02	0.57	1	0	0
6-ton Forklift	Rough Terrain Forklift	0.33	7.86	1	0	0
Water Truck	Onsite Heavy-Duty Diesel	0.02	0.23	1	0	0
185 cfm Air Compressor	Air Compressor (Jackhammer)	0.30	7.82	1	0	0
Dump Truck	Onsite Heavy-Duty Diesel	0.01	0.06	1	0	0
Worker Commutes	Offsite Light-duty Auto/Truck	2.44	3.73	1	0	0
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.07	0.38	1	0	0
Ground Disturbing Activities						
Skid Steer	Skid Steer Loader	0.34	8.06	0.67	0.33	0
Backhoe	Tractors/Loaders/Backhoe	0.40	9.56	0.67	0.33	0
Large Generator	Generator Large	0.94	24.42	0.67	0.33	0
Small Honda Generator	Generator Small	0.03	0.85	0.67	0.33	0
6-ton Forklift	Rough Terrain Forklift	0.49	11.79	0.67	0.33	0
Water Truck	Onsite Heavy-Duty Diesel	0.03	0.35	0.67	0.33	0
185 cfm Air Compressor	Air Compressor (Jackhammer)	0.45	11.72	0.67	0.33	0
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	0.03	0.34	0.67	0.33	0
Dump Truck	Onsite Heavy-Duty Diesel	0.01	0.08	0.67	0.33	0
Handheld Asphalt Saw	Concrete/Industrial Saw	0.01	0.16	0.67	0.33	0
Fugitive Dust	Grading	0.18	NA	0.67	0.33	0
Worker Commutes	Offsite Light-duty Auto/Truck	3.67	5.60	0.67	0.33	0
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.10	0.57	0.67	0.33	0
Electrical Equipment Replacement and Modification						
Temporary Generator	PERP Generators ^h	3,406.19	9,682.84	0	1	0
Skid Steer	Skid Steer Loader	2.01	48.37	0	0.67	0.33
Backhoe	Tractors/Loaders/Backhoe	2.38	57.35	0	0.67	0.33
Large Generator	Generator Large	5.67	146.54	0	0.67	0.33
Small Honda Generator	Generator Small	0.20	5.12	0	0.67	0.33
Manlift	Aerial Lift	0.08	2.18	0	0.67	0.33
Weld Machine	Welder	0.63	16.24	0	0.67	0.33
6-ton Forklift	Rough Terrain Forklift	2.94	70.74	0	0.67	0.33
1/2-Ton Boom Truck	Onsite Heavy-Duty Diesel	0.05	0.51	0	0.67	0.33
Water Truck	Onsite Heavy-Duty Diesel	0.21	2.09	0	0.67	0.33
185 cfm Air Compressor	Air Compressor (Jackhammer)	2.72	70.34	0	0.67	0.33
Vacuum Truck Offsite	Offsite Heavy-Duty Diesel	0.12	0.70	0	0.67	0.33
Vacuum Truck Onsite	Onsite Heavy-Duty Diesel	0.03	0.29	0	0.67	0.33
Dump Truck	Onsite Heavy-Duty Diesel	0.05	0.50	0	0.67	0.33
Concrete Pump Truck	Offsite Heavy-Duty Diesel	0.06	0.35	0	0.67	0.33
Concrete Truck	Offsite Heavy-Duty Diesel	0.06	0.35	0	0.67	0.33

