APPENDIX 5.1A

Construction Emission Estimates

APPENDIX 5.1A

Construction Emission Estimates

Tables 5.1A.1a through 5.1A.1l summarize the onsite construction emissions from power plant construction.

Table 5.1A.1a	Onsite Power Plant Construction Equipment CO Emissions
Table 5.1A.1b	Onsite Power Plant Construction Equipment VOC Emissions
Table 5.1A.1c	Onsite Power Plant Construction Equipment NO_x Emissions
Table 5.1A.1d	Onsite Power Plant Construction Equipment SO_x Emissions
Table 5.1A.1e	Onsite Power Plant Construction Equipment PM_{10} Emissions
Table 5.1A.1f	Onsite Power Plant Construction Equipment $PM_{2.5}$ Emissions
Table 5.1A.1g	Onsite Power Plant Construction Motor Vehicle CO Emissions
Table 5.1A.1h	Onsite Power Plant Construction Motor Vehicle VOC Emissions
Table 5.1A.1i	Onsite Power Plant Construction Motor Vehicle SO_x Emissions
Table 5.1A.1j	Onsite Power Plant Construction Motor Vehicle NO_x Emissions
Table 5.1A.1k	Onsite Power Plant Construction Motor Vehicle PM_{10} Emissions
Table 5.1A.1l	Onsite Power Plant Construction Motor Vehicle $PM_{2.5}$ Emissions

Tables 5.1A.2a through 5.1A.2i summarize the fugitive dust emissions from power plant construction.

Table 5.1A.2a	Onsite Power Plant Construction Fugitive Dust Monthly Activity Levels
Table 5.1A.2b	Onsite Power Plant Construction Fugitive PM_{10} Emissions
Table 5.1A.2c	Onsite Power Plant Construction Fugitive $PM_{2.5}$ Emissions
Table 5.1A.2d	Onsite Power Plant Construction Motor Vehicle Fugitive PM_{10} Emissions
Table 5.1A.2e	Onsite Power Plant Construction Motor Vehicle Fugitive $PM_{2.5}$ Emissions
Table 5.1A.2f	Onsite Power Plant Construction Motor Vehicle Activity
Table 5.1A.2g	Fugitive PM_{10} Emission Factors for Grading
Table 5.1A.2h	Fugitive PM_{10} Emission Factors for Unpaved Roads
Table 5.1A.2i	Fugitive $PM_{2.5}$ Emission Factors for Unpaved Roads

Table 5.1A.3a	Equations Used to Calculate Emissions

Table 5.1A.4a	Number of Onsite Power Plant Construction Equipment
Table 5.1A.4b	Number of Onsite Power Plant Construction Motor Vehicles
Table 5.1A.4c	Power Plant Construction Equipment Emission Factors
Table 5.1A.4d	Derivation of Construction Equipment Emission Factors
Table 5.1A.4e	Motor Vehicle Emission Factors

Table 5.1A.5a	Offsite Motor Vehicle Usage during Construction
Table 5.1A.5b	Offsite Motor Vehicle CO Emissions
Table 5.1A.5c	Offsite Motor Vehicle VOC Emissions
Table 5.1A.5d	Offsite Motor Vehicle SO_x Emissions
Table 5.1A.5e	Offsite Motor Vehicle NO_x Emissions
Table 5.1A.5f	Offsite Motor Vehicle PM_{10} Emissions
Table 5.1A.5g	Offsite Motor Vehicle $PM_{2.5}$ Emissions

Table 5.1A.1a: Onsite Power Plant Construction Equipment CO Emissions

Onsite Equipment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Bulldozer	0	605.69	605.69	605.69	605.69	403.79	403.79	403.79	403.79	403.79	201.90	201.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	0	0	0	0	0	0	0	0	0	0	342.03	342.03	342.03	399.03	456.04	513.04	570.04	684.05	684.05	627.05
Excavator	0	269.19	269.19	269.19	358.92	448.65	448.65	358.92	448.65	448.65	358.92	358.92	179.46	0	0	0	0	0	0	0
Grader	0	0	0	127.69	127.69	127.69	127.69	127.69	127.69	127.69	127.69	0	0	0	0	0	0	0	0	0
Cranes	0	0	0	0	0	0	0	44.67	89.34	178.69	312.71	312.71	312.71	312.71	312.71	312.71	312.71	357.38	357.38	357.38
Asphalt Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	387.35	387.35	193.68
Compactor	0	169.30	169.30	169.30	169.30	169.30	169.30	169.30	169.30	169.30	169.30	169.30	0	0	0	0	0	0	0	0
Welding Machine	0	0	0	0	0	0	0	8.63	25.88	34.50	69.01	86.26	120.77	120.77	129.39	172.52	172.52	172.52	172.52	172.52
Total (lbs/month, E_m)	**0**	**1,044**	**1,044**	**1,172**	**1,262**	**1,149**	**1,149**	**1,113**	**1,265**	**1,363**	**1,582**	**1,471**	**955**	**833**	**898**	**998**	**1,055**	**1,601**	**1,601**	**1,351**
Total (lbs/day, E_d)	**0**	**47**	**47**	**53**	**57**	**52**	**52**	**51**	**57**	**62**	**72**	**67**	**43**	**38**	**41**	**45**	**48**	**73**	**73**	**61**

