

H.1 INTRODUCTION

This appendix provides the emission calculations associated with fugitive dust and criteria pollutants associated with construction equipment. This information supplements the summary emission data presented in Table 5.4-2 in Section 5.4 of this PEA.

The following emission calculation tables are included:

- Table H-1; Segment 2 Criteria Pollutant Construction Equipment Emissions
- Table H-2; Segment 3 Criteria Pollutant Construction Equipment Emissions
- Table H-3; Segment 2 Fugitive Dust Emissions Summary
- Table H-4; Segment 3 Fugitive Dust Emissions Summary
- Table H-3A; Segment 2 Fugitive Dust from Grading
- Table H-3B; Segment 2 Fugitive Dust from Roads
- Table H-3C; Segment 2 Fugitive Dust from Filling and Dumping
- Table H-4A; Segment 3 Fugitive Dust from Grading
- Table H-4B; Segment 3 Fugitive Dust from Roads
- Table H-4C; Segment 3 Fugitive Dust from Filling and Dumping
- Table H-5; Summary of Fugitive Dust Emissions Calculation Methodology

**TABLE H-1
SEGMENT 2 CRITERIA POLLUTANT CONSTRUCTION EQUIPMENT EMISSIONS**

Segment 2: Antelope-Vincent 500kV Project				(21.3 Mile Const - 108 str - 11 month period)			(NO _x Estimates - 11 month period)			(PM ₁₀ Estimates - 11 month period)		(SO ₂ Estimates - 11 month period)		(CO Estimates - 11 month period)		(VOC Estimates - 11 month period)		
Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)	Estimated Hours of Use	Estimated NO _x = Lb/Day (ea 10 hour work day)	Load Factor	Estimated Tons	Estimated PM ₁₀ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated SO ₂ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated CO = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated VOC = Lb/Day (ea 10 hour work day)	Estimated Tons	
Survey (1 Crew)																		
Truck, Pick-Up	180	Gas	2	25	2.50	125	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01	0.00
Marshalling Yards (1 Crew)																		
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	1	300	2.50	750	0.62	0.43	0.09	0.04	0.01	0.05	0.01	0.24	0.04	0.08	0.01	
Truck, Semi, Tractor	310	Diesel	1	300	1.50	450	0.06	0.62	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	
Trailer, Flatbed, 40'	N/A	N/A	N/A	300	N/A													
Loader, Front End, w/ Bucket	145	Diesel	1	300	1.00	300	1.03	0.54	0.15	0.09	0.01	0.10	0.01	0.31	0.05	0.12	0.02	
Forklift, 5 Ton	75	Diesel	1	300	5.00	1500	0.66	0.30	0.10	0.05	0.01	0.19	0.03	0.66	0.10	0.23	0.03	
Forklift, 10 Ton	85	Diesel	1	300	5.00	1500	2.31	0.30	0.35	0.14	0.02	0.21	0.03	0.78	0.12	0.26	0.04	
Truck, Pick-Up	180	Gas	1	300	3.00	900	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.00	0.00	
Truck, Flatbed, 1 Ton	180	Gas	1	300	1.50	450	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.01	0.00	
Trailer, Office, 40' - 60'	N/A	N/A	N/A	300	N/A													
Trailer, Storage, 40'	N/A	N/A	N/A	300	N/A													
Road Work (1 Crew)																		
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	65	9.00	585	6.52	0.58	0.21	0.58	0.02	0.72	0.02	1.81	0.06	0.62	0.02	
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	65	9.00	585	6.52	0.58	0.21	0.58	0.02	0.72	0.02	1.81	0.06	0.62	0.02	
Truck, Semi, Tractor	310	Diesel	1	65	1.50	98	0.06	0.62	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	
Trailer, Lowboy, 30'	N/A	N/A	N/A	65	N/A													
Motor Grader	110	Diesel	1	201	5.00	1005	2.05	0.58	0.21	0.18	0.02	0.19	0.02	0.43	0.04	0.11	0.01	
Truck, Water, 2,000 - 4,000 gal	175	Diesel	1	201	5.00	1005	3.49	0.41	0.35	0.29	0.03	0.29	0.03	1.38	0.14	0.31	0.03	
Back Hoe, w/ Bucket	85	Diesel	1	65	3.00	195	2.65	0.47	0.09	0.24	0.01	0.25	0.01	0.80	0.03	0.32	0.01	
Truck, Pick-Up	210	Diesel	3	201	3.00	1809	0.02	0.48	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	
Truck, Flatbed, 1 Ton	210	Diesel	1	65	3.00	195	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	
Foundations (3 Crews)																		
Digger, Transmission Type, Truck Mount	190	Diesel	1	60	9.00	540	6.27	0.41	0.19	0.52	0.02	0.53	0.02	2.49	0.07	0.55	0.02	
Truck, Flatbed, 2 Ton	210	Diesel	3	60	2.50	450	0.25	0.48	0.01	0.01	0.00	0.01	0.00	0.05	0.00	0.01	0.00	
Truck, Concrete, 10 Yd	310	Diesel	6	60	5.00	1800	1.19	0.56	0.04	0.10	0.00	0.10	0.00	0.47	0.01	0.47	0.01	
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	2	60	2.50	300	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	
Crawler, Track Type, Drill Rig, Pneumatic	305	Diesel	1	60	9.00	540	6.52	0.58	0.20	0.58	0.02	0.72	0.02	1.81	0.05	0.62	0.02	
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	60	4.00	240	2.90	0.58	0.09	0.26	0.01	0.32	0.01	0.81	0.02	0.28	0.01	
Truck, Semi, Tractor	310	Diesel	1	60	2.00	120	0.08	0.62	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	
Trailer, Lowboy, 30'	N/A	N/A	N/A	60	N/A													
Back Hoe, w/ Bucket	85	Diesel	1	60	5.00	300	4.42	0.47	0.13	0.40	0.01	0.42	0.01	1.33	0.04	0.53	0.02	
Truck, Dump, 10 Ton	235	Diesel	1	60	2.50	150	0.13	0.38	0.00	0.01	0.00	0.00	0.00	0.05	0.00	0.01	0.00	
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	2	60	5.00	600	6.97	0.41	0.21	0.57	0.02	0.59	0.02	2.77	0.08	0.62	0.02	
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	60	5.00	300	0.09	0.62	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	
Truck, Pick-Up	210	Diesel	3	60	3.00	540	0.02	0.48	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	
Truck, Flatbed, 1 Ton	210	Diesel	3	60	3.00	540	0.08	0.48	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00	
Motor, Auxiliary Power	5	Gas	3	60	2.00	360	0.01	0.68	0.00	0.00	0.00	0.00	0.00	0.37	0.01	0.01	0.00	
Trailer, Storage, 40'	N/A	N/A	N/A	60	N/A													
Steel (Shake-out, Hauling, Light Assembly, Heavy Assembly, Erection) (8 Crews)																		
Crane, Hydraulic, 150 Ton	250	Diesel	1	135	9.00	1215	13.35	0.43	0.90	0.87	0.06	1.16	0.08	5.22	0.35	1.74	0.12	
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	5	77	9.00	3465	11.13	0.43	0.43	0.72	0.03	0.97	0.04	4.39	0.17	1.45	0.06	
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	2	77	5.00	770	0.28	0.41	0.01	0.01	0.00	0.00	0.00	0.03	0.00	0.01	0.00	
Truck, Flatbed, 2 Ton	235	Gas	4	77	2.50	770	0.17	0.48	0.01	0.01	0.00	0.01	0.00	0.41	0.02	0.06	0.00	
Truck, Pick-Up	180	Gas	8	77	7.50	4620	0.08	0.48	0.00	0.00	0.00	0.01	0.00	0.85	0.03	0.06	0.00	
Truck, Flatbed, 1 Ton	180	Gas	6	77	1.00	462	0.10	0.48	0.00	0.00	0.00	0.01	0.00	0.25	0.01	0.04	0.00	
Trailer, Lowboy, 30'	N/A	N/A	N/A	77	N/A													
Truck, Semi, Tractor	310	Diesel	3	77	2.00	462	0.25	0.62	0.01	0.01	0.00	0.01	0.00	0.10	0.00	0.02	0.00	
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	77	2.00	154	1.45	0.58	0.06	0.13	0.00	0.16	0.01	0.40	0.02	0.14	0.01	
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	135	2.00	270	1.45	0.58	0.10	0.13	0.01	0.16	0.01	0.40	0.03	0.14	0.01	
Trailer, Flatbed, 40'	N/A	N/A	N/A	77	N/A													
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	135	7.50	1013	5.23	0.41	0.35	0.43	0.03	0.44	0.03	2.08	0.14	0.46	0.03	
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	135	7.50	1013	0.13	0.62	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	
Compressor, Air	75	Gas	5	77	7.50	2888	3.15	0.56	0.12	0.39	0.02	0.95	0.04	14.18	0.55	3.15	0.12	

**TABLE H-1
SEGMENT 2 CRITERIA POLLUTANT CONSTRUCTION EQUIPMENT EMISSIONS**

Segment 2: Antelope-Vincent 500kV Project				(21.3 Mile Const - 108 str - 11 month period)			(NO _x Estimates - 11 month period)			(PM ₁₀ Estimates - 11 month period)		(SO ₂ Estimates - 11 month period)		(CO Estimates - 11 month period)		(VOC Estimates - 11 month period)		
Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)	Estimated Hours of Use	Estimated NO _x = Lb/Day (ea 10 hour work day)	Load Factor	Estimated Tons	Estimated PM ₁₀ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated SO ₂ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated CO = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated VOC = Lb/Day (ea 10 hour work day)	Estimated Tons	
Conductor (Sheaves, Insulators, Stringing, Deadending, Clipping and Spacing, Anchors)				(8 Crews)														
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	3	63	9.00	1701	0.75	0.41	0.02	0.01	0.00	0.01	0.00	0.48	0.02	0.02	0.00	
Tension Machine	135	Diesel	1	46	5.00	230	0.06	0.41	0.00	0.00	0.00	0.00	0.00	0.55	0.01	0.00	0.00	
Truck, Wire Puller, 3 Drum	310	Diesel	1	46	2.50	115	0.03	0.41	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	
Truck, Wire Puller, 1 Drum	310	Diesel	1	46	5.00	230	0.07	0.41	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	
Truck, Semi, Tractor	310	Diesel	3	46	7.50	1035	0.93	0.62	0.02	0.04	0.00	0.05	0.00	2.32	0.05	0.08	0.00	
Trailer, Lowboy & Reel Stand	N/A	N/A	N/A	46	N/A													
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	63	9.00	567	6.27	0.41	0.20	0.52	0.02	0.53	0.02	17.44	0.55	0.55	0.02	
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	63	2.50	158	1.81	0.58	0.06	0.16	0.01	0.20	0.01	12.68	0.40	0.17	0.01	
Crawler, Track Type, Sagging (D8 type)	305	Diesel	2	53	5.00	530	7.25	0.58	0.19	0.64	0.02	0.81	0.02	21.33	0.57	0.69	0.02	
Truck, Flatbed, 1 Ton	180	Gas	7	65	5.00	2275	0.60	0.48	0.02	0.02	0.00	0.03	0.00	18.64	0.61	0.22	0.01	
Truck, Pick-Up	180	Gas	3	63	9.00	1701	0.03	0.48	0.00	0.00	0.00	0.00	0.00	2.68	0.08	0.03	0.00	
Back Hoe, w/ Bucket	85	Diesel	1	63	3.50	221	3.09	0.47	0.10	0.28	0.01	0.30	0.01	16.76	0.53	0.37	0.01	
Digger, Transmission Type, Truck Mount	190	Diesel	1	46	1.00	46	0.70	0.41	0.02	0.06	0.00	0.06	0.00	12.73	0.29	0.06	0.00	
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	63	7.50	473	0.13	0.62	0.00	0.00	0.00	0.00	0.00	0.24	0.01	0.01	0.00	
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	2	63	3.50	441	1.73	0.43	0.05	0.11	0.00	0.15	0.00	12.28	0.39	0.23	0.01	
Helicopter, Small		Jet Fuel	1	64	6.00	384		N/A										
Motor, Auxiliary Power	5	Gas	4	53	4.00	848	0.02	0.68	0.00	0.00	0.00	0.00	0.00	13.18	0.35	0.03	0.00	
Cleanup & Guard Poles				(2 Crews)														
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	1	15	5.00	75	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	1	15	5.00	75	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	
Back Hoe, w/ Bucket	85	Diesel	1	15	5.00	75	4.42	0.47	0.03	0.40	0.00	0.42	0.00	3.99	0.03	0.53	0.00	
Truck, Semi, Tractor	310	Diesel	1	15	9.00	135	0.37	0.62	0.00	0.02	0.00	0.02	0.00	0.25	0.00	0.03	0.00	
Trailer, Expandable Pole	N/A	N/A	N/A	15	N/A													
Motor Grader	110	Diesel	1	15	9.00	135	3.69	0.58	0.03	0.32	0.00	0.35	0.00	1.30	0.01	0.20	0.00	
Truck, Flatbed, 1 Ton	210	Diesel	2	15	7.50	225	0.13	0.48	0.00	0.00	0.00	0.02	0.00	0.06	0.00	0.01	0.00	
Truck, Pick-Up	210	Diesel	2	15	7.50	225	0.04	0.48	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.00	
Subtotal:							124.28		5.41	9.92	0.42	12.30	0.54	184.21	6.17	16.38	0.72	
Segment 2: Vincent Substation - 500kV				3 Month Period			(NO_x Estimates - 8 month period)			(PM₁₀ Estimates - 8 month period)		(SO₂ Estimates - 8 month period)		(CO Estimates - 8 month period)		(VOC Estimates - 8 month period)		
Civil Element				(1 Crew)														
Truck, Pick-Up, (Crew)	180	Gas	2	20	10.00	400	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.02	0.00	
Truck, Dump, 10 Ton	180	Gas	1	20	5.00	100	0.11	0.62	0.00	0.00	0.00	0.01	0.00	0.26	0.00	0.04	0.00	
Ditch Digger	75	Gas	1	20	7.50	150	0.18	0.70	0.00	0.00	0.00	0.01	0.00	9.28	0.09	0.42	0.00	
Digger, Transmission Type, Truck Mount	305	Diesel	1	20	7.50	150	5.23	0.41	0.05	0.43	0.00	0.44	0.00	2.08	0.02	0.46	0.00	
Tractor/Back Hoe, w/ Bucket	85	Diesel	2	20	7.00	280	12.37	0.47	0.12	1.11	0.01	1.18	0.01	3.72	0.04	1.50	0.01	
Forklift, 5 Ton	75	Diesel	1	20	5.00	100	0.66	0.30	0.01	0.05	0.00	0.19	0.00	0.66	0.01	0.23	0.00	
Truck, Concrete, 10 Yd	310	Diesel	2	20	7.50	300	0.60	0.56	0.01	0.05	0.00	0.05	0.00	0.24	0.00	0.24	0.00	
Electrical Element				(1 Crew)														
Truck, Pick-Up, (Crew)	180	Gas	2	35	10.00	700	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.02	0.00	
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	1	35	5.00	175	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	
Crane, Hydraulic, 150 Ton	250	Diesel	1	25	7.50	188	11.13	0.43	0.14	0.73	0.01	0.97	0.01	4.35	0.05	1.45	0.02	
Tractor/Back Hoe, w/ Bucket	85	Diesel	1	15	5.00	75	4.42	0.47	0.03	0.40	0.00	0.42	0.00	1.33	0.01	0.53	0.00	
Forklift, 5 Ton	75	Diesel	1	35	5.00	175	0.66	0.30	0.01	0.05	0.00	0.19	0.00	0.66	0.01	0.23	0.00	
Subtotal:							35.54		0.38	2.81	0.03	3.47	0.04	23.16	0.25	5.14	0.06	