Table 5

Construction Emissions with Applicant Proposed Measures
PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Equipment Power Rating (hp) ^d	Equipment Load Factor ^d	Quantity per Day	Number of Days Used ^e	Hours per Day	Miles per Day per Vehicle	Number of Months with Activities			Emission ^f
								2026	2027	2028	
Jumping Jack	Plate Compactor	8	0.43	1	151	5	NA	0	12	6	0.55
Handheld Asphalt Saw	Concrete/Industrial Saw	33	0.73	1	14	5	NA	0	12	6	0.41
Handheld Core Drill	Other General Industrial Equipment	35	0.34	1	16	5	NA	0	12	6	0.45
Vibraplate	Plate Compactor	8	0.43	1	151	5	NA	0	12	6	0.55
Fugitive Dust	Truck Loading	NA	NA	1	NA	NA	NA	0	12	6	NA
Worker Commutes	Offsite Light-duty Auto/Truck	NA	NA	18	347	NA	20	0	12	6	0.01
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	NA	NA	2	117	NA	20	0	12	6	0.01
Demobilization											
Skid Steer	Skid Steer Loader	71	0.37	1	19	10	NA	0	0	2	0.13
Backhoe	Tractors/Loaders/Backhoe	84	0.37	1	19	10	NA	0	0	2	0.18
Large Generator	Generator Large	50	0.74	2	19	10	NA	0	0	2	0.34
Small Honda Generator	Generator Small	7	0.74	2	10	5	NA	0	0	2	0.54
6-ton Forklift	Rough Terrain Forklift	96	0.40	1	19	10	NA	0	0	2	0.12
Water Truck	Onsite Heavy-Duty Diesel	NA	NA	1	19	NA	2	0	0	2	0.12
185 cfm Air Compressor	Air Compressor (Jackhammer)	37	0.48	2	19	10	NA	0	0	2	0.51
Dump Truck	Onsite Heavy-Duty Diesel	NA	NA	1	5	NA	2	0	0	2	0.12
Worker Commutes	Offsite Light-duty Auto/Truck	NA	NA	18	19	NA	20	0	0	2	0.01
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	NA	NA	1	7	NA	20	0	0	2	0.01

Notes:

NA = Parameter not required for computing emissions.

^a Unless otherwise noted, equipment/vehicle list and daily use provided by PG&E.^b The following conversion factors were used to estimate emissions:

1 lb =	453.6	g
1 ton =	2,000	lbs
1 metric ton =	1,000,000	g
1 yd ³ =	1.2641662	tons

Additionally, these emissions incorporate Applicant-proposed Measures to reduce construction equipment exhaust emissions, as applicable.

^c PM₁₀ and PM_{2.5} emissions include only paved road fugitive dust emissions, as it is assumed all onsite and offsite travel will be on paved roads.^d Unless otherwise indicated, default equipment power ratings and load factors were used, as taken from Table G-12 of Appendix G of the *CalEEMod User's Guide* (ICF 2022). The small generator was assumed to be 7 hp and^e A number of vehicles and equipment will be used for only a portion of the total duration for each phase.^f The weight factors are used to calculate annual emissions below and are derived based on the months of activity per year during the construction period.^g Fugitive Dust emissions from Grading activities are a result of smoothing ungraded areas and were estimated per the details provided below. Emissions incorporate Applicant-proposed Measures to reduce fugitive dust and

Activity	Year	Area Graded (acres/phase) ¹	Grader VMT (miles/phase) ²	Emission Factors (lb/mile)		Emissions (lb/phase)	
				PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5}
Grading	2026	2.7	1.83	0.602	0.065	1.1	0.1
Grading	2027	1.3	0.92	0.602	0.065	0.6	0.1
Grading	2028	0	0.00	0.602	0.065	0.0	0.0

Notes:

¹ Total area to be graded is as follows, as provided by PG&E: 4 acres.² Vehicle miles traveled by graders estimated as follows, per methodology provided in Section 4.4.1 of Appendix C of the *CalEEMod User's Guide* (ICF 2022):VMT (mile/phase) = Area Graded (acres/phase) / Wb (ft) X 43,560 (ft²/acre) / 5,280 (ft/mile), where