Table 5.1A.1b: Onsite Power Plant Construction Equipment VOC Emissions

Onsite Equipment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Bulldozer	0	129.48	129.48	129.48	129.48	86.32	86.32	86.32	86.32	86.32	43.16	43.16	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0	97.37	97.37	97.37	113.59	129.82	146.05	162.28	194.73	194.73	178.51
Excavator	0	55.32	55.32	55.32	73.75	92.19	92.19	73.75	92.19	92.19	73.75	73.75	36.88	0	0	0	0	0	0	0
Grader	0	0	0	28.48	28.48	28.48	28.48	28.48	28.48	28.48	28.48	0	0	0	0	0	0	0	0	0
Cranes	0	0	0	0	0	0	0	15.95	31.91	63.82	111.68	111.68	111.68	111.68	111.68	111.68	111.68	127.63	127.63	127.63
Asphalt Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116.46	116.46	58.23
Compactor	0	39.03	39.03	39.03	39.03	39.03	39.03	39.03	39.03	39.03	39.03	39.03	0	0	0	0	0	0	0	0
Welding Machine	0	0	0	0	0	0	0	3.23	9.70	12.94	25.88	32.35	45.29	45.29	48.52	64.70	64.70	64.70	64.70	64.70
Total (lbs/month, E_m)	**0**	**224**	**224**	**252**	**271**	**246**	**246**	**247**	**288**	**323**	**419**	**397**	**291**	**271**	**290**	**322**	**339**	**504**	**504**	**429**
Total (lbs/day, E_d)	**0**	**10**	**10**	**11**	**12**	**11**	**11**	**11**	**13**	**15**	**19**	**18**	**13**	**12**	**13**	**15**	**15**	**23**	**23**	**20**

Table 5.1A.1c: Onsite Power Plant Construction Equipment NOx Emissions

Onsite Equipment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Bulldozer	0	1131.22	1131.22	1131.22	1131.22	754.15	754.15	754.15	754.15	754.15	377.07	377.07	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0	581.00	581.00	581.00	677.83	774.67	871.50	968.34	1162.00	1162.00	1065.17
Excavator	0	417.16	417.16	417.16	556.22	695.27	695.27	556.22	695.27	695.27	556.22	556.22	278.11	0	0	0	0	0	0	0
Grader	0	0	0	220.04	220.04	220.04	220.04	220.04	220.04	220.04	220.04	0	0	0	0	0	0	0	0	0
Cranes	0	0	0	0	0	0	0	157.23	314.46	628.91	1100.60	1100.60	1100.60	1100.60	1100.60	1100.60	1100.60	1257.83	1257.83	1257.83
Asphalt Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	693.43	693.43	346.72
Compactor	0	305.96	305.96	305.96	305.96	305.96	305.96	305.96	305.96	305.96	305.96	305.96	0	0	0	0	0	0	0	0
Welding Machine	0	0	0	0	0	0	0	14.55	43.64	58.19	116.38	145.48	203.67	203.67	218.21	290.95	290.95	290.95	290.95	290.95
Total (lbs/month, E_m)	**0**	**1,854**	**1,854**	**2,074**	**2,213**	**1,975**	**1,975**	**2,008**	**2,334**	**2,663**	**3,257**	**3,066**	**2,163**	**1,982**	**2,093**	**2,263**	**2,360**	**3,404**	**3,404**	**2,961**
Total (lbs/day, E_d)	**0**	**84**	**84**	**94**	**101**	**90**	**90**	**91**	**106**	**121**	**148**	**139**	**98**	**90**	**95**	**103**	**107**	**155**	**155**	**135**

Table 5.1A.1d: Onsite Power Plant Construction Equipment SOx Emissions

Onsite Equipment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Bulldozer	0	0.88	0.88	0.88	0.88	0.59	0.59	0.59	0.59	0.59	0.29	0.29	0	0	0	0	0	0	0	0.00
Air Compressor	0	0	0	0	0	0	0	0	0	0	0.53	0.53	0.53	0.62	0.71	0.80	0.89	1.07	1.07	0.98
Excavator	0	0.56	0.56	0.56	0.74	0.93	0.93	0.74	0.93	0.93	0.74	0.74	0.37	0	0	0	0	0	0	0
Grader	0	0	0	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0	0	0	0	0	0	0	0	0
Cranes	0	0	0	0	0	0	0	0.19	0.38	0.75	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.50	1.50	1.50
Asphalt Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.59	0.59	0.29
Compactor	0	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0	0	0	0	0	0	0	0
Welding Machine	0	0	0	0	0	0	0	0.02	0.05	0.07	0.14	0.18	0.25	0.25	0.27	0.36	0.36	0.36	0.36	0.36
Total (lbs/month, E_m)	**0**	**1.77**	**1.77**	**2.01**	**2.20**	**2.09**	**2.09**	**2.11**	**2.52**	**2.92**	**3.60**	**3.39**	**2.47**	**2.19**	**2.30**	**2.47**	**2.56**	**3.52**	**3.52**	**3.13**
Total (lbs/day, E_d)	**0**	**0.08**	**0.08**	**0.09**	**0.10**	**0.10**	**0.10**	**0.10**	**0.11**	**0.13**	**0.16**	**0.15**	**0.11**	**0.10**	**0.10**	**0.11**	**0.12**	**0.16**	**0.16**	**0.14**