**TABLE H-1
SEGMENT 2 CRITERIA POLLUTANT CONSTRUCTION EQUIPMENT EMISSIONS**

Segment 2: Antelope-Vincent 500kV Project				(21.3 Mile Const - 108 str - 11 month period)			(NO _x Estimates - 11 month period)			(PM ₁₀ Estimates - 11 month period)		(SO ₂ Estimates - 11 month period)		(CO Estimates - 11 month period)		(VOC Estimates - 11 month period)	
Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)	Estimated Hours of Use	Estimated NO _x = Lb/Day (ea 10 hour work day)	Load Factor	Estimated Tons	Estimated PM ₁₀ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated SO ₂ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated CO = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated VOC = Lb/Day (ea 10 hour work day)	Estimated Tons
Segment 2: Antelope Substation - 500kV				3 Month Period			(NO _x Estimates - 3 month period)			(PM ₁₀ Estimates - 3 month period)		(SO ₂ Estimates - 3 month period)		(CO Estimates - 3 month period)		(VOC Estimates - 3 month period)	

Civil Element				(1 Crew)													
Truck, Pick-Up, (Crew)	180	Gas	2	15	10.00	300	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.02	0.00
Truck, Dump, 10 Ton	180	Gas	1	15	5.00	75	0.11	0.62	0.00	0.00	0.00	0.01	0.00	0.26	0.00	0.04	0.00
Ditch Digger	75	Gas	1	10	7.50	75	0.18	0.70	0.00	0.00	0.00	0.01	0.00	9.28	0.05	0.42	0.00
Digger, Transmission Type, Truck Mount	305	Diesel	1	10	7.50	75	5.23	0.41	0.03	0.43	0.00	0.44	0.00	2.08	0.01	0.46	0.00
Tractor/Back Hoe, w/ Bucket	85	Diesel	2	15	7.00	210	12.37	0.47	0.09	1.11	0.01	1.18	0.01	3.72	0.03	1.50	0.01
Forklift, 5 Ton	75	Diesel	1	15	5.00	75	0.66	0.30	0.00	0.05	0.00	0.19	0.00	0.66	0.00	0.23	0.00
Truck, Concrete, 10 Yd	310	Diesel	2	55	7.50	825	0.60	0.56	0.02	0.05	0.00	0.05	0.00	0.24	0.01	0.24	0.01

Electrical Element				(1 Crew)													
Truck, Pick-Up, (Crew)	180	Gas	2	25	10.00	500	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.02	0.00
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	1	25	5.00	125	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Crane, Hydraulic, 150 Ton	250	Diesel	1	15	5.00	75	7.42	0.43	0.06	0.48	0.00	0.65	0.00	2.90	0.02	0.97	0.01
Tractor/Back Hoe, w/ Bucket	85	Diesel	1	25	5.00	125	4.42	0.47	0.06	0.40	0.00	0.42	0.01	1.33	0.02	0.53	0.01
Forklift, 5 Ton	75	Diesel	1	25	5.00	125	0.66	0.30	0.01	0.05	0.00	0.19	0.00	0.66	0.01	0.23	0.00
Subtotal:							31.83		0.26	2.57	0.02	3.14	0.03	21.71	0.15	4.66	0.04
Grand Total - Segment 2:							191.65		6.05	15.29	0.47	18.91	0.60	229.08	6.56	26.17	0.82

GENERAL FOOTNOTES:
 1) Estimated lb/day results were obtained for modified accounting of equipment quantity and specific usage time.
 2) Emissions values were obtained from Table A9-8-A where practical. Where not evident, Table A9-8-B of the CEQA manual was utilized.
 3) EMFAC values were used to supplement emissions values not specified in CEQA manual tables.
 4) A load factor was employed to account for averaged emissions values per the CEQA manual directives, Table A9-8-D.
 5) Auxiliary Power Motor emissions were obtained from AP-42 Section 3.3, Table 3.3.1.

**TABLE H-2
SEGMENT 3 CRITERIA POLLUTANT CONSTRUCTION EQUIPMENT EMISSIONS**

Segment 3: Antelope Substation - 500kV				3 Month Period			NO _x Estimates - 3 month period					PM ₁₀ Estimates - 3 month period		SO ₂ Estimates - 3 month period		CO Estimates - 3 month period		VOC Estimates - 3 month period								
Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)	Estimated Hours of Use	Estimated NO _x = Lb/Hr (Modified for Total Equipment)	Estimated NO _x = Lb/Day (24 Hr day) for 1 vehicle	Estimated NO _x = Lb/Day (24 Hr day)	Estimated NO _x = Lb/Day (ea 10 hour work day)	Load Factor	Estimated Tons	Estimated PM ₁₀ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated SO ₂ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated CO = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated VOC = Lb/Day (ea 10 hour work day)	Estimated Tons						
Civil Element				(1 Crew)																						
Truck, Pick-Up, (Crew)	180	Gas	2	15	10.00	300	0.005	0.064	0.128	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.02	0.00				
Truck, Dump, 10 Ton	180	Gas	1	15	5.00	75	0.036	0.863	0.863	0.11	0.62	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.26	0.00	0.04	0.00				
Ditch Digger	75	Gas	1	10	7.50	75	0.034	0.825	0.825	0.18	0.70	0.00	0.00	0.00	0.01	0.00	0.00	0.00	9.28	0.05	0.42	0.00				
Digger, Transmission Type, Truck Mount	305	Diesel	1	10	7.50	75	1.700	40.800	40.800	5.23	0.41	0.03	0.43	0.00	0.44	0.00	0.00	0.00	2.08	0.01	0.46	0.00				
Tractor/Back Hoe, w/ Bucket	85	Diesel	2	15	7.00	210	3.800	45.600	91.200	12.37	0.47	0.09	1.11	0.01	1.18	0.01	0.00	0.00	3.72	0.03	1.50	0.01				
Forklift, 5 Ton	75	Diesel	1	15	5.00	75	0.440	10.560	10.560	0.66	0.30	0.00	0.05	0.00	0.19	0.00	0.00	0.00	0.66	0.00	0.23	0.00				
Truck, Concrete, 10 Yd	310	Diesel	2	15	7.50	225	0.142	1.700	3.400	0.60	0.36	0.00	0.05	0.00	0.05	0.00	0.00	0.00	0.24	0.00	0.24	0.00				
Foundations				(1 Crew)																						
Truck, Pick-Up, (Crew)	180	Gas	2	25	10.00	500	0.005	0.064	0.128	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.02	0.00				
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	1	25	5.00	125	0.137	1.637	1.637	0.14	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00				
Crane, Hydraulic, 150 Ton	250	Diesel	1	15	5.00	75	3.450	82.800	82.800	7.42	0.43	0.06	0.48	0.00	0.65	0.00	0.00	0.00	2.90	0.02	0.97	0.01				
Tractor/Back Hoe, w/ Bucket	85	Diesel	1	25	5.00	125	1.900	45.600	45.600	4.42	0.47	0.06	0.40	0.01	0.42	0.01	0.00	0.00	1.33	0.02	0.53	0.01				
Forklift, 5 Ton	75	Diesel	1	25	5.00	125	0.440	10.560	10.560	0.66	0.30	0.01	0.05	0.00	0.19	0.00	0.00	0.00	0.66	0.01	0.23	0.00				
Subtotal:																										
Antelope - Substation One - 500 kV TIL Project --Segment 3--				(25.6 Mile Const - 122 str - 13 month period)			NO_x Estimates - 13 month period					PM₁₀ Estimates - 13 month period		SO₂ Estimates - 13 month period		CO Estimates - 13 month period		VOC Estimates - 13 month period								
Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)	Estimated Hours of Use	Estimated NO _x = Lb/Hr (Modified for Total Equipment)	Estimated NO _x = Lb/Day (24 Hr day) for 1 vehicle	Estimated NO _x = Lb/Day (24 Hr day)	Estimated NO _x = Lb/Day (ea 10 hour work day)	Load Factor	Estimated Tons	Estimated PM ₁₀ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated SO ₂ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated CO = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated VOC = Lb/Day (ea 10 hour work day)	Estimated Tons						
Survey				(1 Crew)																						
Truck, Pick-Up	180	Gas	2	30	2.50	150	0.000	0.064	0.128	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01	0.00				
Marshalling Yards				(1 Crew)																						
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	1	335	2.50	838	0.575	13.800	13.800	0.62	0.43	0.10	0.04	0.01	0.05	0.01	0.00	0.00	0.24	0.04	0.08	0.01				
Truck, Semi, Tractor	310	Diesel	1	335	1.50	503	0.067	1.600	1.600	0.06	0.62	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00				
Trailer, Flatbed, 40'	N/A	N/A	N/A	335	N/A																					
Loader, Front End, w/ Bucket	145	Diesel	1	335	1.00	335	1.900	45.600	45.600	1.03	0.54	0.17	0.09	0.02	0.10	0.02	0.00	0.00	0.31	0.05	0.12	0.02				
Forklift, 5 Ton	75	Diesel	1	335	5.00	1675	0.440	10.560	10.560	0.66	0.30	0.11	0.05	0.01	0.19	0.03	0.00	0.00	0.66	0.11	0.23	0.04				
Forklift, 10 Ton	85	Diesel	1	335	5.00	1675	1.540	36.960	36.960	2.31	0.30	0.39	0.14	0.02	0.21	0.04	0.00	0.00	0.78	0.13	0.26	0.04				
Truck, Pick-Up	180	Gas	1	335	3.00	1005	0.003	0.064	0.064	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.00	0.00				
Truck, Flatbed, 1 Ton	180	Gas	1	335	1.50	503	0.036	0.863	0.863	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.01	0.00				
Trailer, Office, 40' - 60'	N/A	N/A	N/A	335	N/A																					
Trailer, Storage, 40'	N/A	N/A	N/A	335	N/A																					
Road Work				(1 Crew)																						
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	72	9.00	648	1.260	30.240	30.240	6.52	0.58	0.23	0.58	0.02	0.72	0.03	0.00	0.00	1.81	0.07	0.62	0.02				
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	72	9.00	648	1.260	30.240	30.240	6.52	0.58	0.23	0.58	0.02	0.72	0.03	0.00	0.00	1.81	0.07	0.62	0.02				
Truck, Semi, Tractor	310	Diesel	1	72	1.50	108	0.067	1.600	1.600	0.06	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00				
Trailer, Lowboy, 30'	N/A	N/A	N/A	72	N/A																					
Motor Grader	110	Diesel	1	219	5.00	1095	0.713	17.112	17.112	2.05	0.58	0.22	0.18	0.02	0.19	0.02	0.00	0.00	0.43	0.05	0.11	0.01				
Truck, Water, 2,000 - 4,000 gal	175	Diesel	1	219	5.00	1095	1.700	40.800	40.800	3.49	0.41	0.38	0.29	0.03	0.29	0.03	0.00	0.00	1.38	0.15	0.31	0.03				
Back Hoe, w/ Bucket	85	Diesel	1	72	3.00	216	1.900	45.600	45.600	2.65	0.47	0.10	0.24	0.01	0.25	0.03	0.00	0.00	0.80	0.03	0.32	0.01				
Truck, Pick-Up	210	Diesel	3	219	3.00	1971	0.016	0.128	0.384	0.02	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00				
Truck, Flatbed, 1 Ton	210	Diesel	1	72	3.00	216	0.018	0.432	0.432	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00				
Foundations				(3 Crews)																						
Digger, Transmission Type, Truck Mount	190	Diesel	1	90	9.00	810	1.700	40.800	40.800	6.27	0.41	0.28	0.52	0.02	0.53	0.02	0.00	0.00	2.49	0.11	0.55	0.02				
Truck, Flatbed, 2 Ton	210	Diesel	2	90	2.50	450	0.136	1.637	3.274	0.16	0.48	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.04	0.00	0.01	0.00				
Truck, Concrete, 10 Yd	310	Diesel	4	90	5.00	1800	0.283	1.700	6.800	0.79	0.56	0.04	0.07	0.00	0.07	0.00	0.00	0.00	0.32	0.01	0.32	0.01				
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	1	90	2.50	225	0.068	1.637	1.637	0.07	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00				
Crawler, Track Type, Drill Rig, Pneumatic	305	Diesel	1	90	9.00	810	1.260	30.240	30.240	6.52	0.58	0.29	0.58	0.03	0.72	0.03	0.00	0.00	1.81	0.08	0.62	0.03				
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	90	4.00	360	1.260	30.240	30.240	2.90	0.58	0.13	0.26	0.01	0.32	0.01	0.00	0.00	0.81	0.04	0.28	0.01				
Truck, Semi, Tractor	310	Diesel	1	90	2.00	180	0.067	1.600	1.600	0.08	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00				
Trailer, Lowboy, 30'	N/A	N/A	N/A	90	N/A																					
Back Hoe, w/ Bucket	85	Diesel	1	90	5.00	450	1.900	45.600	45.600	4.42	0.47	0.20	0.40	0.02	0.42	0.02	0.00	0.00	1.33	0.06	0.53	0.02				
Truck, Dump, 10 Ton	235	Diesel	1	90	2.50	225	0.133	3.200	3.200	0.13	0.38	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.01	0.00				
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	90	5.00	450	1.700	40.800	40.800	3.49	0.41	0.16	0.29	0.01	0.29	0.01	0.00	0.00	1.38	0.06	0.62	0.03				
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	90	5.00	450	0.028	0.680	0.680	0.09	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00				
Truck, Pick-Up	210	Diesel	2	90	3.00	540	0.011	0.128	0.256	0.02	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00				
Truck, Flatbed, 1 Ton	210	Diesel	2	90	3.00	540	0.036	0.432	0.864	0.05	0.48	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00				
Motor, Auxiliary Power	5	Gas	2	90	2.00	360	0.005	0.055	0.110	0.01	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.01	0.01	0.00				
Trailer, Storage, 40'	N/A	N/A	N/A	90	N/A																					
Steel (Shake-out, Hauling, Light Assembly, Heavy Assembly, Erection)				(8 Crews)																						
Crane, Hydraulic, 150 Ton																										