Table 5

Construction Emissions with Applicant Proposed Measures

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Factors (g/hp-hr for equipment, g/mile for vehicles, lb/ton for truck loading, and lb/mile for grading)						Emissions (lbs/phase) ^b				
		CO	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	ROG	CO	NOx	SOx	PM ₁₀ ^c
Jumping Jack	Plate Compactor	3.47	2.75	0.01	0.01	0.01	570.31	3.13	19.87	15.75	0.05	0.06
Handheld Asphalt Saw	Concrete/Industrial Saw	4.32	2.75	0.01	0.01	0.01	576.33	1.50	15.71	10.01	0.03	0.04
Handheld Core Drill	Other General Industrial Equipment	4.59	2.75	0.01	0.01	0.01	589.87	0.95	9.64	5.77	0.01	0.02
Vibraplate	Plate Compactor	3.47	2.75	0.01	0.01	0.01	570.31	3.13	19.87	15.75	0.05	0.06
Fugitive Dust	Truck Loading	NA	NA	NA	0.00010	0.000015	NA	NA	NA	NA	NA	0.07
Worker Commutes	Offsite Light-duty Auto/Truck	0.90	0.05	0.00	0.31	0.08	268.65	2.42	247.62	13.69	0.73	85.84
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.09	0.87	12.20	0.14	4.15
Demobilization												
Skid Steer	Skid Steer Loader	3.25	2.74	0.01	0.01	0.01	530.27	1.50	36.26	30.61	0.06	0.11
Backhoe	Tractors/Loaders/Backhoe	3.48	0.26	0.01	0.01	0.01	531.36	2.43	46.01	3.44	0.07	0.13
Large Generator	Generator Large	3.73	2.74	0.01	0.01	0.01	570.28	10.64	117.42	86.23	0.22	0.31
Small Honda Generator	Generator Small	2.86	2.75	0.01	0.01	0.01	570.30	0.59	3.14	3.02	0.01	0.01
6-ton Forklift	Rough Terrain Forklift	3.22	0.26	0.01	0.01	0.01	530.54	1.88	52.59	4.25	0.08	0.16
Water Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.01	0.09	0.93	0.00	0.04
185 cfm Air Compressor	Air Compressor (Jackhammer)	4.82	2.75	0.01	0.01	0.01	570.26	7.73	72.84	41.54	0.11	0.15
Dump Truck	Onsite Heavy-Duty Diesel	1.05	10.98	0.03	0.45	0.13	3005.79	0.00	0.02	0.22	0.00	0.01
Worker Commutes	Offsite Light-duty Auto/Truck	0.90	0.05	0.00	0.31	0.08	268.65	0.13	13.76	0.76	0.04	4.77
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.08	1.18	0.01	0.40	0.12	1453.80	0.00	0.02	0.34	0.00	0.12

Notes:

NA = Parameter not required for computing emissions.

^a Unless otherwise noted, equipment/vehicle list and daily use provided t^b The following conversion factors were used to estimate emissions:

1 lb =	453.6
1 ton =	2,000
1 metric ton =	1,000,000
1 yd ³ =	1.2641662

Additionally, these emissions incorporate Applicant-proposed Measures 1

^c PM₁₀ and PM_{2.5} emissions include only paved road fugitive dust emissio^d Unless otherwise indicated, default equipment power ratings and load fid the large generator was assumed to be 50 hp, as PG&E indicated that two different generator sizes would be used.^e A number of vehicles and equipment will be used for only a portion of tl^f The weight factors are used to calculate annual emissions below and are^g Fugitive Dust emissions from Grading activities are a result of smoothening construction equipment exhaust emissions, as applicable.

Activity	Year
Grading	2026
Grading	2027
Grading	2028

Notes:

¹ Total area to be graded is as follows, as provided by PG&E:² Vehicle miles traveled by graders estimated as follows, per methodolog

$$\text{VMT (mile/phase)} = \text{Area Graded (acres/phase)} / \text{Wb (ft)} \times 43,560 \text{ (ft}^2\text{)}$$

Table 5

Construction Emissions with Applicant Proposed Measures

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Emissions (metric tons/phase) ^b		Weight Factor ^f		
		PM _{2.5} ^c	CO ₂ e	2026	2027	2028
Jumping Jack	Plate Compactor	0.06	1.48	0	0.67	0.33
Handheld Asphalt Saw	Concrete/Industrial Saw	0.04	0.95	0	0.67	0.33
Handheld Core Drill	Other General Industrial Equipment	0.02	0.56	0	0.67	0.33
Vibraplate	Plate Compactor	0.06	1.48	0	0.67	0.33
Fugitive Dust	Truck Loading	0.01	NA	0	0.67	0.33
Worker Commutes	Offsite Light-duty Auto/Truck	22.00	33.58	0	0.67	0.33
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	1.21	6.80	0	0.67	0.33
Demobilization						
Skid Steer	Skid Steer Loader	0.11	2.69	0	0	1
Backhoe	Tractors/Loaders/Backhoe	0.13	3.19	0	0	1
Large Generator	Generator Large	0.31	8.14	0	0	1
Small Honda Generator	Generator Small	0.01	0.28	0	0	1
6-ton Forklift	Rough Terrain Forklift	0.16	3.93	0	0	1
Water Truck	Onsite Heavy-Duty Diesel	0.01	0.12	0	0	1
185 cfm Air Compressor	Air Compressor (Jackhammer)	0.15	3.91	0	0	1
Dump Truck	Onsite Heavy-Duty Diesel	0.00	0.03	0	0	1
Worker Commutes	Offsite Light-duty Auto/Truck	1.22	1.87	0	0	1
Vendor/Delivery Trucks	Offsite Heavy-Duty Diesel	0.03	0.19	0	0	1