Table 5.1A.1e: Onsite Power Plant Construction Equipment PM_{10} Emissions

Onsite Equipment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Bulldozer	0	47.86	47.86	47.86	47.86	31.90	31.90	31.90	31.90	31.90	15.95	15.95	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0	53.48	53.48	53.48	62.39	71.31	80.22	89.13	106.96	106.96	98.05
Excavator	0	25.22	25.22	25.22	33.63	42.03	42.03	33.63	42.03	42.03	33.63	33.63	16.81	0	0	0	0	0	0	0
Grader	0	0	0	12.91	12.91	12.91	12.91	12.91	12.91	12.91	12.91	0	0	0	0	0	0	0	0	0
Cranes	0	0	0	0	0	0	0	5.82	11.64	23.27	40.73	40.73	40.73	40.73	40.73	40.73	40.73	46.55	46.55	46.55
Asphalt Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61.39	61.39	30.70
Compactor	0	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	17.84	0	0	0	0	0	0	0	0
Welding Machine	0	0.00	0.00	0.00	0.00	0.00	0.00	0.98	2.95	3.93	7.86	9.82	13.75	13.75	14.73	19.64	19.64	19.64	19.64	19.64
Total (lbs/month, E_m)	**0**	**91**	**91**	**104**	**112**	**105**	**105**	**103**	**119**	**132**	**182**	**171**	**125**	**117**	**127**	**141**	**150**	**235**	**235**	**195**
Total (lbs/day, E_d)	**0**	**4.13**	**4.13**	**4.72**	**5.10**	**4.76**	**4.76**	**4.69**	**5.42**	**5.99**	**8.29**	**7.79**	**5.67**	**5.31**	**5.76**	**6.39**	**6.80**	**10.66**	**10.66**	**8.86**

Table 5.1A.1f: Onsite Power Plant Construction Equipment $PM_{2.5}$ Emissions

Onsite Equipment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Bulldozer	0	42.59	42.59	42.59	42.59	28.39	28.39	28.39	28.39	28.39	14.20	14.20	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0	47.60	47.60	47.60	55.53	63.46	71.40	79.33	95.20	95.20	87.26
Excavator	0	22.45	22.45	22.45	29.93	37.41	37.41	29.93	37.41	37.41	29.93	29.93	14.96	0	0	0	0	0	0	0
Grader	0	0	0	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	0.00	0.00	0	0	0	0	0	0	0
Cranes	0	0	0	0	0	0	0	5.18	10.36	20.71	36.25	36.25	36.25	36.25	36.25	36.25	36.25	41.43	41.43	41.43
Asphalt Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54.64	54.64	27.32
Compactor	0	15.88	15.88	15.88	15.88	15.88	15.88	15.88	15.88	15.88	15.88	15.88	0	0	0	0	0	0	0	0
Welding Machine	0	0	0	0	0	0	0	0.87	2.62	3.50	6.99	8.74	12.23	12.23	13.11	17.48	17.48	17.48	17.48	17.48
Total (lbs/month, E_m)	**0**	**81**	**81**	**92**	**100**	**93**	**93**	**92**	**106**	**117**	**162**	**153**	**111**	**104**	**113**	**125**	**133**	**209**	**209**	**173**
Total (lbs/day, E_d)	**0**	**3.68**	**3.68**	**4.20**	**4.54**	**4.24**	**4.24**	**4.17**	**4.82**	**5.34**	**7.38**	**6.94**	**5.05**	**4.73**	**5.13**	**5.69**	**6.05**	**9.49**	**9.49**	**7.89**

Table 5.1A.1g: Onsite Power Plant Construction Motor Vehicle CO Emissions

Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	19	17	18	19	20
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.02	0.03	0.03	0.03	0.03	0.05	0.05	0.06	0.06	0.10	0.06	0.06
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.05	0.06	0.06	0.06	0.05
Onsite Water Truck	0	0.08	0.08	0.08	0.08	0	0	0	0	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.02	0.02	0.03	0.03	0.05	0.05	0.02	0.02	0.02	0.02	0	0	0	0	0
Total (lbs/day)	**0**	**0.08**	**0.08**	**0.08**	**0.08**	**0.02**	**0.03**	**0.05**	**0.06**	**0.18**	**0.18**	**0.16**	**0.16**	**0.18**	**0.18**	**0.19**	**0.13**	**0.16**	**0.13**	**0.11**
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.35	0.71	0.71	0.71	0.71	1.06	1.06	1.42	1.42	2.13	1.42	1.42
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.35	0.35	0.35	0	0	0.71	0.71	0.71	0.71	1.06	1.42	1.42	1.42	1.06
Onsite Water Truck	0	1.77	1.77	1.77	1.77	0	0	0	0	1.77	1.77	1.77	1.77	1.77	1.77	1.77	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.35	0.35	0.71	0.71	1.06	1.06	0.35	0.35	0.35	0.35	0	0	0	0	0
Total (lbs/month)	**0**	**1.77**	**1.77**	**1.77**	**1.77**	**0.35**	**0.71**	**1.06**	**1.42**	**3.90**	**3.90**	**3.55**	**3.55**	**3.90**	**3.90**	**4.26**	**2.84**	**3.55**	**2.84**	**2.48**

Table 5.1A.1h: Onsite Power Plant Construction Motor Vehicle VOC Emissions

Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	19	17	18	19	20
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.001	0.003	0.003	0.003	0.003	0.004	0.004	0.006	0.006	0.009	0.006	0.006
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.001	0.001	0.001	0.001	0.001	0.003	0.003	0.003	0.003	0.004	0.006	0.006	0.006	0.004
Onsite Water Truck	0	0.007	0.007	0.007	0.007	0	0	0	0	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.001	0.001	0.003	0.003	0.004	0.004	0.001	0.001	0.001	0.001	0	0	0	0	0
Total (lbs/day)	**0**	**0.007**	**0.007**	**0.007**	**0.007**	**0.001**	**0.003**	**0.004**	**0.006**	**0.016**	**0.016**	**0.014**	**0.014**	**0.016**	**0.016**	**0.017**	**0.011**	**0.014**	**0.011**	**0.010**
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.03	0.06	0.06	0.06	0.06	0.09	0.09	0.13	0.13	0.19	0.13	0.13
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.03	0.03	0.03	0.03	0.03	0.06	0.06	0.06	0.06	0.09	0.13	0.13	0.13	0.09
Onsite Water Truck	0	0.16	0.16	0.16	0.16	0	0	0	0	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.03	0.03	0.06	0.06	0.09	0.09	0.03	0.03	0.03	0.03	0	0	0	0	0
Total (lbs/month)	0	**0.16**	**0.16**	**0.16**	**0.16**	**0.03**	**0.06**	**0.09**	**0.13**	**0.35**	**0.35**	**0.32**	**0.32**	**0.35**	**0.35**	**0.38**	**0.25**	**0.32**	**0.25**	**0.22**