TABLE H-2
SEGMENT 3 CRITERIA POLLUTANT CONSTRUCTION EQUIPMENT EMISSIONS

Antelope - Substation One - 500 kV T/L Project -Segment 3--				(25.6 Mile Const - 122 str - 13 month period)			NO _x Estimates - 13 month period					PM ₁₀ Estimates - 13 month period		SO ₂ Estimates - 13 month period		CO Estimates - 13 month period		VOC Estimates - 13 month period											
Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)	Estimated Hours of Use	Estimated NO _x = Lb/Hr (Modified for Total Equipment)	Estimated NO _x = Lb/Day (24 Hr day) for 1 vehicle	Estimated NO _x = Lb/Day (24 Hr day)	Estimated NO _x = Lb/Day (ea 10 hour work day)	Load Factor	Estimated Tons	Estimated PM ₁₀ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated SO ₂ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated CO = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated VOC = Lb/Day (ea 10 hour work day)	Estimated Tons									
Conductor (Sheaves, Insulators, Stringing, Deadending, Clipping and Spacing, Anchors)				(8 Crews)																									
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	3	172	9.00	4644	0.204	1.630	4.890	0.75	0.41	0.06	0.01	0.00	0.01	0.00	1.32	0.11	0.02	0.00									
Tension Machine	135	Diesel	1	172	5.00	860	0.028	0.680	0.680	0.06	0.41	0.00	0.00	0.00	0.00	0.00	2.05	0.18	0.00	0.00									
Truck, Wire Puller, 3 Drum	310	Diesel	1	172	2.50	430	0.034	0.815	0.815	0.03	0.41	0.00	0.00	0.00	0.00	0.00	0.22	0.02	0.00	0.00									
Truck, Wire Puller, 1 Drum	310	Diesel	1	172	5.00	860	0.034	0.815	0.815	0.07	0.41	0.01	0.00	0.00	0.00	0.00	0.22	0.02	0.00	0.00									
Truck, Semi, Tractor	310	Diesel	3	172	7.50	3870	0.200	1.600	4.800	0.93	0.62	0.08	0.04	0.00	0.05	0.00	8.66	0.75	0.08	0.01									
Trailer, Lowboy & Reel Stand	N/A	N/A	N/A	172	N/A	N/A																							
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	172	9.00	1548	1.700	40.800	40.800	6.27	0.41	0.54	0.52	0.04	0.53	0.05	47.60	4.09	0.55	0.05									
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	172	2.50	430	1.260	30.240	30.240	1.81	0.58	0.16	0.16	0.01	0.20	0.02	34.62	2.98	0.17	0.01									
Crawler, Track Type, Sagging (D8 type)	305	Diesel	2	172	5.00	1720	2.520	30.240	60.480	7.25	0.58	0.62	0.64	0.06	0.81	0.07	69.23	5.95	0.69	0.06									
Truck, Flatbed, 1 Ton	180	Gas	7	172	5.00	6020	0.252	0.863	6.041	0.60	0.48	0.05	0.02	0.00	0.03	0.00	49.32	4.24	0.22	0.02									
Truck, Pick-Up	180	Gas	3	172	9.00	4644	0.064	0.192	0.604	0.08	0.48	0.00	0.00	0.00	0.00	0.00	7.33	0.63	0.03	0.00									
Back Hoe, w/ Bucket	85	Diesel	1	172	3.50	602	1.900	45.600	45.600	3.09	0.47	0.27	0.28	0.02	0.30	0.03	45.75	3.93	0.37	0.03									
Digger, Transmission Type, Truck Mount	190	Diesel	1	172	1.00	172	1.700	40.800	40.800	0.70	0.41	0.06	0.06	0.00	0.06	0.01	47.60	4.09	0.06	0.01									
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	172	7.50	1290	0.028	0.680	0.680	0.13	0.62	0.01	0.00	0.00	0.00	0.00	0.67	0.06	0.01	0.00									
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	2	172	3.50	1204	1.150	13.800	27.600	1.73	0.43	0.15	0.11	0.01	0.15	0.01	33.53	2.88	0.23	0.02									
Helicopter, Small		Jet Fuel	1	172	6.00	1032	1.010	24.250	24.250		N/A																		
Motor, Auxiliary Power	5	Gas	4	172	4.00	2752	0.009	0.055	0.220	0.02	0.68	0.00	0.00	0.00	0.00	0.00	42.79	3.68	0.03	0.00									
Cleanup & Guard Poles				(2 Crews)																									
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	1	24	5.00	120	0.068	1.630	1.630	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00									
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	1	24	5.00	120	0.068	1.630	1.630	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00									
Back Hoe, w/ Bucket	85	Diesel	1	24	5.00	120	1.900	45.600	45.600	4.42	0.47	0.05	0.40	0.02	0.42	0.01	6.38	0.08	0.53	0.01									
Truck, Semi, Tractor	310	Diesel	1	24	9.00	216	0.067	1.600	1.600	0.37	0.62	0.00	0.02	0.00	0.02	0.00	0.40	0.00	0.03	0.00									
Trailer, Expandable Pole	N/A	N/A	N/A	24	N/A	N/A																							
Motor Grader	110	Diesel	1	24	9.00	216	0.713	17.112	17.112	3.69	0.58	0.04	0.32	0.00	0.35	0.00	2.08	0.03	0.20	0.00									
Truck, Flatbed, 1 Ton	210	Diesel	2	24	7.50	360	0.036	0.432	0.864	0.13	0.48	0.00	0.00	0.00	0.02	0.00	0.10	0.00	0.01	0.00									
Truck, Pick-Up	210	Diesel	2	24	7.50	360	0.011	0.128	0.256	0.04	0.48	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01	0.00									
Subtotal:										138.84		8.93		10.84		6.68		13.71		455.76		37.42		19.23		1.27			
Total AVAQM for Segment 3 ⁵ :										84.59		3.64		6.68		0.28		8.35		36.36		194.90		14.37		11.96		0.52	
KCAPCD ⁵ :										86.08		5.54		6.72		0.42		8.50		55.55		282.57		23.20		11.92		0.79	
Substation One - Substation Two 220 kV T/L Project -Segment 3--				(8.96 Mile Const - 49 str - 8 month period)			NO_x Estimates - 8 month period					PM₁₀ Estimates - 8 month period		SO₂ Estimates - 8 month period		CO Estimates - 8 month period		VOC Estimates - 8 month period											
Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)	Estimated Hours of Use	Estimated NO _x = Lb/Hr (Modified for Total Equipment)	Estimated NO _x = Lb/Day (24 Hr day) for 1 vehicle	Estimated NO _x = Lb/Day (24 Hr day)	Estimated NO _x = Lb/Day (ea 10 hour work day)	Load Factor	Estimated Tons	Estimated PM ₁₀ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated SO ₂ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated CO = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated VOC = Lb/Day (ea 10 hour work day)	Estimated Tons									
Survey				(1 Crew)																									
Truck, Pick-Up	180	Gas	2	30	2.50	150	0.000	0.064	0.128	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01	0.00									
Marshalling Yards				(1 Crew)																									
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	1	209	2.50	523	0.575	13.800	13.800	0.62	0.43	0.06	0.04	0.00	0.05	0.01	0.24	0.03	0.08	0.01									
Truck, Semi, Tractor	310	Diesel	1	209	1.50	314	0.06	1.600	1.600	0.06	0.62	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00									
Trailer, Flatbed, 40'	N/A	N/A	N/A	209	N/A	N/A																							
Loader, Front End, w/ Bucket	145	Diesel	1	209	1.00	209	1.900	45.600	45.600	1.03	0.54	0.11	0.09	0.01	0.10	0.01	0.31	0.03	0.12	0.01									
Forklift, 5 Ton	75	Diesel	1	209	5.00	1045	0.440	10.560	10.560	0.66	0.30	0.07	0.05	0.01	0.19	0.02	0.66	0.07	0.23	0.02									
Forklift, 10 Ton	85	Diesel	1	209	5.00	1045	1.540	36.960	36.960	2.31	0.24	0.14	0.21	0.01	0.21	0.02	0.78	0.08	0.26	0.03									
Truck, Pick-Up	180	Gas	1	209	3.00	627	0.003	0.064	0.064	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00									
Truck, Flatbed, 1 Ton	180	Gas	1	209	1.50	314	0.036	0.863	0.863	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.01	0.00									
Trailer, Office, 40' - 60'	N/A	N/A	N/A	209	N/A	N/A																							
Trailer, Storage, 40'	N/A	N/A	N/A	209	N/A	N/A																							
Road Work				(1 Crew)																									
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	41	9.00	369	1.260	30.240	30.240	6.52	0.58	0.13	0.58	0.01	0.72	0.01	1.81	0.04	0.62	0.01									
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	41	9.00	369	1.260	30.240	30.240	6.52	0.58	0.13	0.58	0.01	0.72	0.01	1.81	0.04	0.62	0.01									
Truck, Semi, Tractor	310	Diesel	1	41	1.50	62	0.06	1.600	1.600	0.06	0.62	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00									
Trailer, Lowboy, 30'	N/A	N/A	N/A	41	N/A	N/A																							
Motor Grader	110	Diesel	1	123	5.00	615	0.713	17.112	17.112	2.05	0.58	0.13	0.18	0.01	0.19	0.01	0.43	0.03	0.11	0.01									
Truck, Water, 2,000 - 4,000 gal	175	Diesel	1	123	5.00	615	1.700	40.800	40.800	3.49	0.41	0.21	0.29	0.02	0.28	0.02	1.38	0.09	0.31	0.02									
Back Hoe, w/ Bucket	85	Diesel	1	41	3.00	123	1.900	45.600	45.600	2.65	0.47	0.05	0.24	0.00	0.25	0.01	0.80	0.02	0.32	0.01									
Truck, Pick-Up	210	Diesel	3	123	3.00	1107	0.128	0.48	0.384	0.02	0.48	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00									
Truck, Flatbed, 1 Ton	210	Diesel	1	41	3.00	123	0.018	0.432	0.432	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00									
Foundations				(3 Crews)																									
Digger, Transmission Type, Truck Mount	190	Diesel	1	55	9.00	495	1.700	40.800	40.800	6.27	0.41	0.17	0.52	0.01	0.53	0.01	2.49	0.07	0.55	0.02									
Truck, Flatbed, 2 Ton	210	Diesel	2	55	2.50	275	0.136	1.637	3.274	0.16	0.48	0.00	0.01	0.00	0.01	0.00	0.04	0.00	0.01	0.00									
Truck, Concrete, 10 Yd	310	Diesel	4	55	5.00	1100	0.283	1.700	6.800	0.79	0.56	0.02	0.07	0.00	0.07	0.00	0.32	0.01	0.32	0.01									
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	1	55	2.50	138	0.068	1.637	1.637	0.07	0.41	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00									
Crawler, Track Type, Drill Rig, Pneumatic	305	Diesel	1	55	9.00	495	1.260	30.240	30.240	6.52	0.58	0.18	0.58	0.02	0.72	0.02	1.81	0.05	0.62	0.02									
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	55	4.00	220	1.260	30.240	30.240	2.90	0.58	0.08	0.26	0.01	0.32	0.01	0.81												