Notes:

NA = Parameter not required for computing emissions.

^a Unless otherwise noted, equipment/vehicle list and daily use provided t^b The following conversion factors were used to estimate emissions:

1 lb =	453.6
1 ton =	2,000
1 metric ton =	1,000,000
1 yd ³ =	1.2641662

Additionally, these emissions incorporate Applicant-proposed Measures 1

^c PM₁₀ and PM_{2.5} emissions include only paved road fugitive dust emissio^d Unless otherwise indicated, default equipment power ratings and load f^e A number of vehicles and equipment will be used for only a portion of tl^f The weight factors are used to calculate annual emissions below and are^g Fugitive Dust emissions from Grading activities are a result of smoothin

Activity	Year
Grading	2026
Grading	2027
Grading	2028

Notes:

¹ Total area to be graded is as follows, as provided by PG&E:² Vehicle miles traveled by graders estimated as follows, per methodologVMT (mile/phase) = Area Graded (acres/phase) / Wb (ft) X 43,560 (ft²/

Table 5

Construction Emissions with Applicant Proposed Measures

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Equipment Power Rating (hp) ^d	Equipment Load Factor ^d	Quantity per Day	Number of Days Used ^e	Hours per Day	Miles per Day per Vehicle	Number of Months with Activities			Emission Factor ^f
								2026	2027	2028	

^a Wb is the blade width of the grader; the CalEEMod default for Wb is = 12 ft.

^h Information and emissions for the temporary Portable Equipment Registration Program (PERP) equipment is detailed in Appendix A, Tables 6a and 6b. The temporary generators were assumed to be utilized entirely within the project area.

ⁱ Fugitive Dust emissions from Truck Dumping/Loading activities are a result of trenching and foundation work. Volumes were provided by PG&E, as follows:

Activity	Volume (yd ³)	Weight (tons)
Excavated Soil	443	560
Backfill	108	137

Annual Emissions Summary

Year ^a	Emissions (lbs/year)						Emissions (metric tons/year)
	ROG	CO	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂ e
2026	100	1,371	688	2	24	9	98
2027	3,106	83,443	5,157	111	3,485	3,435	10,018
2028	188	2,520	1,285	4	42	16	180

Notes:

^a Yearly emissions were estimated using a weight factor based on the schedule and months of activity per year.

Table 5
Construction Emissions with Applicant Proposed Measures
PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions												
Equipment / Vehicle List ^a	Equipment / Vehicle Type	Factors (g/hp-hr for equipment, g/mile for vehicles, lb/ton for truck loading, and lb/mile for grading)						Emissions (lbs/phase) ^b				
		CO	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	ROG	CO	NOx	SOx	PM ₁₀ ^c

Wb is the blade width of the grader; the CalEEMod default for Wb is =

^b Information and emissions for the temporary Portable Equipment Register are based on a single calendar year to provide the most conservative emissions estimate, although they are expected to be used intermittently throughout the project.

ⁱ Fugitive Dust emissions from Truck Dumping/Loading activities are a result of the project.

Activity	Volume (yd ³)
Excavated Soil	443
Backfill	108

Annual Emissions Summary	
Year ^a	
	ROG
2026	100
2027	3,106
2028	188

Notes:

^a Yearly emissions were estimated using a weight factor based on the schedule of construction activities.