Table 5.1A.1i: Onsite Power Plant Construction Motor Vehicle SOx Emissions

Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.00004	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.00004	0.00004	0.00004	0.00004	0.00004	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Onsite Water Truck	0	0.00018	0.00018	0.00018	0.00018	0	0	0	0	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.00004	0.00004	0.00007	0.00007	0.0001	0.0001	0.00004	0.00004	0.00004	0.00004	0	0	0	0	0
Total (lbs/day)	0	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.00004**	**0.0001**	**0.0001**	**0.0001**	**0.0004**	**0.0004**	**0.0004**	**0.0004**	**0.0004**	**0.0004**	**0.0004**	**0.0003**	**0.0004**	**0.0003**	**0.0002**
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.005	0.003	0.003
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002
Onsite Water Truck	0	0.004	0.004	0.004	0.004	0.000	0	0	0	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.001	0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0	0	0	0	0
Total (lbs/month)	0	**0.004**	**0.004**	**0.004**	**0.004**	**0.001**	**0.002**	**0.002**	**0.003**	**0.009**	**0.009**	**0.008**	**0.008**	**0.009**	**0.009**	**0.009**	**0.006**	**0.008**	**0.006**	**0.005**

Table 5.1A.1j: Onsite Power Plant Construction Motor Vehicle NOx Emissions

Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.003	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.003	0.003	0.003	0.003	0.003	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Onsite Water Truck	0	0.01	0.01	0.01	0.01	0	0	0	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.003	0.003	0.01	0.01	0.01	0.01	0.003	0.003	0.003	0.003	0	0	0	0	0
Total (lbs/day)	0	**0.01**	**0.01**	**0.01**	**0.01**	**0.00**	**0.01**	**0.01**	**0.01**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.02**	**0.03**	**0.02**	**0.02**
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.06	0.12	0.12	0.12	0.12	0.17	0.17	0.23	0.23	0.35	0.23	0.23
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.06	0.06	0.06	0.06	0.06	0.12	0.12	0.12	0.12	0.17	0.23	0.23	0.23	0.17
Onsite Water Truck	0	0.29	0.29	0.29	0.29	0	0	0	0	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.06	0.06	0.12	0.12	0.17	0.17	0.06	0.06	0.06	0.06	0	0	0	0	0
Total (lbs/month)	0	**0.29**	**0.29**	**0.29**	**0.29**	**0.06**	**0.12**	**0.17**	**0.23**	**0.64**	**0.64**	**0.58**	**0.58**	**0.64**	**0.64**	**0.69**	**0.46**	**0.58**	**0.46**	**0.40**

Table 5.1A.1k: Onsite Power Plant Construction Motor Vehicle PM_{10} Emissions

Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.0003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.0003	0.0003	0.0003	0.0003	0.0003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Onsite Water Truck	0	0.001	0.001	0.001	0.001	0	0	0	0	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.0003	0.0003	0.001	0.001	0.001	0.001	0.0003	0.0003	0.0003	0.0003	0	0	0	0	0
Total (lbs/day)	0	**0.001**	**0.001**	**0.001**	**0.001**	**0.0003**	**0.001**	**0.001**	**0.001**	**0.003**	**0.003**	**0.003**	**0.003**	**0.003**	**0.003**	**0.004**	**0.002**	**0.003**	**0.002**	**0.002**
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.03	0.03
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.03	0.02
Onsite Water Truck	0	0.03	0.03	0.03	0.03	0	0	0	0	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0	0	0	0	0
Total (lbs/month)	0	**0.032**	**0.032**	**0.032**	**0.032**	**0.006**	**0.013**	**0.019**	**0.026**	**0.071**	**0.071**	**0.065**	**0.065**	**0.071**	**0.071**	**0.077**	**0.052**	**0.065**	**0.052**	**0.045**

Table 5.1A.1l: Onsite Power Plant Construction Motor Vehicle $PM_{2.5}$ Emissions

Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.0002	0.0005	0.0005	0.0005	0.0005	0.0007	0.0007	0.001	0.001	0.001	0.001	0.001
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.001	0.001	0.001	0.001	0.001
Onsite Water Truck	0	0.001	0.001	0.001	0.001	0	0	0	0	0.001	0.001	0.001	0.001	0.001	0.0012	0.001	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.0002	0.0002	0.0005	0.0005	0.001	0.001	0.0002	0.0002	0.0002	0.0002	0	0	0	0	0
Total (lbs/day)	0	**0.001**	**0.001**	**0.001**	**0.001**	**0.0002**	**0.0005**	**0.001**	**0.001**	**0.003**	**0.003**	**0.002**	**0.002**	**0.003**	**0.003**	**0.003**	**0.002**	**0.002**	**0.002**	**0.002**
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.005	0.011	0.011	0.011	0.011	0.016	0.016	0.021	0.021	0.032	0.021	0.021
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.005	0.005	0.005	0.005	0.005	0.011	0.011	0.011	0.011	0.016	0.021	0.021	0.021	0.016
Onsite Water Truck	0	0.027	0.027	0.027	0.027	0	0	0	0	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.005	0.005	0.011	0.011	0.016	0.016	0.005	0.005	0.005	0.005	0	0	0	0	0
Total (lbs/month)	0	**0.027**	**0.027**	**0.027**	**0.027**	**0.005**	**0.011**	**0.016**	**0.021**	**0.059**	**0.059**	**0.053**	**0.053**	**0.059**	**0.059**	**0.064**	**0.043**	**0.053**	**0.043**	**0.037**

Table 5.1A.2a: Onsite Power Plant Construction Fugitive Dust Monthly Activity Levels

	Monthly Activity Levels																			
Source	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Grading (acres)[a]	0	0	0	3.28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[a]Assumes the 3.28 acres disturbed during construction are graded entirely in the 4th month of construction.