TABLE H-2
SEGMENT 3 CRITERIA POLLUTANT CONSTRUCTION EQUIPMENT EMISSIONS

Substation One - Substation Two 220 kV T/L Project - Segment 3--				(8.96 Mile Const - 49 str - 8 month period)						NO _x Estimates - 8 month period			PM ₁₀ Estimates - 8 month period		SO ₂ Estimates - 8 month period		CO Estimates - 8 month period		VOC Estimates - 8 month period		
Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)	Estimated Hours of Use	Estimated NO _x = Lb/Hr (Modified for Total Equipment)	Estimated NO _x = Lb/Day (24 Hr day) for 1 vehicle	Estimated NO _x = Lb/Day (24 Hr day)	Estimated NO _x = Lb/Day (ea 10 hour work day)	Load Factor	Estimated Tons	Estimated PM ₁₀ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated SO ₂ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated CO = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated VOC = Lb/Day (ea 10 hour work day)	Estimated Tons	
Conductor (Sheaves, Insulators, Stringing, Deadending, Clipping and Spacing, Anchors)																					
(8 Crews)																					
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	3	83	9.00	2241	0.204	1.630	4.890	0.75	0.41	0.03	0.01	0.00	0.01	0.00	0.64	0.03	0.02	0.00	
Tension Machine	135	Diesel	1	83	5.00	415	0.028	0.680	0.680	0.06	0.41	0.00	0.00	0.00	0.00	0.00	0.99	0.04	0.00	0.00	
Truck, Wire Puller, 3 Drum	310	Diesel	1	83	2.50	208	0.034	0.815	0.815	0.03	0.41	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	
Truck, Wire Puller, 1 Drum	310	Diesel	1	83	5.00	415	0.034	0.815	0.815	0.07	0.41	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	
Truck, Semi, Tractor	310	Diesel	3	83	7.50	1868	0.200	1.600	4.800	0.93	0.62	0.04	0.04	0.00	0.05	0.00	4.18	0.17	0.08	0.00	
Trailer, Lowboy & Reel Stand	N/A	N/A	N/A	83	N/A																
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	83	9.00	747	1.700	40.800	40.800	6.27	0.41	0.26	0.52	0.02	0.53	0.02	22.97	0.95	0.55	0.02	
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	83	2.50	208	1.260	30.240	30.240	1.81	0.58	0.08	0.16	0.01	0.20	0.01	16.70	0.69	0.17	0.01	
Crawler, Track Type, Saggins (D8 type)	305	Diesel	2	83	5.00	830	2.520	30.240	60.480	7.25	0.58	0.30	0.64	0.03	0.81	0.03	33.41	1.39	0.69	0.03	
Truck, Flatbed, 1 Ton	180	Gas	7	83	5.00	2905	0.863	0.863	6.041	0.60	0.48	0.03	0.02	0.00	0.00	0.00	23.80	0.99	0.22	0.01	
Truck, Pick-Up	180	Gas	3	83	9.00	2241	0.008	0.064	0.192	0.03	0.48	0.00	0.00	0.00	0.00	0.00	3.54	0.15	0.03	0.00	
Back Hoe, w/ Bucket	85	Diesel	1	83	3.50	291	1.900	45.600	45.600	3.09	0.47	0.13	0.28	0.01	0.30	0.01	22.08	0.92	0.37	0.02	
Digger, Transmission Type, Truck Mount	180	Diesel	1	83	1.00	83	1.700	40.800	40.800	0.70	0.41	0.03	0.06	0.00	0.06	0.00	22.97	0.95	0.06	0.00	
Truck, Mechanics, 1 - 2 Ton	280	Diesel	1	83	7.50	623	0.028	0.680	0.680	0.13	0.62	0.01	0.00	0.00	0.00	0.00	0.32	0.01	0.01	0.00	
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	2	83	3.50	581	1.150	13.800	27.600	1.73	0.43	0.07	0.11	0.00	0.15	0.01	16.18	0.67	0.23	0.01	
Helicopter, Small		Jet Fuel	1	84	6.00	504	1.010	24.250	24.250		N/A										
Motor, Auxiliary Power	5	Gas	4	83	4.00	1328	0.009	0.055	0.220	0.02	0.68	0.00	0.00	0.00	0.00	0.00	20.65	0.86	0.03	0.00	
Cleanup & Guard Poles																					
(2 Crews)																					
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	1	69	5.00	345	0.068	1.630	1.630	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.18	0.01	0.00	0.00	
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	1	69	5.00	345	0.068	1.630	1.630	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.18	0.01	0.00	0.00	
Back Hoe, w/ Bucket	85	Diesel	1	69	5.00	345	1.900	45.600	45.600	4.42	0.47	0.15	0.40	0.01	0.42	0.01	18.35	0.63	0.53	0.02	
Truck, Semi, Tractor	310	Diesel	1	69	9.00	621	0.067	1.600	1.600	0.37	0.62	0.01	0.02	0.00	0.02	0.00	1.16	0.04	0.03	0.00	
Trailer, Expandable Pole	N/A	N/A	N/A	69	N/A																
Motor Grader	110	Diesel	1	69	9.00	621	0.713	17.112	17.112	3.69	0.58	0.13	0.32	0.01	0.35	0.01	5.99	0.21	0.20	0.01	
Truck, Flatbed, 1 Ton	210	Diesel	2	69	7.50	1035	0.036	0.432	0.864	0.13	0.48	0.00	0.00	0.00	0.02	0.00	0.29	0.01	0.01	0.00	
Truck, Pick-Up	210	Diesel	2	69	7.50	1035	0.011	0.128	0.256	0.04	0.48	0.00	0.00	0.00	0.00	0.00	0.20	0.01	0.01	0.00	
Subtotal:																					
Segment 3: Substation One - 500kV																					
6 Month Period																					
Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)	Estimated Hours of Use	Estimated NO _x = Lb/Hr (Modified for Total Equipment)	Estimated NO _x = Lb/Day (24 Hr day) for 1 vehicle	Estimated NO _x = Lb/Day (24 Hr day)	Estimated NO _x = Lb/Day (ea 10 hour work day)	Load Factor	Estimated Tons	Estimated PM ₁₀ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated SO ₂ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated CO = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated VOC = Lb/Day (ea 10 hour work day)	Estimated Tons	
Grading Element																					
(1 Crew)																					
Loader, Scraper, 980	305	Diesel	2	40	7.50	600	0.320	3.840	7.680	1.58	0.66	0.03	0.17	0.00	0.19	0.00	0.52	0.01	0.11	0.00	
Motor Grader	110	Diesel	1	40	5.00	200	0.713	17.112	17.112	2.05	0.58	0.04	0.18	0.00	0.19	0.00	0.43	0.01	0.11	0.00	
Truck, Dump, 10 Ton	180	Gas	3	40	5.00	600	0.108	0.863	2.589	0.33	0.62	0.01	0.01	0.00	0.02	0.00	0.79	0.02	0.12	0.00	
Loader, Front End, w/ Bucket	145	Diesel	1	30	5.00	150	1.900	45.600	45.600	5.13	0.54	0.08	0.46	0.01	0.49	0.01	1.54	0.02	0.62	0.01	
Compactor	165	Diesel	1	30	5.00	300	0.870	0.870	6.16	0.16	0.58	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.01	0.00	
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	3	40	9.00	1080	5.100	40.800	122.400	18.82	0.41	0.38	1.55	0.03	1.58	0.03	7.47	0.15	1.11	0.02	
Truck, Pick-Up, Survey	180	Gas	1	30	5.00	150	0.003	0.064	0.064	0.01	0.48	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01	0.00	
Truck, Pick-Up (Soils Testing)	180	Gas	1	30	5.00	150	0.003	0.064	0.064	0.01	0.48	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01	0.00	
Civil Element																					
(1 Crew)																					
Truck, Pick-Up, (Crew)	180	Gas	2	25	10.00	500	0.000	0.064	0.128	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.02	0.00	
Truck, Dump, 10 Ton	180	Gas	1	25	5.00	125	0.036	0.863	0.863	0.11	0.62	0.00	0.00	0.00	0.01	0.00	0.26	0.00	0.04	0.00	
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	1	25	5.00	125	0.068	1.637	1.637	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	
Ditch Digger	75	Gas	1	15	7.50	113	0.034	0.825	0.825	0.18	0.70	0.00	0.00	0.00	0.01	0.00	9.28	0.07	0.42	0.00	
Digger, Transmission Type, Truck Mount	305	Diesel	1	15	7.50	113	1.700	40.800	40.800	5.23	0.41	0.04	0.43	0.00	0.44	0.00	2.08	0.02	0.46	0.00	
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	1	20	5.00	100	0.575	13.800	13.800	1.24	0.43	0.01	0.08	0.00	0.11	0.00	0.49	0.00	0.16	0.00	
Tractor/Back Hoe, w/ Bucket	85	Diesel	2	20	7.00	280	3.800	45.600	91.200	12.37	0.47	0.12	1.11	0.01	1.18	0.01	3.72	0.04	1.50	0.01	
Forklift, 5 Ton	75	Diesel	1	20	5.00	100	0.440	10.560	10.560	0.66	0.30	0.01	0.05	0.00	0.19	0.00	0.66	0.01	0.23	0.00	
Truck, Concrete, 10 Yd	310	Diesel	2	20	7.50	300	0.142	1.700	3.400	0.60	0.56	0.01	0.05	0.00	0.05	0.00	0.24	0.00	0.24	0.00	
Electrical Element																					
(1 Crew)																					
Truck, Pick-Up, (Crew)	180	Gas	2	35	10.00	700	0.000	0.064	0.128	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.02	0.00	
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	1	35	5.00	175	0.068	1.637	1.637	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	
Crane, Hydraulic, 150 Ton	250	Diesel	1	20	7.50	150	3.450	82.800	82.800	11.13	0.43	0.11	0.73	0.01	0.97	0.01	4.35	0.04	1.45	0.01	
Truck Crane	180	Gas	2	20	7.50	300	0.000	0.432	0.864	0.00	0.41	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.01	0.00	
Tractor/Back Hoe, w/ Bucket	85	Diesel	1	20	5.00	100	1.900	45.600	45.600	4.42	0.47	0.04	0.40	0.00	0.42	0.00	1.33	0.01	0.53	0.01	
Forklift, 5 Ton	75	Diesel	1	30	7.50	225	0.440	10.560	10.560	0.99	0.30	0.01	0.07	0.00	0.28	0.00	0.98	0.01	0.34	0.01	
Manlift	75	Gas	2	30	7.50	450	0.036	0.432	0.864	0.11	0.60	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.01	0.00	
Support Truck (Truck, Pick-Up)	180	Gas	1	35	5.00	175	0.003	0.064	0.064	0.01	0.48	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01	0.00	
Subtotal:																					
Segment 3: Substation Two - 220kV																					
6 Month Period																					
Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)	Estimated Hours of Use	Estimated NO _x = Lb/Hr														

**TABLE H-2
SEGMENT 3 CRITERIA POLLUTANT CONSTRUCTION EQUIPMENT EMISSIONS**

Segment 3: Substation Two - 220kV				6 Month Period						NO _x Estimates - 6 month period			PM ₁₀ Estimates - 6 month period		SO ₂ Estimates - 6 month period		CO Estimates - 6 month period		VOC Estimates - 6 month period		
Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)	Estimated Hours of Use	Estimated NO _x = Lb/Hr (Modified for Total Equipment)	Estimated NO _x = Lb/Day (24 Hr day) for 1 vehicle	Estimated NO _x = Lb/Day (24 Hr day)	Estimated NO _x = Lb/Day (ea 10 hour work day)	Load Factor	Estimated Tons	Estimated PM ₁₀ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated SO ₂ = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated CO = Lb/Day (ea 10 hour work day)	Estimated Tons	Estimated VOC = Lb/Day (ea 10 hour work day)	Estimated Tons	
<i>Electrical Element</i>				<i>(1 Crew)</i>																	
Truck, Pick-Up, (Crew)	180	Gas	2	35	10.00	700	0.000	0.064	0.128	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.02	0.00	
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	1	35	5.00	175	0.068	1.637	1.637	0.14	0.41	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	
Crane, Hydraulic, 150 Ton	250	Diesel	1	20	7.50	150	3.450	82.800	82.800	11.13	0.43	0.11	0.73	0.01	0.97	0.01	4.35	0.04	1.45	0.01	
Truck Crane	180	Gas	2	20	7.50	300	0.000	0.432	0.864	0.00	0.41	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.01	0.00	
Tractor/Back Hoe, w/ Bucket	85	Diesel	1	20	5.00	100	1.900	45.600	45.600	4.42	0.47	0.04	0.40	0.00	0.42	0.00	1.33	0.01	0.53	0.01	
Forklift, 5 Ton	75	Diesel	1	30	7.50	225	0.440	10.560	10.560	0.99	0.30	0.01	0.07	0.00	0.28	0.00	0.98	0.01	0.34	0.01	
Manlift	75	Gas	2	30	7.50	450	0.036	0.432	0.864	0.11	0.41	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.01	0.00	
Support Truck	180	Gas	1	35	5.00	175	0.003	0.064	0.064	0.01	0.48	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01	0.00	
Subtotal:										65.40	0.67	5.29	0.05	6.19	0.06	35.07	0.32	7.53	0.07		
Grand Total for Segment 3:										440.29	16.12	34.82	1.24	42.95	1.99	818.29	49.28	58.18	2.23		
AVAQMD Total:										84.59	3.64	6.68	0.28	8.35	0.36	194.90	14.37	11.96	0.52		
KCAPCD Total:										355.71	12.47	28.14	0.96	34.60	1.23	623.39	34.91	46.21	1.71		

GENERAL FOOTNOTES:

- 1) Estimated Lb/Day results were obtained for modified accounting of equipment quantity and specific usage time.
- 2) Emissions values were obtained from Table A9-8-A where practical. Where not evident, Table A9-8-B of the CEQA manual was utilized.
- 3) EMFAC values were used to supplement emissions values not specified in CEQA manual tables.
- 4) A load factor was employed to account for averaged emissions values per the CEQA manual directives, Table A9-8-D.
- 5) Auxiliary Power emissions were obtained from AP-42 Section 3.3, Table 3.3.1.
- 6) The AVAQMD portion of the Segment 3, Antelope Substation to Substation One T/L construction is assumed to be 38 percent or 9.6 miles of the 25.6-mile-long segment.
- 7) The KCAPCD portion of the Segment 3, Antelope Substation to Substation One T/L construction is assumed to be 62 percent or 16.0 miles of the 25.6-mile-long segment.