Table 5
Construction Emissions with Applicant Proposed Measures
PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Vehicle and Equipment Emissions

Equipment / Vehicle List ^a	Equipment / Vehicle Type	Emissions (metric tons/phase) ^b		Weight Factor ^f		
		PM _{2.5} ^c	CO ₂ e	2026	2027	2028

^b Wb is the blade width of the grader; the CalEEMod default for Wb is =

^h Information and emissions for the temporary Portable Equipment Regist for a total duration not to exceed 8 months.

ⁱ Fugitive Dust emissions from Truck Dumping/Loading activities are a res

Activity	Volume (yd ³)
Excavated Soil	443
Backfill	108

Annual Emissions Summary

Year ^a	
	ROG
2026	100
2027	3,106
2028	188

Notes:

^a Yearly emissions were estimated using a weight factor based on the sch

Tables 6a, 6b, and 6c

Temporary Generator Emissions

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Table 6a. PERP Generators - Parameters

Operation	Generators	
Generator Make	Hipower	
Generator Model	HRNG 230 T6	
Number of Generators ^a	22	
Model Year	2014	
Engine Make	Power Solutions International, Inc.	
EPA Family Name	EPSIB11.1NGP	
Maximum Daily Operating Hours ^b	24	hours
Maximum Rated Horsepower (Prime)	302	hp
Fuel Consumption Rate	2115	ft ³ /hr
Maximum Heat Input - per unit ^c	2.16	MMBtu/hr
Maximum Heat Input - Total	47.46	MMBtu/hr

Notes:

^a As per the information provided by PG&E, all generators have the same make and model.

^b It is assumed that the generators will have the ability to operate 24/7 for the purposes of calculating the maximum potential to emit.

^c Natural Gas Heat Content is 1,020 Btu/scf Per AP-42, Table 1.4-1, Footnote a.

Table 6b. PERP Generator Emissions - Potential to Emit

Unit Type	Parameter	Emissions ^{a, b, c, d, e}					
		PM ₁₀	PM _{2.5}	CO	NO _x	VOC	SO ₂
HRNG 230 T6	Value (per engine)	1.87E-02	1.87E-02	1.40	0.049	0.049	0.00057
	Units	lb/MMBtu	lb/MMBtu	g/bhp-hr	g/bhp-hr	g/bhp-hr	lb/MMBtu
	Value (total for all PERPs)	0.887	0.887	20.51	0.72	0.72	2.69E-02
	Units	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
	Value (total for all PERPs)	21.29	21.29	492.16	17.23	17.23	0.65
	Units	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
	Value (total for all PERPs)	7,770	7,770	179,637	6,287	6,287	236
	Units	lb/yr	lb/yr	lb/yr	lb/yr	lb/yr	lb/yr
	Value (total for all PERPs)	3.89	3.89	89.82	3.14	3.14	0.118
	Units	tpy	tpy	tpy	tpy	tpy	tpy

Notes:

^a PM₁₀, PM_{2.5}, and SO₂ emission factors per MDAQMD's default emission factors for Internal Combustion Engines, Natural Gas-fired, 4SR. Accessed online:

<https://www.mdaqmd.ca.gov/home/showpublisheddocument/10131/638433490279600000>

Heat content of natural gas assumed to be 1,038 BTU/scf per U.S. Energy Information Administration. Accessed online:

<https://www.eia.gov/tools/faqs/faq.php?id=45&t=8>

Tables 6a, 6b, and 6c

Temporary Generator Emissions

PG&E S-238 Hinkley Compressor Station Electrical Upgrades

^b CO, VOC and NO_x emission factor per EPA Family Name Certification Level from EPA's Large Nonroad Spark-Ignition (NRSI) Engines database (EPA certification test number EPSIBM0020251 for constant speed application)

<https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.epa.gov%2Fsystem%2Ffiles%2Fdocuments%2F2024-02%2Flarge-spark-ignition-2011-present.xlsx&wdOrigin=BROWSELINK>

The EPA Family Name's VOC and NO_x Certification Level is 0.0 g/bhp-hr. For purposes of conservative emission estimates, PG&E assumes that the maximum potential emission factor is 0.049 g/bhp-hr.