Table 5.1A.2b: Onsite Power Plant Construction Fugitive PM_{10} Emissions

	Fugitive PM_{10} Emissions (lb/month)																			
Source	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Grading (acres)	0	0	0	32.80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (lbs/month)	**0**	**0**	**0**	**32.80**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total (lbs/day)	**0**	**0**	**0**	**1.49**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

[a] Calculation based on highest (controlled) grading emission factor of 10 lb/acre.
[b] Based on 22 days/month

Table 5.1A.2c: Onsite Power Plant Construction Fugitive $PM_{2.5}$ Emissions

	Fugitive $PM_{2.5}$ Emissions (lb/month)																			
Source	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Grading (acres)	0	0	0	6.82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (lbs/month)	**0**	**0**	**0**	**6.82**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total (lbs/day)	**0**	**0**	**0**	**0.31**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

[a] Calculation based on assumption that 20.8% of PM_{10} is $PM_{2.5}$ for construction fugitive dust emissions. Reference: SCAQMD CEQA Handbook, Appendix A, Table A.
[b] Based on 22 days/month

Table 5.1A.2d: Onsite Power Plant Construction Motor Vehicle Fugitive PM_{10} Emissions

	Daily Fugitive PM_{10} Emissions (lb/day) for Each Month																			
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.76	1.52	1.52	1.52	1.52	2.27	2.27	3.03	3.03	4.55	3.03	3.03
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.76	0.76	0.76	0.76	0.76	1.52	1.52	1.52	1.52	2.27	3.03	3.03	3.03	2.27
Onsite Water Truck	0	3.79	3.79	3.79	3.79	0	0	0	0	3.79	3.79	3.79	3.79	3.79	3.79	3.79	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.76	0.76	1.52	1.52	2.27	2.27	0.76	0.76	0.76	0.76	0	0	0	0	0
Total (lbs/day)	**0**	**3.79**	**3.79**	**3.79**	**3.79**	**0.76**	**1.52**	**2.27**	**3.03**	**8.34**	**8.34**	**7.58**	**7.58**	**8.34**	**8.34**	**9.09**	**6.06**	**7.58**	**6.06**	**5.31**
	Monthly Fugitive PM_{10} Emissions (lb/month)																			
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	16.67	33.35	33.35	33.35	33.35	50.02	50.02	66.70	66.70	100.04	66.70	66.70
Onsite Fuel/Lube Truck	0	0	0	0	0	0	16.67	16.67	16.67	16.67	16.67	33.35	33.35	33.35	33.35	50.02	66.70	66.70	66.70	50.02
Onsite Water Truck	0	83.37	83.37	83.37	83.37	0	0	0	0	83.37	83.37	83.37	83.37	83.37	83.37	83.37	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	16.67	16.67	33.35	33.35	50.02	50.02	16.67	16.67	16.67	16.67	0	0	0	0	0
Total (lb/month)	**0**	**83**	**83**	**83**	**83**	**17**	**33**	**50**	**67**	**183**	**183**	**167**	**167**	**183**	**183**	**200**	**133**	**167**	**133**	**117**

[a] Calculation based on highest (controlled) unpaved road emission factor of 0.76 lb/mi for PM_{10}.
[b] Based on 22 days/month

Table 5.1A.2e: Onsite Power Plant Construction Vehicle Fugitive $PM_{2.5}$ Emissions

Vehicle Type	Daily Fugitive $PM_{2.5}$ Emissions (lb/day) for Each Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	0.08	0.15	0.15	0.15	0.15	0.23	0.23	0.30	0.30	0.45	0.30	0.30
Onsite Fuel/Lube Truck	0	0	0	0	0	0	0.08	0.08	0.08	0.08	0.08	0.15	0.15	0.15	0.15	0.23	0.30	0.30	0.30	0.23
Onsite Water Truck	0	0.38	0.38	0.38	0.38	0	0	0	0	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	0.08	0.08	0.15	0.15	0.23	0.23	0.08	0.08	0.08	0.08	0	0	0	0	0
Total (lbs/day)	**0**	**0.38**	**0.38**	**0.38**	**0.38**	**0.08**	**0.15**	**0.23**	**0.30**	**0.83**	**0.83**	**0.76**	**0.76**	**0.83**	**0.83**	**0.91**	**0.61**	**0.76**	**0.61**	**0.53**
Vehicle Type	**Monthly Fugitive $PM_{2.5}$ Emissions (lb/month)**																			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	1.67	3.33	3.33	3.33	3.33	5.00	5.00	6.67	6.67	10.00	6.67	6.67
Onsite Fuel/Lube Truck	0	0	0	0	0	0	1.67	1.67	1.67	1.67	1.67	3.33	3.33	3.33	3.33	5.00	6.67	6.67	6.67	5.00
Onsite Water Truck	0	8.34	8.34	8.34	8.34	0	0	0	0	8.34	8.34	8.34	8.34	8.34	8.34	8.34	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	1.67	1.67	3.33	3.33	5.00	5.00	1.67	1.67	1.67	1.67	0	0	0	0	0
Total (lb/month)	**0**	**8.34**	**8.34**	**8.34**	**8.34**	**1.67**	**3.33**	**5.00**	**6.67**	**18.34**	**18.34**	**16.67**	**16.67**	**18.34**	**18.34**	**20.01**	**13.34**	**16.67**	**13.34**	**11.67**