TABLE H-3
SEGMENT 2 FUGITIVE DUST EMISSIONS SUMMARY^{1,2}

Activities	Emission Activities	Total Project PM ₁₀ Emissions		
		Lbs/Day	Tons PM ₁₀	Mitigation Measures
Construction	Fugitive Dust from Grading, Dirt & Debris Pushing (Table H-3A)	45.52	0.97	Reduced speed, soil binders, watering, use of wheel washers
	Fugitive Dust from Construction Equipment on Paved and Unpaved Roads (Table H-3B)	127.39	3.44	Reduced speed, soil binders, watering, use of wheel washers
	Fugitive Dust from Truck Filling/Dumping Operations (Table H-3C)	0.11	0.02	Reduced speed, soil binders, watering, use of wheel washers
Total Fugitive Dust Emissions		173.03	4.42	

¹ Note: Does not include worker commute trips or material delivery truck trips.

² All Segment 2 emissions occur in the AVAQMD.

TABLE H-4
SEGMENT 3 FUGITIVE DUST EMISSIONS SUMMARY¹

Activities	Emission Activities	Total Project PM ₁₀ Emissions		
		Lbs/Day	Tons PM ₁₀	Mitigation Measures
Construction	Fugitive Dust from Grading, Dirt & Debris Pushing (Table H-4A)	85.99	1.79	Reduced speed, soil binders, watering, use of wheel washers
	Fugitive Dust from Construction Equipment on Paved and Unpaved Roads (Table H-4B)	352.38	9.96	Reduced speed, soil binders, watering, use of wheel washers
	Fugitive Dust from Truck Filling/Dumping Operations (Table H-4C)	0.92	0.14	Reduced speed, soil binders, watering, use of wheel washers
Total Fugitive Dust Emissions		439.29	11.89	
AVAQMD (Segment 3)		98.17	2.68	
KCAPCD (Segment 3)		341.12	9.21	

¹ Note: Does not include worker commute trips or material delivery truck trips.

TABLE H-3A
SEGMENT 2 - FUGITIVE DUST FROM GRADING

Primary Equipment Description	Primary Equip. Quantity	Equipment Usage Time	Equipment Usage Days	Factor (Lbs/Hr) ¹	Total PM (Lbs/Day)	Unmitigated Total PM (Tons/Project)
Segment 2: 500 kV T/L Construction (Antelope to Vincent) (21.5 miles; 11-month period)						
Road Work						
Crawler, Track Type, w/ Blade (D8 type)	1	9	65	0.46	4.14	0.13
Crawler, Track Type, w/ Blade (D6 type)	1	9	65	0.46	4.14	0.13
Motor Grader	1	5	201	0.46	2.30	0.23
Foundations						
Crawler, Track Type, w/ Blade (D6 type)	1	4	60	0.46	1.84	0.06
Steel (Shake-out, Hauling, Light Assembly, Heavy Assembly, Erection)						
Crawler, Track Type, w/ Blade (D6 type)	1	2	77	0.46	0.92	0.04
Crawler, Track Type, w/ Blade (D8 type)	1	2	135	0.46	0.92	0.06
Conductor (Sheaves, Insulators, Stringing, Deadening, Clipping and Spacing, Anchors)						
Crawler, Track Type, w/ Blade (D8 type)	1	2.5	65	0.46	1.15	0.04
Subtotal:					15.40	0.69
Segment 2: Antelope Substation (500 kV)(3-month period)						
Civil Element						
Dump Truck	1	5	15	0.46	2.30	0.02
Ditch Digger	1	7.5	15	0.46	3.45	0.03
Tractor/Backhoe	2	7	15	0.46	6.44	0.05
Electrical Element						
Tractor/Backhoe	1	5	25	0.46	2.30	0.03
Subtotal:					14.48	0.12
Segment 2: Vincent Substation (500 kV)(3-month period)						
Civil Element						
Dump Truck	1	5	20	0.46	2.30	0.02
Ditch Digger	1	7.5	20	0.46	3.45	0.03
Tractor/ Backhoe	2	7	20	0.46	6.44	0.06
Electrical Element						
Ditch Digger	1	7.5	20	0.46	3.45	0.03
Subtotal:					15.63	0.16
Segment 2 Totals:					45.52	0.97

¹ Fugitive Dust PM₁₀ Emission Factors for Dirt Pushing Operations obtained using the equation provided in the SCAQMD CEQA Air Quality Handbook, Table A9-9-F.

² All of Segment 2 and 38% of the Segment 3 construction element emissions, Antelope to Substation One, occur in the Antelope Valley AQMD.

**TABLE H-3B
SEGMENT 2 - FUGITIVE DUST FROM ROADS**

Construction Equipment	BHP	Fuel	# of Units	Total Days	Hours/Day	# Miles/Day		EF - Unpaved Roads (Lbs/Mile)	EF - Paved Roads (Lbs/Mile)	PM (Lbs/Day)	Total PM (Tons/Project)
						Paved Road	Unpaved Road				
Segment 2: 500 kV T/L Construction (Antelope to Vincent) (21.5 miles; 11-month period)											
Survey											
Truck, Pick-Up	180	Gas	2	25	2.5	6	4	0.64	0.0003	2.55	0.03
Marshalling Yards											
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	1	300	2.5		0.1	2.22	0.64	0.22	0.03
Truck, Semi, Tractor	310	Diesel	1	300	1.5		0.1	2.22	0.64	0.22	0.03
Trailer, Flatbed, 40'	N/A	N/A	1		N/A						0.00
Loader, Front End, w/ Bucket	145	Diesel	1	300	1		0.1	2.22	0.64	0.22	0.03
Forklift, 5 Ton	75	Diesel	1	300	5		0.1	2.22	0.64	0.22	0.03
Forklift, 10 Ton	85	Diesel	1	300	5		0.1	2.22	0.64	0.22	0.03
Truck, Pick-Up	180	Gas	1	300	3		0.1	0.64	0.0003	0.06	0.01
Truck, Flatbed, 1 Ton	180	Gas	1	300	1.5		0.1	0.64	0.0003	0.06	0.01
Trailer, Office, 40' - 60'	N/A	N/A	1		N/A						
Trailer, Storage, 40'	N/A	N/A	3	300	N/A						
Road Work											
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	65	9		1	2.22	0.64	2.22	0.07
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	65	9		1	2.22	0.64	2.22	0.07
Truck, Semi, Tractor	310	Diesel	1	65	1.5		1	2.22	0.64	2.22	0.07
Trailer, Lowboy, 30'	N/A	N/A	1		N/A						
Motor Grader	110	Diesel	1	201	5		1	2.22	0.64	2.22	0.22
Truck, Water, 2,000 – 4,000 gal	175	Diesel	1	201	5		1	2.22	0.64	2.22	0.22
Back Hoe, w/ Bucket	85	Diesel	1	65	3		1	2.22	0.64	2.22	0.07
Truck, Pick-Up	210	Diesel	1	201	3	3	1	0.64	0.0003	0.64	0.06
Truck, Flatbed, 1 Ton	210	Diesel	1	65	3		1	0.64	0.0003	0.64	0.02
Foundations											
Digger, Transmission Type, Truck Mount	190	Diesel	1	60	9		1	2.22	0.64	2.22	0.07
Truck, Flatbed, 2 Ton	210	Diesel	3	60	2.5		1	0.64	0.0003	0.64	0.02
Truck, Concrete, 10 Yd	310	Diesel	6	60	5		1	2.22	0.64	2.22	0.07
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	2	60	2.5		1	2.22	0.64	2.22	0.07
Crawler, Track Type, Drill Rig, Pneumatic	305	Diesel	1	60	9		1	2.22	0.64	2.22	0.07
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	60	4		1	2.22	0.64	2.22	0.07
Truck, Semi, Tractor	310	Diesel	1	60	2		1	2.22	0.64	2.22	0.07
Trailer, Lowboy, 30'	N/A	N/A	1	60	N/A						
Back Hoe, w/Bucket	85	Diesel	1	60	5		1	2.22	0.64	2.22	0.07
Truck, Dump, 10 Ton	235	Diesel	1	60	2.5		1	2.22	0.64	2.22	0.07
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	2	60	5		1	2.22	0.64	2.22	0.07
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	60	5		1	0.64	0.0003	0.64	0.02
Truck, Pick-Up	210	Diesel	3	60	3	3	1	0.64	0.0003	0.64	0.02
Truck, Flatbed, 1 Ton	210	Diesel	3	60	3		1	0.64	0.0003	0.64	0.02
Motor, Auxiliary Power	5	Gas	3	60	2						
Trailer, Storage, 40'	N/A	N/A	3	60	N/A						

TABLE H-3B
SEGMENT 2 - FUGITIVE DUST FROM ROADS

Construction Equipment	BHP	Fuel	# of Units	Total Days	Hours/Day	# Miles/Day		EF - Unpaved	EF - Paved	PM (Lbs/Day)	Total PM (Tons/Project)
						Paved Road	Unpaved Road	Roads (Lbs/Mile)	Roads (Lbs/Mile)		
Steel (Shake-out, Hauling, Light Assembly, Heavy Assembly, Erection)											
Crane, Hydraulic, 150 Ton	250	Diesel	1	135	9		1	2.22	0.64	2.22	0.15
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	5	77	9		1	2.22	0.64	2.22	0.09
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	2	77	5		1	2.22	0.64	2.22	0.09
Truck, Flatbed, 2 Ton	235	Gas	4	77	2.5		1	0.64	0.0003	0.64	0.02
Truck, Pick-Up	180	Gas	8	77	7.5	3	1	0.64	0.0003	0.64	0.02
Truck, Flatbed, 1 Ton	180	Gas	6	77	1	3	1	0.64	0.0003	0.64	0.02
Trailer, Lowboy, 30'	N/A	N/A	N/A	77	N/A						
Truck, Semi, Tractor	310	Diesel	3	77	2		1	2.22	0.64	2.22	0.09
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	77	2		1	2.22	0.64	2.22	0.09
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	135	2		1	2.22	0.64	2.22	0.15
Trailer, Flatbed, 40'	N/A	N/A	3	77	N/A						
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	135	7.5		1	2.22	0.64	2.22	0.15
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	135	7.5		1	0.64	0.0003	0.64	0.04
Compressor, Air	75	Gas	5	77	7.5						
Conductor (Sheaves, Insulators, Stringing, Deadening, Clipping and Spacing, Anchors)											
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	3	63	9		0.3	2.22	0.64	0.67	0.02
Tension Machine	135	Diesel	1	46	5		0.3	2.22	0.64	0.67	0.02
Truck, Wire Puller, 3 Drum	310	Diesel	1	46	2.5		0.3	2.22	0.64	0.67	0.02
Truck, Wire Puller, 1 Drum	310	Diesel	1	46	5		0.3	2.22	0.64	0.67	0.02
Truck, Semi, Tractor	310	Diesel	3	46	7.5		0.3	2.22	0.64	0.67	0.02
Trailer, Lowboy & Reel Stand	N/A	N/A	5	46	N/A						
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	63	9		0.3	2.22	0.64	0.67	0.02
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	63	2.5		0.3	2.22	0.64	0.67	0.02
Crawler, Track Type, Sagging (D8 type)	305	Diesel	2	53	5		0.3	2.22	0.64	0.67	0.02
Truck, Flatbed, 1 Ton	180	Gas	7	65	5		0.3	0.64	0.0003	0.19	0.01
Truck, Pick-Up	180	Gas	3	63	9		0.3	0.64	0.0003	0.19	0.01
Back Hoe, w/ Bucket	85	Diesel	1	63	3.5		0.3	2.22	0.64	0.67	0.02
Digger, Transmission Type, Truck Mount	190	Diesel	1	46	1		0.3	2.22	0.64	0.67	0.02
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	63	7.5		0.3	2.22	0.64	0.67	0.02
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	2	63	3.5		0.3	2.22	0.64	0.67	0.02
Motor, Auxiliary Power	5	Gas	4	53	4						
Cleanup & Guard Poles											
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	1	15	5		1	2.22	0.64	2.22	0.02
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	1	15	5		1	2.22	0.64	2.22	0.02
Back Hoe, w/ Bucket	85	Diesel	1	15	5		1	2.22	0.64	2.22	0.02
Truck, Semi, Tractor	310	Diesel	1	15	9		1	2.22	0.64	2.22	0.02
Trailer, Extendable Pole	N/A	N/A	1	15	N/A		1	2.22	0.64	2.22	0.02
Motor Grader	110	Diesel	1	15	9		1	2.22	0.64	2.22	0.02
Truck, Flatbed, 1 Ton	210	Diesel	2	15	7.5		1	0.64	0.0003	0.64	0.00
Truck, Pick-Up	210	Diesel	2	15	7.5		1	0.64	0.0003	0.64	0.00