^c PM₁₀, PM_{2.5} and SO₂ Hourly Emissions (lb/hr) = Emission Factor (lb/MMBtu) * Maximum Total Heat Input Rate (MMBtu/hr)

^d CO, NO_x and VOC Hourly Emissions (lb/hr) = Emission Factor (g/bhp-hr) * lb/453.592 g * Maximum Rated Horsepower (HP) * Number of Generators

^e Daily and annual emissions are calculated based on 24 hours per day and 365 days per year.

Table 6c. PERP Generator Emissions - Greenhouse Gas Potential to Emit

Unit Type	Parameter	Emissions ^{a, b, c, d, e}			
		CO ₂	CH ₄	N ₂ O	CO ₂ e
HRNG 230 T6	Global Warming Potential	1	25	298	--
	Value (per engine)	117	2.20E-03	2.20E-04	117.10
	Units	lb/MMBtu	lb/MMBtu	lb/MMBtu	lb/MMBtu
	Value (total for all PERPs)	5,552	1.05E-01	1.05E-02	5,558
	Units	lb/hr	lb/hr	lb/hr	lb/hr
	Value (total for all PERPs)	133,243	2.51E+00	2.51E-01	133,381
	Units	lb/day	lb/day	lb/day	lb/day
	Value (total for all PERPs)	48,633,871	917	92	48,684,099
	Units	lb/yr	lb/yr	lb/yr	lb/yr
	Value (total for all PERPs)	24,316.94	0.46	0.05	24,342.05
	Units	tpy	tpy	tpy	tpy

Notes:

^a Global Warming Potentials are obtained from Subpart A of 40 CFR 98, Table A-1 "Global Warming Potentials."

^b Emission factor for carbon dioxide is obtained from 40 CFR 98, Table C-1 to Subpart C for natural gas (Weighted U.S.

Average). Emission factors for methane and nitrous oxide are obtained from 40 CFR 98, Table C-2 to Subpart C for natural gas.

^c CO₂e Emission Factor (lb/MMBtu) = [EF_{CO2} (lb/MMBtu) * GWP_{CO2} + EF_{CH4} (lb/MMBtu) * GWP_{CH4} + EF_{N2O} (lb/MMBtu) * GWP_{N2O}]

^d Hourly Emissions (lb/hr) = Emission Factor (lb/MMBtu) * Maximum Total Heat Input Rate (MMBtu/hr)

^e Daily and annual emissions are calculated based on 24 hours per day and 365 days per year.

Table 7

PG&E Fugitive Dust Emission Factors*PG&E S-238 Hinkley Compressor Station Electrical Upgrades***Fugitive Dust Emission Factors for Grading***Grading Equipment Passes*

Parameter	PM ₁₀	PM _{2.5}
S ^a	7.1	7.1
F ^a	0.6	0.031
Emission Factor (lb/mile) ^b	1.543	0.167
Control Efficiency for Watering 2x Daily ^c	61%	61%
Controlled Emission Factor (lb/mile)	0.602	0.065

Notes:

^a S and F taken from Section 4.4.1 of Appendix C of the *CalEEMod User's Guide* (ICF 2022).^b Emission factor calculated using the following equation from Section 4.4.1 of Appendix C of the *CalEEMod User's Guide* (ICF 2022):

$$PM_{10} \text{ Emission Factor (lb/VMT)} = 0.051 \times [S \text{ (mph)}]^{2.0} \times F_{PM10}$$

$$PM_{2.5} \text{ Emission Factor (lb/VMT)} = 0.04 \times [S \text{ (mph)}]^{2.5} \times F_{PM2.5}$$

^c Control efficiency for watering exposed areas twice per day taken from Section 4.4.4 of Appendix C of the *CalEEMod User's Guide* (ICF 2022).**Fugitive Dust Emission Factors for Truck Dumping/Loading***Truck Dumping on a Pile or Loading to a Truck from a Pile*

Parameter	PM ₁₀	PM _{2.5}
k ^a	0.35	0.053
U ^b	11.2	11.2
M ^a	12.0	12.0
Emission Factor (lb/ton) ^c	0.00026	0.000039
Control Efficiency for Watering 2x Daily ^d	61%	61%
Controlled Emission Factor (lb/ton)	0.00010	0.000015

Notes:

^a k and M taken from Section 4.4.3 of Appendix C of the *CalEEMod User's Guide* (ICF 2022).^b U taken as the average annual wind speed measured at the Dagget-Barstow Airport, as presented in Table G-1 of Appendix G of the *CalEEMod User's Guide* (ICF 2022). Original value of 5.0 m/s has been converted to mph.^c Emission factor calculated using the following equation from Section 4.4.3 of Appendix C of the *CalEEMod User's Guide* (ICF, 2022):

$$\text{Emission Factor (lb/ton)} = k \times 0.0032 \times [U \text{ (mph)} / 5]^{1.3} / [M \text{ (\%)} / 2]^{1.4}$$

^d Control efficiency for watering exposed areas twice per day taken from Section 4.4.4 of Appendix C of the *CalEEMod User's Guide* (ICF 2022). It was assumed that keeping exposed areas moist would have the co-benefit of limiting dust emissions associated with loading/unloading materials.**Fugitive Dust Emissions from Paved Roads**

Included in vehicle emissions.

Table 8
PG&E Construction Equipment Emission Factors
PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Construction Phase

OFFROAD Equipment Category	Fuel Type	Horsepower ^a	Load Factor ^a	Year ^b						
					ROG	CO	NOx	SOx	PM ₁₀	PM _{2.5}
Aerial Lift	Diesel	46	0.31	2026	0.152	3.075	2.874	0.005	0.021	0.019
Air Compressor (Jackhammer)	Diesel	37	0.48	2026	0.512	4.822	3.646	0.007	0.099	0.091
Concrete/Industrial Saw	Diesel	33	0.73	2026	0.413	4.315	3.526	0.007	0.085	0.078
Generator Small	Diesel	7	0.74	2026	0.539	2.860	4.324	0.008	0.174	0.160
Generator Large	Diesel	50	0.74	2026	0.338	3.731	3.382	0.007	0.079	0.073
Other General Industrial Equipment	Diesel	35	0.34	2026	0.453	4.594	3.588	0.005	0.113	0.104
Plate Compactor	Diesel	8	0.43	2026	0.547	3.470	4.143	0.009	0.162	0.149
Rough Terrain Forklift	Diesel	96	0.40	2026	0.115	3.220	1.643	0.005	0.033	0.030
Skid Steer Loader	Diesel	71	0.37	2026	0.134	3.245	1.807	0.005	0.051	0.047
Tractors/Loaders/Backhoe	Diesel	84	0.37	2026	0.184	3.481	1.885	0.005	0.063	0.058
Welder	Diesel	46	0.45	2026	0.465	4.493	3.570	0.007	0.095	0.088

Notes:

^a Unless otherwise indicated, Horsepower and Load Factors taken from Table G-12 of Appendix G of the *CalEEMod User's Guide* (ICF 2022).

The small generator was assumed to be 7 hp and the large generator was assumed to be 50 hp, as PG&E indicated that two different generator sizes would be used.

^b Construction emission factors conservatively based on the year construction activities begin (2026).

^c Unless otherwise indicated, Emission Factors taken from Table G-11 of Appendix G of the *CalEEMod User's Guide* (ICF 2022).

^d CO₂e emissions were calculated using the following global warming potentials from 40 CFR Part 98, Table A-1:

CO₂ = 1

CH₄ = 28

N₂O = 265

^e Controlled NOx, PM₁₀, and PM_{2.5} emission factors taken from Table G-13 of Appendix G of the *CalEEMod User's Guide* (ICF 2022), assuming all equipment would comply with the Tier 4 Final emissions standards.

Table 8
PG&E Construction Equipment Emission Factors
PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Construction Phase