[a] Calculation based on highest (controlled) unpaved road emission factor of 0.08 lb/mi for $PM_{2.5}$.
[b] Based on 22 days/month

Table 5.1A.2f: Onsite Power Plant Construction Motor Vehicle Activity

Vehicle Type	Miles/Day	Working Days per Month
Onsite Flatbed Truck	1	22
Onsite Fuel/Lube Truck	1	22
Onsite Water Truck	5	22
Onsite Concrete Pump Truck	1	22

Table 5.1A.2g: Fugitive PM_{10} Emission Factors for Grading

Grading

Emission Factor (Uncontrolled)	20	lb/acre
Controlled Emission Factor	10	lb/acre

Reference: URBEMIS2007, Appendix A, Table A-4

Table 5.1A.2h: Fugitive PM_{10} Emission Factors for Unpaved Roads

Motor Vehicles and Equipment on Unpaved Surfaces

Emission Factor [lb/mi] = 1.5 x (silt content [%] / 12)$^{0.9}$ x (average vehicle weight [tons] / 3)$^{0.45}$

Reference: AP-42, Section 13.2.2, December 2003

Parameter	PM_{10}
Average Vehicle Weight (tons) by month	16.50
Silt Content	8.5
Emission Factor (Uncontrolled, lb/mile)	2.37
Reduction from Watering Twice/Day	68%
Controlled Emission Factor (lb/mile)	0.76

Reference for Silt Content: AP-42, Section 13.2.2, Table 13.2.2-1, Average for a Construction Site, Scraper Route
Reference for Control Efficiency: SCAQMD CEQA Handbook, Table 11-4

Table 5.1A.2i: Fugitive $PM_{2.5}$ Emission Factors for Unpaved Roads

Motor Vehicles and Equipment on Unpaved Surfaces

Emission Factor [lb/mi] = 0.15 x (silt content [%] / 12)$^{0.9}$ x (average vehicle weight [tons] / 3)$^{0.45}$

Reference: AP-42, Section 13.2.2, December 2003

Parameter	$PM_{2.5}$
Average Vehicle Weight (tons) by month	16.50
Silt Content	8.5
Emission Factor (Uncontrolled, lb/mile)	0.24
Reduction from Watering Twice/Day	68%
Controlled Emission Factor (lb/mile)	0.08

Reference for Silt Content: AP-42, Section 13.2.2, Table 13.2.2-1, Average for a Construction Site, Scraper Route
Reference for Control Efficiency: SCAQMD CEQA Handbook, Table 11-4

Table 5.1A.3a: Equations Used to Calculate Emissions

Emission Source	Pollutant(s)	Equation	Variables
Construction Equipment Exhaust	CO, VOC, NOx, SOx, PM_{10} and $PM_{2.5}$	$E_m = N * EF * H * 22$	E_m = Emissions (lb/month) N = number of pieces of equipment EF = emission factor (lb/hr) H = daily hours of operation, assumed to be 12 hr/day 22 = 22 construction days per month
		$E_d = E_m / 22$	E_d = Emissions (lb/day) E_m = Emissions (lb/month) 22 = 22 construction days per month
		$Et = \Sigma E_m / 2000$	E_t = Emissions (ton/yr) E_m = Emissions (lb/month) 2000 = conversion from lbs to tons
Onsite and Offsite Motor Vehicle Exhaust and Unpaved Road Fugitive PM_{10} and $PM_{2.5}$	CO, VOC, NOx, SOx, PM_{10}, $PM_{2.5}$	$E_d = N * VMT * EF$	E_d = Emissions (lb/day) N = number of vehicles VMT = vehicle miles traveled per day (miles/day) EF =EMFAC2007 emission factor (lb/mile). For fugitive PM_{10} and $PM_{2.5}$, Unpaved road dust emission factor based on equation in AP-42, ch. 13.2.2, December 2003 (lb/mile). See Tables 5.1A.2h and 5.1A.2i.
		$E_m = E_d * D$	E_m = Emissions (lb/month) E_d = Emissions (lb/day) D = number of construction days (days/month)

Reference: SCAQMD CEQA Handbook online, http://www.aqmd.gov/ceqa/handbook/offroad/offroad.html for construction equipment exhaust emissions and http://www.aqmd.gov/ceqa/handbook/onroad/onroad.html for vehicle exhaust.

Table 5.1A.4a: Number of Onsite Power Plant Construction Equipment

Onsite Equipment	Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Bulldozer	0	3	3	3	3	2	2	2	2	2	1	1	0	0	0	0	0	0	0	0
Air Compressor	0	0	0	0	0	0	0	0	0	0	6	6	6	7	8	9	10	12	12	11
Excavator	0	3	3	3	4	5	5	4	5	5	4	4	2	0	0	0	0	0	0	0
Grader	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
Cranes	0	0	0	0	0	0	0	1	2	4	7	7	7	7	7	7	7	8	8	8
Asphalt Paver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	2
Compactor	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
Welding Machine	0	0	0	0	0	0	0	1	3	4	8	10	14	14	15	20	20	20	20	20