TABLE H-3B
SEGMENT 2 - FUGITIVE DUST FROM ROADS

Construction Equipment	BHP	Fuel	# of Units	Total Days	Hours/Day	# Miles/Day		EF - Unpaved	EF - Paved	PM (Lbs/Day)	Total PM (Tons/Project)
						# Miles/Day Paved Road	Unpaved Road	Roads (Lbs/Mile)	Roads (Lbs/Mile)		
Segment 2: Antelope Substation (500 kV)(3-month period)											
Civil Element											
Crew Trucks	180	Gas	2	15	10		1	0.64	0.0003	0.64	0.00
Dump Truck	180	Gas	1	15	5		1	2.22	0.64	2.22	0.02
Ditch Digger	75	Gas	1	15	7.5		1	2.22	0.64	2.22	0.02
Driller	305	Diesel	1	15	7.5		1	2.22	0.64	2.22	0.02
Tractor/Backhoe	85	Diesel	2	15	7		1	2.22	0.64	2.22	0.02
Forklift	75	Diesel	1	15	5		1	2.22	0.64	2.22	0.02
Truck, Concrete, 10 Yd	310	Diesel	2	20	5		1	2.22	0.64	2.22	0.022
Electrical Element											
Crew Trucks	180	Gas	2	25	10		1	0.64	0.0003	0.64	0.01
5-ton Truck	235	Diesel	1	25	5		1	0.64	0.0003	0.64	0.01
Crane	250	Diesel	1	15	5		1	2.22	0.64	2.22	0.02
Tractor/Backhoe	85	Diesel	1	25	5		1	2.22	0.64	2.22	0.03
Forklift	75	Diesel	1	25	5		1	2.22	0.64	2.22	0.03
Subtotal:										103.90	3.16
Segment 2: Vincent Substation (500 kV)(3-month period)											
Civil Element											
Crew Trucks	180	Gas	2	20	10		1	0.64	0.0003	0.64	0.006
Dump Truck	180	Gas	1	20	5		1	2.22	0.64	2.22	0.022
Ditch Digger	75	Gas	1	20	7.5		1	2.22	0.64	2.22	0.022
Digger, Transmission Type, Truck Mount	305	Diesel	1	20	7.5		1	2.22	0.64	2.22	0.022
Tractor/ Backhoe	85	Diesel	2	20	7		1	2.22	0.64	2.22	0.022
Forklift	75	Diesel	1	20	5		1	2.22	0.64	2.22	0.022
Truck, Concrete, 10 Yd	310	Diesel	2	20	5		1	2.22	0.64	2.22	0.022
Electrical Element											
Crew Trucks	180	Gas	2	35	10		1	0.64	0.0003	0.64	0.011
5-ton Truck	235	Diesel	1	35	5		1	2.22	0.64	2.22	0.039
Tractor/ Backhoe	85	Gas	1	25	7.5		1	2.22	0.64	2.22	0.028
Crane 150-ton	250	Diesel	1	15	5		1	2.22	0.64	2.22	0.017
Forklift	75	Diesel	1	35	5		1	2.22	0.64	2.22	0.039
Subtotal:										23.48	0.27
Segment 2 Totals:										127.39	3.44

TABLE H-3C
SEGMENT 2 - FUGITIVE DUST FROM FILLING AND DUMPING

Waste Item	Pounds Total	Tons of Material Handled Per Day	Emission Factor (Lbs/Ton)	PM ₁₀ Emissions (Lbs/Day)	PM ₁₀ Emissions (Tons)
Segment 2: Antelope – Vincent 500 kV Waste Estimate					
Wood from Cribbing etc.	57,500	0.44	0.02	0.01	0.00
Soil/Veg: Ftgs, Stubs & Crane Pads	543,222	4.18	0.02	0.09	0.01
Miscellaneous	40,000	0.31	0.02	0.01	0.00
Subtotal	699,090	5.38		0.11	0.02
Segment 2: Antelope Substation Waste Estimate					
Civil Element					
Wood	2,000	0.02	0.02	0.00	0.00
Concrete	2,000	0.02	0.02	0.00	0.00
Miscellaneous	1,000	0.01	0.02	0.00	0.00
Electrical Element					
Wood	2,000	0.02	0.02	0.00	0.00
Steel/Aluminum/Copper	30,000	0.23	0.02	0.01	0.00
Miscellaneous	2,000	0.02	0.02	0.00	0.00
Subtotal	1,378,812	10.61		0.01	0.00
Segment 2 Total:				0.11	0.02

Note: Numbers are rounded to nearest hundredth.

**TABLE H-4A
SEGMENT 3 - FUGITIVE DUST FROM GRADING**

Primary Equipment Description	Primary Equip. Quantity	Estimated Equipment Usage Time (Hrs/dy)	Estimated Equipment Usage Days	Emission Factor (Lbs/Hr)¹	Total PM (Lbs/Day)	Unmitigated Total PM (Tons/Project)
Segment 3: Antelope to Substation One (25.6 miles; 13-month period)						
Road Work						
Crawler, Track Type, w/ Blade (D8 type)	1	9	72	0.46	4.14	0.15
Crawler, Track Type, w/ Blade (D6 type)	1	9	72	0.46	4.14	0.15
Motor Grader	1	5	219	0.46	2.30	0.25
Foundations						
Crawler, Track Type, w/ Blade (D6 type)	1	4	90	0.46	1.84	0.08
Steel (Shake-out, Hauling, Light Assembly, Heavy Assembly, Erection)						
Crawler, Track Type, w/ Blade (D6 type)	1	2	134	0.46	0.92	0.06
Crawler, Track Type, w/ Blade (D8 type)	1	2	134	0.46	0.92	0.06
Conductor (Sheaves, Insulators, Stringing, Deadening, Clipping and Spacing, Anchors)						
Crawler, Track Type, w/ Blade (D8 type)	1	2.5	172	0.46	1.15	0.10
Subtotal:					15.40	0.85
Segment 3: 220 kV T/L Construction (Substation One to Substation Two) (9.6 miles; 8-month period)						
Road Work						
Crawler, Track Type, w/ Blade (D8 type)	1	9	41	0.46	4.14	0.08
Crawler, Track Type, w/ Blade (D6 type)	1	9	41	0.46	4.14	0.08
Motor Grader	1	5	123	0.46	2.30	0.14
Foundations						
Crawler, Track Type, w/ Blade (D6 type)	1	4	55	0.46	1.84	0.05
Steel (Shake-out, Hauling, Light Assembly, Heavy Assembly, Erection)						
Crawler, Track Type, w/ Blade (D6 type)	1	2	81	0.46	0.92	0.04
Crawler, Track Type, w/ Blade (D8 type)	1	2	81	0.46	0.92	0.04
Conductor (Sheaves, Insulators, Stringing, Deadening, Clipping and Spacing, Anchors)						
Crawler, Track Type, w/ Blade (D8 type)	1	2.5	83	0.46	1.15	0.05
Subtotal:					15.40	0.48
Segment 3: Substation One (6-month period)						
Grading Element						
980 Loader/Scraper	2	7.5	20	0.46	6.90	0.07
Grader	1	5	30	0.46	2.30	0.03
Compactor	1	5	20	0.46	2.30	0.02
Civil Element						
Ditch Digger	1	7.5	15	0.46	3.45	0.03
Driller	1	7.5	15	0.46	3.45	0.03
Tractor/ Backhoe	2	7	20	0.46	6.44	0.06
Subtotal:					24.83	0.24
Segment 3: Substation Two (6-month period)						
Grading Element						
980 Loader/Scraper	1	7.5	15	0.46	3.45	0.03
Grader	1	5	15	0.46	2.30	0.02
Compactor	1	5	15	0.46	2.30	0.02
Civil Element						
Ditch Digger	1	7.5	10	0.46	3.45	0.02
Tractor/ Backhoe	1	7	15	0.46	3.22	0.02
Subtotal:					14.71	0.10

**TABLE H-4A
SEGMENT 3 - FUGITIVE DUST FROM GRADING**

Primary Equipment Description	Primary Equip. Quantity	Estimated	Estimated	Emission Factor		Unmitigated Total PM (Tons/Project)
		Equipment Usage Time (Hrs/dy)	Equipment Usage Days	(Lbs/Hr) ¹	Total PM (Lbs/Day)	
Segment 3: Antelope Substation (500 kV)(3-month period)						
Civil Element						
Ditch Digger	1	7.5	10	0.46	3.45	0.02
Driller	1	7.5	10	0.46	3.45	0.02
Tractor/ Backhoe	2	7	15	0.46	6.44	0.05
Electrical Element						
Tractor/ Backhoe	1	5	25	0.46	2.30	0.03
Subtotal:					15.63	0.11
Total Segment 3:					85.99	1.79
AVAQMD (Segment 3)					21.49	0.44
KCAPCD (Segment 3)					64.50	1.36

¹ Fugitive Dust PM₁₀ Emission Factors for Dirt Pushing Operations obtained using the equation provided in the SCAQMD CEQA Air Quality Handbook, Table A9-9-F.

² All of Segment 2 and 38% of the Segment 3 construction element emissions, Antelope to Substation One, occur in the Antelope Valley AQMD.

Note: Numbers are rounded to nearest hundredth.

**TABLE H-4B
SEGMENT 3 - FUGITIVE DUST EMISSIONS FROM ROADS¹**

Construction Equipment	BHP	Fuel	# of Units	Total Days	Hours/Day	# Miles/Day Paved Road	# Miles/Day Unpaved Road	EF - Unpaved Roads (Lbs/Mile)	EF - Paved Roads (Lbs/Mile)	PM (Lbs/Day)	Total PM (Tons/Project)
Segment 3: Antelope Substation (500 kV)(3-month period)											
Civil Element											
Crew Trucks	180	Gas	2	15	10		1	0.64	0.0003	0.64	0.00
Dump Truck	180	Gas	1	15	5		1	2.22	0.40	2.22	0.02
Ditch Digger	75	Gas	1	10	7.5		1	2.22	0.40	2.22	0.01
Driller	305	Diesel	1	10	7.5		1	2.22	0.40	2.22	0.01
Tractor/ Backhoe	85	Diesel	2	15	7		1	2.22	0.40	2.22	0.02
Forklift	75	Diesel	1	15	5		1	2.22	0.40	2.22	0.02
Truck, Concrete, 10 Yd	310	Diesel	2	20	5		1	2.22	0.64	2.22	0.022
Electrical Element											
Crew Trucks	180	Gas	2	25	10		1				
5-ton Truck	235	Diesel	1	25	5		1	2.22	0.40	2.22	0.03
Crane	250	Diesel	1	15	5		1	2.22	0.40	2.22	0.02
Tractor/ Backhoe	85	Diesel	1	25	5		1	2.22	0.40	2.22	0.03
Forklift	75	Diesel	1	25	5		1	2.22	0.40	2.22	0.03
Subtotal:										22.84	0.20
Segment 3: Antelope to Substation 1 (25.6 miles; 13-month period)											
Survey											
Truck, Pick-Up	180	Gas	2	25	2.5	6	4	0.64	0.0003	2.55	0.03
Marshalling Yards											
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	1	335	2.5		0.1	2.22	0.40	0.22	0.04
Truck, Semi, Tractor	310	Diesel	1	335	1.5		0.1	2.22	0.40	0.22	0.04
Trailer, Flatbed, 40'	N/A	N/A	1	335	N/A		0.1	2.22	0.40	0.22	0.04
Loader, Front End, w/ Bucket	145	Diesel	1	335	1		0.1	2.22	0.40	0.22	0.04
Forklift, 5 Ton	75	Diesel	1	335	5		0.1	2.22	0.40	0.22	0.04
Forklift, 10 Ton	85	Diesel	1	335	5		0.1	2.22	0.40	0.22	0.04
Truck, Pick-Up	180	Gas	1	335	3		0.1	0.64	0.0003	0.06	0.01
Truck, Flatbed, 1 Ton	180	Gas	1	335	1.5		0.1	0.64	0.0003	0.06	0.01
Trailer, Office, 40' - 60'	N/A	N/A	1	335	N/A						
Trailer, Storage, 40'	N/A	N/A	3	335	N/A						
Road Work											
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	72	9		1	2.22	0.40	2.22	0.08
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	72	9		1	2.22	0.40	2.22	0.08
Truck, Semi, Tractor	310	Diesel	1	72	1.5		1	2.22	0.40	2.22	0.08
Trailer, Lowboy, 30'	N/A	N/A	1	72	N/A						
Motor Grader	110	Diesel	1	219	5		1	2.22	0.40	2.22	0.24
Truck, Water, 2,000 - 4,000 gal	175	Diesel	1	219	5		1	2.22	0.40	2.22	0.24
Back Hoe, w/ Bucket	85	Diesel	1	72	3		1	2.22	0.40	2.22	0.08
Truck, Pick-Up	210	Diesel	3	219	3	3	1	0.64	0.0003	0.64	0.07
Truck, Flatbed, 1 Ton	210	Diesel	1	72	3		1	0.64	0.0003	0.64	0.02
Foundations											
Digger, Transmission Type, Truck Mount	190	Diesel	1	90	9		1	2.22	0.40	2.22	0.10
Truck, Flatbed, 2 Ton	210	Diesel	2	90	2.5		1	0.64	0.0003	0.64	0.03
Truck, Concrete, 10 Yd	310	Diesel	4	90	5		1	2.22	0.40	2.22	0.10
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	1	90	2.5		1	2.22	0.40	2.22	0.10
Crawler, Track Type, Drill Rig, Pneumatic	305	Diesel	1	90	9		1	2.22	0.40	2.22	0.10
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	90	4		1	2.22	0.40	2.22	0.10
Truck, Semi, Tractor	310	Diesel	1	90	2		1	2.22	0.40	2.22	0.10
Trailer, Lowboy, 30'	N/A	N/A	1	90	N/A						
Back Hoe, w/Bucket	85	Diesel	1	90	5		1	2.22	0.40	2.22	0.10
Truck, Dump, 10 Ton	235	Diesel	1	90	2.5		1	2.22	0.40	2.22	0.10
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	90	5		1	2.22	0.40	2.22	0.10
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	90	5		1	0.64	0.0003	0.64	0.03
Truck, Pick-Up	210	Diesel	2	90	3	3	1	0.64	0.0003	0.64	0.03
Truck, Flatbed, 1 Ton	210	Diesel	2	90	3		1	0.64	0.0003	0.64	0.03
Motor, Auxiliary Power	5	Gas	2	90	2						
Trailer, Storage, 40'	N/A	N/A	2	90	N/A						