OFFROAD Equipment Category	Fuel Type	Horsepower ^a	Load Factor ^a	Year ^b	Emission Factors (g/hp-hr) ^c						
					CO ₂ e ^d	CO ₂	CH ₄	N ₂ O	Controlled NO _x ^e	Controlled PM ₁₀ ^e	Controlled PM _{2.5} ^e
Aerial Lift	Diesel	46	0.31	2026	588.897	586.900	0.024	0.005	2.750	0.010	0.010
Air Compressor (Jackhammer)	Diesel	37	0.48	2026	570.256	568.287	0.023	0.005	2.750	0.010	0.010
Concrete/Industrial Saw	Diesel	33	0.73	2026	576.326	574.357	0.023	0.005	2.750	0.010	0.010
Generator Small	Diesel	7	0.74	2026	570.296	568.327	0.023	0.005	2.750	0.010	0.010
Generator Large	Diesel	50	0.74	2026	570.284	568.315	0.023	0.005	2.740	0.010	0.010
Other General Industrial Equipment	Diesel	35	0.34	2026	589.874	587.877	0.024	0.005	2.750	0.010	0.010
Plate Compactor	Diesel	8	0.43	2026	570.306	568.337	0.023	0.005	2.750	0.010	0.010
Rough Terrain Forklift	Diesel	96	0.40	2026	530.537	528.889	0.021	0.004	0.260	0.010	0.010
Skid Steer Loader	Diesel	71	0.37	2026	530.269	528.621	0.021	0.004	2.740	0.010	0.010
Tractors/Loaders/Backhoe	Diesel	84	0.37	2026	531.355	529.707	0.021	0.004	0.260	0.010	0.010
Welder	Diesel	46	0.45	2026	570.260	568.291	0.023	0.005	2.750	0.010	0.010

Notes:

^a Unless otherwise indicated, Horsepower and Load Factors taken from Table G-12 of Appendix G of the *CalEEMod*.
The small generator was assumed to be 7 hp and the large generator was assumed to be 50 hp, as PG&E indicated.

^b Construction emission factors conservatively based on the year construction activities begin (2026).

^c Unless otherwise indicated, Emission Factors taken from Table G-11 of Appendix G of the *CalEEMod User's Guide*.

^d CO₂e emissions were calculated using the following global warming potentials from 40 CFR Part 98, Table A-1:

CO₂ = 1

CH₄ = 28

N₂O = 265

^e Controlled NO_x, PM₁₀, and PM_{2.5} emission factors taken from Table G-13 of Appendix G of the *CalEEMod User's Guide*, assuming all equipment would comply with the Tier 4 Final emissions standards.

Table 9
PG&E Vehicle Emission Factors
PG&E S-238 Hinkley Compressor Station Electrical Upgrades

Construction Emission Factors for 2026 ^a

Vehicle Class ^b	Fuel Type	EMFAC Vehicle Types	Exhaust Emission Factors (g/mile) ^c							Paved Road Emission Factors (g/mile) ^d	
			ROG	CO	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂ e	PM ₁₀	PM _{2.5}
Offsite Light-duty Auto/Truck	Gasoline	LDA, LDT1, LDT2	0.01	0.90	0.05	0.00	0.01	0.01	268.65	0.30	0.07
Offsite Heavy-duty Diesel	Diesel	HHDT	0.01	0.08	1.18	0.01	0.10	0.04	1,453.80	0.30	0.07
Onsite Heavy-duty Diesel	Diesel	HHDT	0.12	1.05	10.98	0.03	0.15	0.06	3,005.79	0.30	0.07

Notes:

^a Construction emission factors conservatively based on the year construction activities begin (2026)

^b Offsite vehicles were assumed to travel 40 mph and onsite vehicles were assumed to travel 5 mph

^c Vehicle Emission Factors from EMFAC2021 for the Mojave Desert AQMD, calendar year 2026.

^d Paved road emission factors calculated using CalEEMod methodology, as described below. It is assumed that no vehicles will travel on unpaved roads during this project

Paved Road Emission Factors

Parameter ^a	PM ₁₀	PM _{2.5}
Average Weight	2.4	2.4
k	1	0.25
sL	0.1	0.1
p ^b	11.6	11.6
Emission Factor (g/mile) ^c	0.298	0.075

Notes:

^a Except for P, all parameters taken from Section 5.1.4 of Appendix C of the *CalEEMod User's Guide* (ICF 2022).

^b P taken from the CalEEMod model for a location in or around Barstow, California.

^c Emission factor calculated using methodology from Section 5.1.4 of Appendix C of the *CalEEMod User's Guide* (ICF 2022), as follows:

$$\text{Emission Factor (g/mile)} = k \text{ (g/mile)} \times [\text{sL (g/m}^2\text{)}]^{0.91} \times [\text{Average Weight (tons)}]^{1.02} \times [1 - P \text{ (days)} / 1,460 \text{ days}]$$