Table 5.1A.4b: Number of Onsite Power Plant Construction Motor Vehicles

Vehicle Type	Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Onsite Flatbed Truck	0	0	0	0	0	0	0	0	1	2	2	2	2	3	3	4	4	6	4	4
Onsite Fuel/Lube Truck	0	0	0	0	0	0	1	1	1	1	1	2	2	2	2	3	4	4	4	3
Onsite Water Truck	0	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0
Onsite Concrete Pump Truck	0	0	0	0	0	1	1	2	2	3	3	1	1	1	1	0	0	0	0	0

Table 5.1A.4c: Power Plant Construction Equipment Emission Factors

Equipment	Fuel Type	Hours per Month[a]	Emission Factors, EF (lb/hr)[b]					
			CO	VOC	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Bulldozer	diesel	264	0.76	0.16	1.43	0.001	0.06	0.05
Air Compressor	diesel	264	0.22	0.06	0.37	0.00	0.03	0.03
Excavator	diesel	264	0.34	0.07	0.53	0.00	0.03	0.03
Grader	diesel	264	0.48	0.11	0.83	0.00	0.05	0.04
Cranes	diesel	264	0.17	0.06	0.60	0.00	0.02	0.02
Asphalt Paver	diesel	264	0.37	0.11	0.66	0.00	0.06	0.05
Compactor	diesel	264	0.64	0.15	1.16	0.00	0.07	0.06
Welding Machine	diesel	264	0.03	0.01	0.06	0.00	0.00	0.00

[a] Hours per month assumes 12 work hours per day and 22 days per month.

[b] Table 5.1A.4d below summarizes the horsepower, load factors, and emission factors (g/ bhp hr) used to derive the lb/hr emission factors.

Table 5.1A.4d. Derivation of Construction Equipment Emission Factors

Equipment	Horsepower[a]	Load Factor[b]	Emission Factors, EF (g/bhp hr)[b]					
			CO	VOC	NO_X	SO_X	PM_{10}	$PM_{2.5}$[c]
Bulldozer	285	0.59	2.063	0.441	3.853	0.003	0.163	0.14507
Air Compressor	106	0.48	1.925	0.548	3.27	0.003	0.301	0.26789
Excavator	140	0.57	1.932	0.397	2.994	0.004	0.181	0.16109
Grader	174	0.61	2.067	0.461	3.562	0.004	0.209	0.18601
Cranes	250	0.43	0.714	0.255	2.513	0.003	0.093	0.08277
Asphalt Paver	102	0.62	2.631	0.791	4.71	0.004	0.417	0.37113
Compactor	145	0.78	2.572	0.593	4.648	0.005	0.271	0.24119
Welding Machine	23	0.45	1.432	0.537	2.415	0.003	0.163	0.14507

[a] Horsepower for Grader and Air Compressor from URBEMIS2007. For all other construction equipment, horsepower from spreadsheet "Tracy Chart r 1.xls".

[b] Offroad mobile source load and emission factors from URBEMIS2007 version 9.2 Handbook Appendices G and I. To be conservative, the emission factors for the year 2011 were used for the construction equipment exhaust emission calculations although some construction activities may occur after 2011.

[c] $PM_{2.5}$ emission factors were calculated following the SCAQMD Particulate Matter (PM) 2.5 Significance Thresholds and Calculation Methodology, October 2006. For offroad combustion sources, 89% of the PM_{10} would be $PM_{2.5}$.

Table 5.1A.4e: Motor Vehicle Emission Factors [a]

Vehicle Type	Vehicle Class	Mean Vehicle Weight (tons)[b]	Silt loading (g/m^2)[c]	CO Exhaust lb/mi	VOC Exhaust lb/mi	SO_X Exhaust lb/mi	NO_X Exhaust lb/mi	PM_{10} Exhaust lb/mi	$PM_{2.5}$ Exhaust lb/mi
Onsite Flatbed Truck	MDT	3	0.6	0.0161	0.0014	0.0000	0.0026	0.0003	0.00024
Onsite Fuel/Lube Truck	MDT	16.5	0.6	0.0161	0.0014	0.0000	0.0026	0.0003	0.00024
Onsite Water Truck	MDT	16.5	0.6	0.0161	0.0014	0.0000	0.0026	0.0003	0.00024
Onsite Concrete Pump Truck	MDT	16.5	0.6	0.0161	0.0014	0.0000	0.0026	0.0003	0.00024
Offsite Delivery Trucks	MDT	16.5	0.6	0.0060	0.0002	0.0000	0.0016	0.0001	0.00005
Construction Worker Commute	LDA	3	0.6	0.0045	0.0001	0.0000	0.0005	0.0001	0.00003

[a] All emission factors were derived from the emission factors [g/mi] from EMFAC2007 for calendar year 2011 in San Joaquin County. For this model, a speed of 5 mph was assumed for onsite vehicles. A speed of 45 mph was assumed for offsite vehicles and worker commutes. The emission factors account for emissions from running.

[b] Weighted average assumes that autos/trucks weigh 3 tons and medium/heavy duty trucks weigh 16.5 tons.

[c] Silt loading from AP-42, Ch. 13, Table 13.2.1-3, for average daily traffic <500.

Table 5.1A.5a: Offsite Motor Vehicle Usage during Construction

Vehicle Type	Number per Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Offsite Delivery Trucks[a]	8	8	6	9	14	65	184	230	420	301	240	195	199	179	171	208	224	226	184	144
Construction Worker Commute[b]	37	63	66	75	94	108	116	133	145	142	150	163	188	214	223	387	398	334	321	289

[a] Included Standard Deliveries and Heavy Haul Deliveries as Offsite Delivery Trucks, characterized as Medium-Duty Trucks (MDT).

[b] Assumed 1 commute per 1 worker.