**TABLE H-4B
SEGMENT 3 - FUGITIVE DUST EMISSIONS FROM ROADS¹**

Construction Equipment	BHP	Fuel	# of Units	Total Days	Hours/Day	# Miles/Day Paved Road	# Miles/Day Unpaved Road	EF - Unpaved Roads (Lbs/Mile)	EF - Paved Roads (Lbs/Mile)	PM (Lbs/Day)	Total PM (Tons/Project)
Steel (Shake-out, Hauling, Light Assembly, Heavy Assembly, Erection)											
Crane, Hydraulic, 150 Ton	250	Diesel	2	134	9		1	2.22	0.40	2.22	0.15
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	7	134	9		1	2.22	0.40	2.22	0.15
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	2	134	5		1	2.22	0.40	2.22	0.15
Truck, Flatbed, 2 Ton	235	Gas	7	134	2.5		1	0.64	0.0003	0.64	0.04
Truck, Pick-Up	180	Gas	9	134	7.5	3	1	0.64	0.0003	0.64	0.04
Truck, Flatbed, 1 Ton	180	Gas	9	134	1	3	1	0.64	0.0003	0.64	0.04
Trailer, Lowboy, 30'	N/A	N/A	N/A	134	N/A						
Truck, Semi, Tractor	310	Diesel	3	134	2		1	2.22	0.40	2.22	0.15
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	134	2		1	2.22	0.40	2.22	0.15
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	134	2		1	2.22	0.40	2.22	0.15
Trailer, Flatbed, 40'	N/A	N/A	3	134	N/A						
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	134	7.5		1	2.22	0.40	2.22	0.15
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	134	7.5		1	0.64	0.0003	0.64	0.04
Compressor, Air	75	Gas	6	134	7.5						
Conductor (Sheaves, Insulators, Stringing, Deadening, Clipping and Spacing, Anchors)											
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	3	172	9		0.5	2.22	0.40	1.11	0.10
Tension Machine	135	Diesel	1	172	5		0.5	2.22	0.40	1.11	0.10
Truck, Wire Puller, 3 Drum	310	Diesel	1	172	2.5		0.5	2.22	0.40	1.11	0.10
Truck, Wire Puller, 1 Drum	310	Diesel	1	172	5		0.5	2.22	0.40	1.11	0.10
Truck, Semi, Tractor	310	Diesel	3	172	7.5		0.5	2.22	0.40	1.11	0.10
Trailer, Lowboy & Reel Stand	N/A	N/A	5	172	N/A						
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	172	9		0.5	2.22	0.40	1.11	0.10
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	172	2.5		0.5	2.22	0.40	1.11	0.10
Crawler, Track Type, Sagging (D8 type)	305	Diesel	2	172	5		0.5	2.22	0.40	1.11	0.10
Truck, Flatbed, 1 Ton	180	Gas	7	172	5		0.5	0.64	0.0003	0.32	0.03
Truck, Pick-Up	180	Gas	3	172	9		0.5	0.64	0.0003	0.32	0.03
Back Hoe, w/ Bucket	85	Diesel	1	172	3.5		0.5	2.22	0.40	1.11	0.10
Digger, Transmission Type, Truck Mount	190	Diesel	1	172	1		0.5	2.22	0.40	1.11	0.10
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	172	7.5		0.5	2.22	0.40	1.11	0.10
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	2	172	3.5		0.5	2.22	0.40	1.11	0.10
Motor, Auxiliary Power	5	Gas	4	172	4						
Cleanup & Guard Poles											
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	1	24	5		1.5	2.22	0.40	3.33	0.04
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	1	24	5		1.5	2.22	0.40	3.33	0.04
Back Hoe, w/ Bucket	85	Diesel	1	24	5		1.5	2.22	0.40	3.33	0.04
Truck, Semi, Tractor	310	Diesel	1	24	9		1.5	2.22	0.40	3.33	0.04
Trailer, Extendable Pole	N/A	N/A	1	24	N/A		1.5	2.22	0.40	3.33	0.04
Motor Grader	110	Diesel	1	24	9		1.5	2.22	0.40	3.33	0.04
Truck, Flatbed, 1 Ton	210	Diesel	2	24	7.5		1.5	0.64	0.0003	0.96	0.01
Truck, Pick-Up	210	Diesel	2	24	7.5		1.5	0.64	0.0003	0.96	0.01
Subtotal:										140.80	5.26
Segment 3: 220 kV T/L Construction (Substation One to Substation Two) (9.5 miles; 8-month period)											
Survey											
Truck, Pick-Up	180	Gas	2	25	2.5	6	4	0.64	0.0003	2.55	0.03
Marshalling Yards											
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	1	209	2.5		0.1	2.22	0.40	0.22	0.02
Truck, Semi, Tractor	310	Diesel	1	209	1.5		0.1	2.22	0.40	0.22	0.02
Trailer, Flatbed, 40'	N/A	N/A	1	209	N/A		0.1	2.22	0.40	0.22	0.02
Loader, Front End, w/ Bucket	145	Diesel	1	209	1		0.1	2.22	0.40	0.22	0.02
Forklift, 5 Ton	75	Diesel	1	209	5		0.1	2.22	0.40	0.22	0.02
Forklift, 10 Ton	85	Diesel	1	209	5		0.1	2.22	0.40	0.22	0.02
Truck, Pick-Up	180	Gas	1	209	3		0.1	0.64	0.0003	0.06	0.01
Truck, Flatbed, 1 Ton	180	Gas	1	209	1.5		0.1	0.64	0.0003	0.06	0.01
Trailer, Office, 40' - 60'	N/A	N/A	1	209	N/A						
Trailer, Storage, 40'	N/A	N/A	3	209	N/A						

**TABLE H-4B
SEGMENT 3 - FUGITIVE DUST EMISSIONS FROM ROADS¹**

Construction Equipment	BHP	Fuel	# of Units	Total Days	Hours/Day	# Miles/Day Paved Road	# Miles/Day Unpaved Road	EF - Unpaved Roads (Lbs/Mile)	EF - Paved Roads (Lbs/Mile)	PM (Lbs/Day)	Total PM (Tons/Project)
Road Work											
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	41	9		1	2.22	0.40	2.22	0.05
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	41	9		1	2.22	0.40	2.22	0.05
Truck, Semi, Tractor	310	Diesel	1	41	1.5		1	2.22	0.40	2.22	0.05
Trailer, Lowboy, 30'	N/A	N/A	1	41	N/A						
Motor Grader	110	Diesel	1	123	5		1	2.22	0.40	2.22	0.14
Truck, Water, 2,000 – 4,000 gal	175	Diesel	1	123	5		1	2.22	0.40	2.22	0.14
Back Hoe, w/ Bucket	85	Diesel	1	41	3		1	2.22	0.40	2.22	0.05
Truck, Pick-Up	210	Diesel	3	123	3	3	1	0.64	0.0003	0.64	0.04
Truck, Flatbed, 1 Ton	210	Diesel	1	41	3		1	0.64	0.0003	0.64	0.01
Foundations											
Digger, Transmission Type, Truck Mount	190	Diesel	1	55	9		1	2.22	0.40	2.22	0.06
Truck, Flatbed, 2 Ton	210	Diesel	2	55	2.5		1	0.64	0.0003	0.64	0.02
Truck, Concrete, 10 Yd	310	Diesel	4	55	5		1	2.22	0.40	2.22	0.06
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	1	55	2.5		1	2.22	0.40	2.22	0.06
Crawler, Track Type, Drill Rig, Pneumatic	305	Diesel	1	55	9		1	2.22	0.40	2.22	0.06
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	55	4		1	2.22	0.40	2.22	0.06
Truck, Semi, Tractor	310	Diesel	1	55	2		1	2.22	0.40	2.22	0.06
Trailer, Lowboy, 30'	N/A	N/A	1	55	N/A						
Back Hoe, w/Bucket	85	Diesel	1	55	5		1	2.22	0.40	2.22	0.06
Truck, Dump, 10 Ton	235	Diesel	1	55	2.5		1	2.22	0.40	2.22	0.06
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	55	5		1	2.22	0.40	2.22	0.06
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	55	5		1	0.64	0.0003	0.64	0.02
Truck, Pick-Up	210	Diesel	2	55	3	3	1	0.64	0.0003	0.64	0.02
Truck, Flatbed, 1 Ton	210	Diesel	2	55	3		1	0.64	0.0003	0.64	0.02
Motor, Auxiliary Power	5	Gas	2	55	2						
Trailer, Storage, 40'	N/A	N/A	2	55	N/A						
Steel (Shake-out, Hauling, Light Assembly, Heavy Assembly, Erection)											
Crane, Hydraulic, 150 Ton	250	Diesel	2	81	9		1	2.22	0.40	2.22	0.09
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	7	81	9		1	2.22	0.40	2.22	0.09
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	2	81	5		1	2.22	0.40	2.22	0.09
Truck, Flatbed, 2 Ton	235	Gas	7	81	2.5		1	0.64	0.0003	0.64	0.03
Truck, Pick-Up	180	Gas	9	81	7.5	3	1	0.64	0.0003	0.64	0.03
Truck, Flatbed, 1 Ton	180	Gas	9	81	1	3	1	0.64	0.0003	0.64	0.03
Trailer, Lowboy, 30'	N/A	N/A	N/A	81	N/A						
Truck, Semi, Tractor	310	Diesel	3	81	2		1	2.22	0.40	2.22	0.09
Crawler, Track Type, w/ Blade (D6 type)	165	Diesel	1	81	2		1	2.22	0.40	2.22	0.09
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	81	2		1	2.22	0.40	2.22	0.09
Trailer, Flatbed, 40'	N/A	N/A	3	81	N/A						
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	81	7.5		1	2.22	0.40	2.22	0.09
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	81	7.5		1	0.64	0.0003	0.64	0.03
Compressor, Air	75	Gas	6	81	7.5						
Conductor (Sheaves, Insulators, Stringing, Deadening, Clipping and Spacing, Anchors)											
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	3	83	9		0.5	2.22	0.40	1.11	0.05
Tension Machine	135	Diesel	1	83	5		0.5	2.22	0.40	1.11	0.05
Truck, Wire Puller, 3 Drum	310	Diesel	1	83	2.5		0.5	2.22	0.40	1.11	0.05
Truck, Wire Puller, 1 Drum	310	Diesel	1	83	5		0.5	2.22	0.40	1.11	0.05
Truck, Semi, Tractor	310	Diesel	3	83	7.5		0.5	2.22	0.40	1.11	0.05
Trailer, Lowboy & Reel Stand	N/A	N/A	5	83	N/A						
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	83	9		0.5	2.22	0.40	1.11	0.05
Crawler, Track Type, w/ Blade (D8 type)	305	Diesel	1	83	2.5		0.5	2.22	0.40	1.11	0.05
Crawler, Track Type, Sagging (D8 type)	305	Diesel	2	83	5		0.5	2.22	0.40	1.11	0.05
Truck, Flatbed, 1 Ton	180	Gas	7	83	5		0.5	0.64	0.0003	0.32	0.01
Truck, Pick-Up	180	Gas	3	83	9		0.5	0.64	0.0003	0.32	0.01
Back Hoe, w/ Bucket	85	Diesel	1	83	3.5		0.5	2.22	0.40	1.11	0.05
Digger, Transmission Type, Truck Mount	190	Diesel	1	83	1		0.5	2.22	0.40	1.11	0.05
Truck, Mechanics, 1 - 2 Ton	260	Diesel	1	83	7.5		0.5	2.22	0.40	1.11	0.05
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	2	83	3.5		0.5	2.22	0.40	1.11	0.05
Motor, Auxiliary Power	5	Gas	4	83	4						

