

Appendix 3

Air Quality Emission Calculations

- Supplemental emissions estimates for motor vehicle trips

1. SCAMQD's 2011 on-road emission factors for passenger vehicles are used as they are used in the PEA.
2. Annual emissions are estimated by staff based on the given number of operating days identified in the PEA Appendix.

			Emission Factors (lbs/mile)								Daily Emissions (lbs/day)									Annual Emissions (lbs)							
Construction Activity	Number of Vehicles	Miles/Day	ROG	CO	NOx	SO _x	PM10	PM2.5	CO ₂	CH ₄	ROG	CO	NOx	SO _x	PM10	PM2.5	CO ₂	CH ₄	# of Days	ROG	CO	NOx	SO _x	PM10	PM2.5	CO ₂	CH ₄
Grading Task Personal Vehicles	8	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.102	0.992	0.101	0.001	0.011	0.007	132.28	0.009	13	1.33	12.89	1.32	0.02	0.14	0.09	1,720	0.12
Fencing Task Personal Vehicles	4	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.051	0.496	0.051	0.001	0.005	0.003	66.14	0.005	5	0.26	2.48	0.25	0.00	0.03	0.02	331	0.02
Civil Task Personal Vehicles	8	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.102	0.992	0.101	0.001	0.011	0.007	132.28	0.009	30	3.07	29.75	3.04	0.04	0.32	0.20	3,968	0.28
MEER Task Personal Vehicles	4	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.051	0.496	0.051	0.001	0.005	0.003	66.14	0.005	40	2.05	19.83	2.03	0.03	0.21	0.14	2,646	0.18
Electrical Task Personal Vehicles	8	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.102	0.992	0.101	0.001	0.011	0.007	132.28	0.009	40	4.09	39.66	4.05	0.05	0.43	0.27	5,291	0.37
Wiring Task Personal Vehicles	2	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.026	0.248	0.025	0.000	0.003	0.002	33.07	0.002	60	1.53	14.87	1.52	0.02	0.16	0.10	1,984	0.14
Total (tpy)																				0.006	0.060	0.006	0.000	0.001	0.000	7.97	0.001

			Emission Factors (lbs/mile)								Daily Emissions (lbs/day)									Annual Emissions (lbs)							
Vehicle Class	Estimated Workforce	VMT	ROG	CO	NOx	SO _x	PM10	PM2.5	CO ₂	CH ₄	ROG	CO	NOx	SO _x	PM10	PM2.5	CO ₂	CH ₄	# of Days	ROG	CO	NOx	SO _x	PM10	PM2.5	CO ₂	CH ₄
Survey Task Personal Vehicles	4	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.051	0.496	0.051	0.001	0.005	0.003	66.14	0.005	2	0.10	0.99	0.10	0.00	0.01	0.01	132	0.01
Roads & Landing Work	5	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.064	0.620	0.063	0.001	0.007	0.004	82.68	0.006	5	0.32	3.10	0.32	0.00	0.03	0.02	413	0.03
LWS / Wood Pole Haul	4	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.051	0.496	0.051	0.001	0.005	0.003	66.14	0.005	3	0.15	1.49	0.15	0.00	0.02	0.01	198	0.01
IWS / Wood Pole Assembly	8	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.102	0.992	0.101	0.001	0.011	0.007	132.28	0.009	5	0.51	4.96	0.51	0.01	0.05	0.03	661	0.05
Guard Structure	6	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.077	0.744	0.076	0.001	0.008	0.005	99.21	0.007	6	0.46	4.46	0.46	0.01	0.05	0.03	595	0.04
Install Tubular Steel Pole Foundations	7	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.089	0.868	0.089	0.001	0.009	0.006	115.75	0.008	10	0.89	8.68	0.89	0.01	0.09	0.06	1,157	0.08
LWS / Wood Pole	8	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.102	0.992	0.101	0.001	0.011	0.007	132.28	0.009	5	0.51	4.96	0.51	0.01	0.05	0.03	661	0.05
Tubular Steel Pole Haul	4	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.051	0.496	0.051	0.001	0.005	0.003	66.14	0.005	2	0.10	0.99	0.10	0.00	0.01	0.01	132	0.01
Tubular Steel Pole Assembly	8	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.102	0.992	0.101	0.001	0.011	0.007	132.28	0.009	5	0.51	4.96	0.51	0.01	0.05	0.03	661	0.05
Tubular Steel Pole Erection	8	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.102	0.992	0.101	0.001	0.011	0.007	132.28	0.009	5	0.51	4.96	0.51	0.01	0.05	0.03	661	0.05
Remove Existing Conductor	14	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.179	1.735	0.177	0.002	0.019	0.012	231.49	0.016	1	0.18	1.74	0.18	0.00	0.02	0.01	231	0.02
Install Conductor & GW	20	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.256	2.479	0.253	0.003	0.027	0.017	330.71	0.023	8	2.05	19.83	2.03	0.03	0.21	0.14	2,646	0.18
Guard Structure Removal	6	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.077	0.744	0.076	0.001	0.008	0.005	99.21	0.007	1	0.08	0.74	0.08	0.00	0.01	0.01	99	0.01
Remove LWS Poles	6	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008</																	

Vehicle Class	Number of Vehicles	VMT	Emission Factors (lbs/mile)								Daily Emissions (lbs/day)								# of Days	Annual Emissions (lbs)							
			ROG	CO	NOx	SO _x	PM10	PM2.5	CO ₂	CH ₄	ROG	CO	NOx	SO _x	PM10	PM2.5	CO ₂	CH ₄		ROG	CO	NOx	SO _x	PM10	PM2.5	CO ₂	CH ₄
Cable Construction Task Personal Vehicles	5	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.064	0.620	0.063	0.001	0.007	0.004	82.68	0.006	23	1.47	14.25	1.46	0.02	0.15	0.10	1,902	0.13
Receive and Load Out Materials Task Personal Vehicles	5	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.064	0.620	0.063	0.001	0.007	0.004	82.68	0.006	23	1.47	14.25	1.46	0.02	0.15	0.10	1,902	0.13
Cleanup Task Personal Vehicles	5	15	0.00085	0.00826	0.00084	0.00001	0.00009	0.00006	1.10235	0.00008	0.064	0.620	0.063	0.001	0.007	0.004	82.68	0.006	23	1.47	14.25	1.46	0.02	0.15	0.10	1,902	0.13
Total (tpy)																		0.002	0.021	0.002	0.000	0.000	0.000	2.85	0.000		