Table 5.1A.5b: Offsite Motor Vehicle CO Emissions

Vehicle Type	Number per Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Offsite Delivery Trucks	4.82	4.82	3.62	5.42	8.44	39.18	110.90	138.63	253.15	181.42	144.66	117.53	119.94	107.89	103.07	125.37	135.01	136.22	110.90	86.79
Construction Worker Commute	9.98	16.99	17.80	20.23	25.35	29.13	31.29	35.87	39.11	38.30	40.46	43.96	50.71	57.72	60.15	104.38	107.34	90.08	86.58	77.95
Total (lbs/month)	**14.80**	**21.81**	**21.42**	**25.65**	**33.79**	**68.31**	**142.19**	**174.50**	**292.26**	**219.72**	**185.11**	**161.50**	**170.65**	**165.61**	**163.21**	**229.75**	**242.36**	**226.30**	**197.48**	**164.74**
Total (ton/yr)	**1.21**																			

Table 5.1A.5c: Offsite Motor Vehicle VOC Emissions

Vehicle Type	Number per Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Offsite Delivery Trucks	0.17	0.17	0.13	0.19	0.29	1.36	3.85	4.82	8.80	6.30	5.03	4.08	4.17	3.75	3.58	4.36	4.69	4.73	3.85	3.02
Construction Worker Commute	0.26	0.45	0.47	0.54	0.67	0.77	0.83	0.95	1.04	1.01	1.07	1.16	1.34	1.53	1.59	2.76	2.84	2.39	2.29	2.06
Total (lbs/month)	**0.43**	**0.62**	**0.60**	**0.72**	**0.96**	**2.13**	**4.68**	**5.77**	**9.83**	**7.32**	**6.10**	**5.25**	**5.51**	**5.28**	**5.17**	**7.12**	**7.53**	**7.12**	**6.15**	**5.08**
Total (ton/yr)	**0.04**																			

Table 5.1A.5d: Offsite Motor Vehicle SOx Emissions

Vehicle Type	Number per Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Offsite Delivery Trucks	0.01	0.01	0.01	0.01	0.02	0.07	0.20	0.25	0.46	0.33	0.26	0.21	0.22	0.20	0.19	0.23	0.25	0.25	0.20	0.16
Construction Worker Commute	0.0147	0.0250	0.0262	0.0298	0.0373	0.0429	0.0460	0.0528	0.0575	0.0563	0.0595	0.0647	0.0746	0.0849	0.0885	0.1536	0.1579	0.1325	0.1274	0.1147
Total (lbs/month)	**0.02**	**0.03**	**0.03**	**0.04**	**0.05**	**0.11**	**0.25**	**0.31**	**0.52**	**0.39**	**0.32**	**0.28**	**0.29**	**0.28**	**0.28**	**0.38**	**0.40**	**0.38**	**0.33**	**0.27**
Total (ton/yr)	**0.0021**																			

Table 5.1A.5e: Offsite Motor Vehicle NOx Emissions

Vehicle Type	Number per Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Offsite Delivery Trucks	1.31	1.31	0.99	1.48	2.30	10.68	30.22	37.78	68.98	49.44	39.42	32.03	32.68	29.40	28.09	34.16	36.79	37.12	30.22	23.65
Construction Worker Commute	1.00	1.71	1.79	2.03	2.55	2.93	3.15	3.61	3.93	3.85	4.07	4.42	5.10	5.80	6.05	10.49	10.79	9.06	8.70	7.84
Total (lbs/month)	**2.32**	**3.02**	**2.78**	**3.51**	**4.85**	**13.60**	**33.37**	**41.38**	**72.91**	**53.29**	**43.49**	**36.45**	**37.78**	**35.20**	**34.13**	**44.66**	**47.58**	**46.18**	**38.92**	**31.49**
Total (ton/yr)	**0.26**																			

Table 5.1A.5f: Offsite Motor Vehicle PM_{10} Emissions

Vehicle Type	Number per Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Offsite Delivery Trucks	0.07	0.07	0.05	0.08	0.12	0.56	1.58	1.98	3.61	2.59	2.06	1.68	1.71	1.54	1.47	1.79	1.93	1.94	1.58	1.24
Construction Worker Commute	0.15	0.25	0.26	0.30	0.37	0.43	0.46	0.53	0.58	0.56	0.60	0.65	0.75	0.85	0.88	1.54	1.58	1.33	1.27	1.15
Total (lbs/month)	**0.22**	**0.32**	**0.31**	**0.38**	**0.49**	**0.99**	**2.04**	**2.51**	**4.19**	**3.15**	**2.66**	**2.32**	**2.46**	**2.39**	**2.36**	**3.32**	**3.51**	**3.27**	**2.86**	**2.38**
Total (ton/yr)	**0.02**																			

Table 5.1A.5g: Offsite Motor Vehicle PM2.5 Emissions

Vehicle Type	Number per Month																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Offsite Delivery Trucks	0.19	0.32	0.33	0.38	0.48	0.55	0.59	0.67	0.74	0.72	0.76	0.83	0.95	1.09	1.13	1.96	2.02	1.69	1.63	1.47
Construction Worker Commute	0.07	0.13	0.13	0.15	0.19	0.21	0.23	0.26	0.29	0.28	0.30	0.32	0.37	0.42	0.44	0.77	0.79	0.66	0.64	0.57
Total (lbs/month)	**0.26**	**0.44**	**0.47**	**0.53**	**0.66**	**0.76**	**0.82**	**0.94**	**1.02**	**1.00**	**1.06**	**1.15**	**1.33**	**1.51**	**1.57**	**2.73**	**2.81**	**2.36**	**2.26**	**2.04**
Total (ton/yr)	**0.01**																			

Vehicle Type	Roundtrip Miles per Day
Offsite Delivery Trucks	100
Construction Worker Commute	60