TABLE H-4B
SEGMENT 3 - FUGITIVE DUST EMISSIONS FROM ROADS¹

Construction Equipment	BHP	Fuel	# of Units	Total Days	Hours/Day	# Miles/Day Paved Road	# Miles/Day Unpaved Road	EF - Unpaved Roads (Lbs/Mile)	EF - Paved Roads (Lbs/Mile)	PM (Lbs/Day)	Total PM (Tons/Project)
Cleanup & Guard Poles											
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	1	69	5		1.5	2.22	0.40	3.33	0.11
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	1	69	5		1.5	2.22	0.40	3.33	0.11
Back Hoe, w/ Bucket	85	Diesel	1	69	5		1.5	2.22	0.40	3.33	0.11
Truck, Semi, Tractor	310	Diesel	1	69	9		1.5	2.22	0.40	3.33	0.11
Trailer, Extendable Pole	N/A	N/A	1	69	N/A		1.5	2.22	0.40	3.33	0.11
Motor Grader	110	Diesel	1	69	9		1.5	2.22	0.40	3.33	0.11
Truck, Flatbed, 1 Ton	210	Diesel	2	69	7.5		1.5	0.64	0.0003	0.96	0.03
Truck, Pick-Up	210	Diesel	2	69	7.5		1.5	0.64	0.0003	0.96	0.03
Subtotal:										95.11	3.38
Segment 3: Substation One (6-month period)											
Grading Element											
980 Loader/Scraper	305	Diesel	2	40	7.5		1	2.22	0.40	2.22	0.04
Grader	110	Diesel	1	40	5		1	2.22	0.40	2.22	0.04
Dump Truck	180	Gas	3	40	5		1	0.64	0.0003	0.64	0.01
Loader, Front End, w/ Bucket	145	Diesel	1	30	5		1	2.22	0.40	2.22	0.03
Compactor	165	Diesel	1	30	5		1	2.22	0.40	2.22	0.03
Water Truck	175	Gas	3	40	7.5		1	2.22	0.40	2.22	0.04
Survey Truck	180	Gas	1	40	9		1	0.64	0.0003	0.64	0.01
Soils Test Crew Truck	180	Gas	1	30	5		1	0.64	0.0003	0.64	0.01
Civil Element											
Crew Trucks	180	Gas	2	25	10		1	0.64	0.0003	0.64	0.01
Dump Truck	180	Gas	1	25	5		1	2.22	0.4000	2.22	0.03
5-ton Truck	235	Diesel	1	25	5		1	2.22	0.4000	2.22	0.03
Ditch Digger	75	Gas	1	15	7.5		1	2.22	0.4000	2.22	0.02
Driller	305	Diesel	1	15	7.5		1	2.22	0.4000	2.22	0.02
Crane	125	Diesel	1	20	5		1	2.22	0.4000	2.22	0.02
Tractor/ Backhoe	85	Diesel	2	20	7		1	2.22	0.4000	2.22	0.02
Forklift	75	Diesel	1	20	5		1	2.22	0.4000	2.22	0.02
Truck, Concrete, 10 Yd	310	Diesel	2	20	7.5		1	2.22	0.4000	2.22	0.02
Electrical Element											
Crew Trucks	180	Gas	2	35	10		1	0.64	0.0003	0.64	0.01
5-ton Truck	180	Diesel	1	35	5		1	2.22	0.40	2.22	0.04
150-ton Crane	305	Diesel	1	20	7.5		1	2.22	0.40	2.22	0.02
Truck Crane	180	Gas	1	20	7.5		1	2.22	0.40	2.22	0.02
Tractor/Back Hoe, w/ Bucket	85	Diesel	1	20	5		1	2.22	0.40	2.22	0.02
Forklift	75	Diesel	1	20	5		1	2.22	0.40	2.22	0.02
Manlift	75	Gas	2	30	7.5		1	2.22	0.40	2.22	0.03
Support Truck	180	Gas	1	35	5		1	0.64	0.0003	0.64	0.01
Subtotal:										46.02	0.60
Segment 3: Substation Two (6-month period)											
Grading Element											
980 Loader/Scraper	305	Diesel	1	25	7.5		1	2.22	0.40	2.22	0.03
Grader	110	Diesel	1	25	5		1	2.22	0.40	2.22	0.03
Dump Truck	180	Gas	3	25	5		1	0.64	0.0003	0.64	0.01
Loader, Front End, w/ Bucket	145	Diesel	1	25	5		1	2.22	0.40	2.22	0.03
Compactor	165	Diesel	1	25	5		1	2.22	0.40	2.22	0.03
Water Truck	175	Gas	2	25	7.5		1	2.22	0.40	2.22	0.03
Survey Truck	180	Gas	1	25	9		1	0.64	0.0003	0.64	0.01
Soils Test Crew Truck	180	Gas	1	25	5		1	0.64	0.0003	0.64	0.01

**TABLE H-4B
SEGMENT 3 - FUGITIVE DUST EMISSIONS FROM ROADS¹**

Construction Equipment	BHP	Fuel	# of Units	Total Days	Hours/Day	# Miles/Day Paved Road	# Miles/Day Unpaved Road	EF - Unpaved Roads (Lbs/Mile)	EF - Paved Roads (Lbs/Mile)	PM (Lbs/Day)	Total PM (Tons/Project)
Civil Element											
Crew Trucks	180	Gas	2	20	10		1	0.64	0.0003	0.64	0.01
Dump Truck	180	Gas	1	20	5		1	2.22	0.40	2.22	0.02
5-ton Truck	235	Diesel	1	20	5		1	2.22	0.40	2.22	0.02
Ditch Digger	75	Gas	1	10	7.5		1	2.22	0.40	2.22	0.01
Driller	305	Diesel	1	10	7.5		1	2.22	0.40	2.22	0.01
Crane	180	Gas	1	15	5		1	2.22	0.40	2.22	0.02
Tractor/ Backhoe	85	Diesel	1	15	7		1	2.22	0.40	2.22	0.02
Forklift	75	Diesel	1	15	5		1	2.22	0.40	2.22	0.02
Truck, Concrete, 10 Yd	310	Diesel	2	15	7.5		1	2.22	0.40	2.22	0.02
Electrical Element											
Crew Trucks	180	Gas	2	35	10		1	0.64	0.00	0.64	0.01
5-ton Truck	235	Diesel	1	35	5		1	2.22	0.40	2.22	0.04
150-ton Crane	250	Diesel	1	20	7.5		1	2.22	0.40	2.22	0.02
Truck Crane	180	Gas	2	20	7.5		1	2.22	0.40	2.22	0.02
Tractor/Back Hoe, w/ Bucket	85	Diesel	1	20	5		1	2.22	0.40	2.22	0.02
Forklift	75	Diesel	1	20	5		1	2.22	0.40	2.22	0.02
Manlift	75	Gas	2	30	7.5		1	2.22	0.40	2.22	0.03
Support Truck	180	Gas	1	35	5		1	2.22	0.40	2.22	0.04
Subtotal:										47.60	0.51
Total Segment 3 Emissions:										352.38	9.96
AVAQMD (Segment 3)										76.35	2.20
KCAPCD (Segment 3)										276.03	7.76

¹ Emission factors for Paved Road Dust (AP-42 13.2.1, December 2003).

² Emission factors for Unpaved Road Dust (AP-42 13.2.2, December 2003).

³ Unpaved roads include unimproved and R-O-W roads.

⁴ Mitigation measures include watering, use of soil binders, and reduced vehicle speeds.

⁵ Unless specifically provided, construction equipment is assumed to move one mile per day on unpaved roads.

⁶ All of Segment 2 and 38% of the Segment 3 construction element emissions, Antelope to Substation One, occur in Antelope Valley AQMD.

TABLE H-4C
SEGMENT 3 - FUGITIVE DUST FROM FILLING AND DUMPING

Waste Item	Pounds Total	Tons of Material Handled Per Day	Emission Factor ¹ (Lbs/Ton)	PM ₁₀ Emissions (Lbs/Day)	PM ₁₀ Emissions (Tons)
Segment 3: Antelope to Substation 1 (25.6 miles; 13-month period)					
Wood from Cribbing etc.	123,300.000	0.95	0.02	0.02	0.00
Soil/Veg: Ftgs, Stubs & Crane Pads	4923936.00	37.88	0.02	0.84	0.13
Miscellaneous	40000.00	0.31	0.02	0.01	0.00
Sub Total	5,087,236	39.13		0.86	0.13
Segment 3: Substation One to Substation Two					
Civil Element					
Wood	25,000	0.19	0.02	0.00	0.00
Concrete	246,057	1.89	0.02	0.04	0.01
Miscellaneous	40000	0.31	0.02	0.01	0.00
Sub Total	311,057	2.39		0.05	0.01
Segment 3 Total:				0.92	0.14
AVAQMD (Segment 3)²				0.33	0.05
KCAPCD (Segment 3)²				0.59	0.09

¹ Emission factors provided through the SCAQMD CEQA Air Quality Handbook, Appendix 9, Table A9-9.

² All of Segment 2 and 38% of the Segment 3 construction element emissions, Antelope to Substation 1, occur in Antelope Valley AQMD.

**TABLE H-5
SUMMARY OF FUGITIVE DUST EMISSIONS CALCULATION METHODOLOGY
FOR ROAD TRIPS AND DIRT PUSHING OPERATIONS**

Paved Road Dust (AP-42 13.2.1, December 2003)

$$E = [k (sL/2)^{0.65} (W/3)^{1.5} - C](1-P/4N)$$

E = avg monthly particulate emission factor (g/VKT)

4.6 k = particle size multiplier for particle size range and units of interest = 4.6 for PM10 (24 for TSP)

0.4 sL = road surface silt loading = 0.4 g/m² (Normal low ADT roads(AP-42 Table 13.2.1-3)) (SCAQMD major streets/highways)

16 W = average weight (tons) of the vehicles traveling the road = 16 tons (Tractor Trailer Trucks SCAQMD)

1 W = average weight (tons) of the personnel vehicles traveling the road = 1 tons

0.2119 C = emission factor for exhaust, brake wear & tire wear (AP-42 Table 13.2.1-2)

18 P = number of "wet" days with at least 0.254 mm of precipitation during the averaging period = 365 days/year. Rainfall data from AVAQMD CEQA Handbook

365 N = number of days in the averaging period

PM10	19.45 g/VKT	EPA AP-42 13.2.1 Paved Roads	=	PM10	0.06898781 lb/VMT	For LARGE VEHICLES (16 tons)
TSP	102.35 g/VKT	EPA AP-42 13.2.1 Paved Roads	=	TSP	0.36306729 lb/VMT	For LARGE VEHICLES (16 tons)
PM10	0.10 g/VKT	EPA AP-42 13.2.1 Paved Roads	=	PM10	0.00034715 lb/VMT	For SMALL VEHICLES (1 ton)
TSP	1.39 g/VKT	EPA AP-42 13.2.1 Paved Roads	=	TSP	0.00494215 lb/VMT	For SMALL VEHICLES (1 ton)

Unpaved Road Dust (AP-42 13.2.2, December 2003)

$$E = k (s/12)^a (W/3)^b [(365-P)/365]$$

*Assumed that these are not publicly accessible roads

E = size-specific emission factor (lb/VMT)

8.5 s = surface material silt content (%) = 8.5% for construction sites (table 13.2.2-1)

16 W = average weight (tons) of the vehicles traveling the road = 16 tons (Tractor Trailer Trucks SCAQMD)

1 W = average weight (tons) of the personnel vehicles traveling the road = 1 tons

1.5 4.9 k = 1.5 for PM10, 4.9 for TSP (table 13.2.2-2)

0.9 0.7 a = 0.9 for PM10, 0.7 for TSP (table 13.2.2-2)

0.45 b = 0.45 for PM10 and TSP (table 13.2.2-2)

18 P = number of "wet" days with at least 0.254 mm of precipitation during the year. Rainfall data from AVAQMD CEQA Handbook

PM10	2.22 lb/VMT	EPA AP-42 13.2.2 Unpaved Roads	For LARGE VEHICLES (16 tons)
TSP	7.77 lb/VMT	EPA AP-42 13.2.2 Unpaved Roads	For LARGE VEHICLES (16 tons)
PM10	0.64 lb/VMT	EPA AP-42 13.2.2 Unpaved Roads	For SMALL VEHICLES (1 ton)
TSP	2.23 lb/VMT	EPA AP-42 13.2.2 Unpaved Roads	For SMALL VEHICLES (1 ton)

Fugitive Dust PM₁₀ Emission Factors for Dirt Pushing Operations

$$E = (0.45 * ((G/1.5) / ((H/1.4)))^I) * J$$

7.5	G = Overburden in %
15	H = Moisture content in %
2.2046	I = Conversion Factor
	J = Hours of Pushing Operations (from PEA Table 3-2)

Notes:

¹ Fugitive Dust PM₁₀ Emission Factors for Dirt Pushing Operations obtained using the equation provided in the SCAQMD CEQA Air Quality Handbook, Table A9-9-F.