Air Quality Appendix

- **Construction Schedule**
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Construction Schedule

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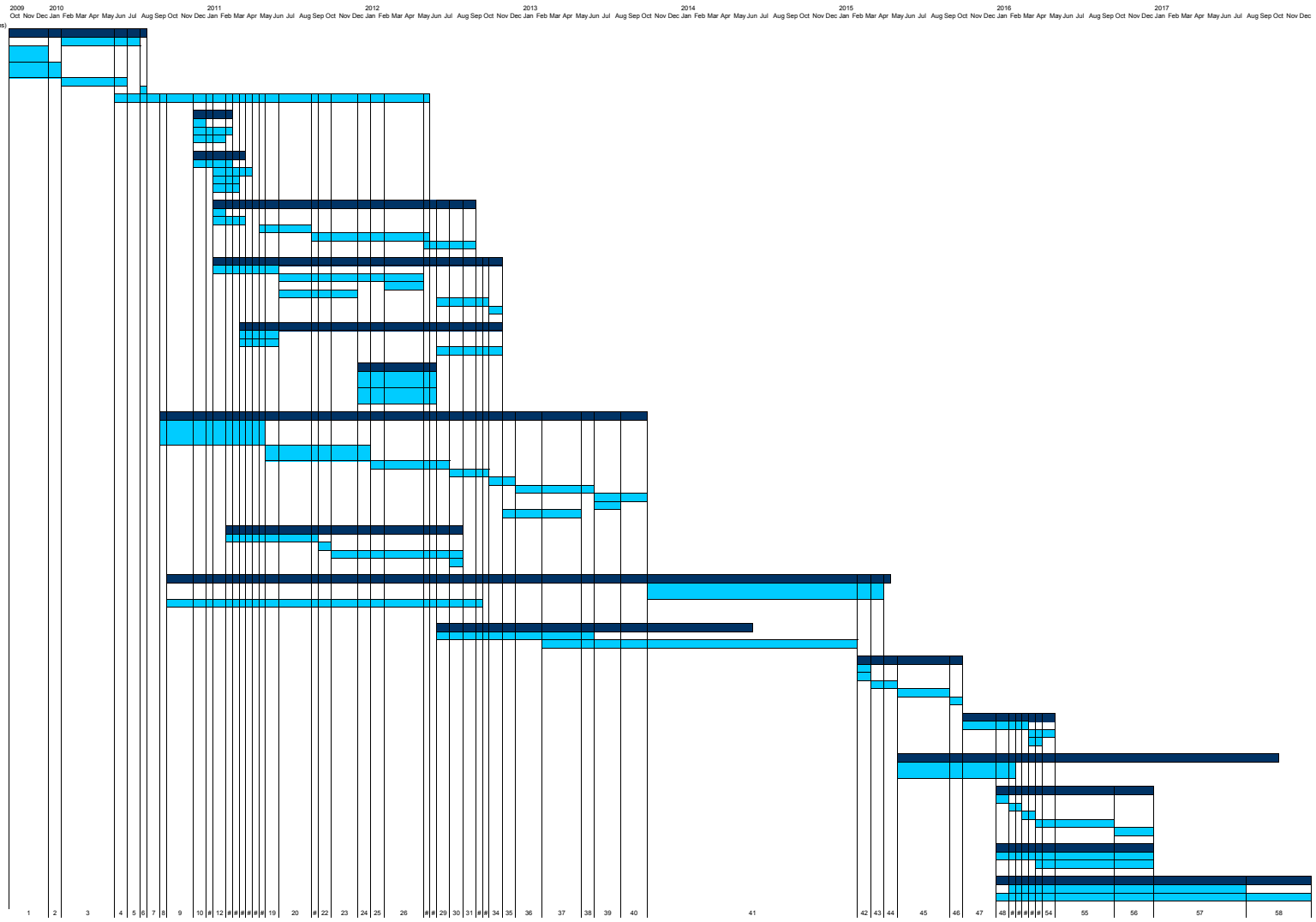
Construction Schedule

		Start Date	Durration (months)
PHASE I			
Avalon Boulevard Corridor - North		10/5/2009	10.5
1	Railroad Green (landscaping/hardscaping)	2/2/2010	6
2	demo approximately 55, 000 square feet of existing buildings	10/5/2009	3
3	Demolish existing sidewalks, back of curb to ROW	10/5/2009	4
4	Construct new sidewalk, incl. tree wells	2/2/2010	5
5	Place new street trees	8/1/2010	0.5
6	Red Car Museum in Bekins Building	6/1/2010	24
General Site Preparation		12/22/2010	3
7	Clearing and Grubbing	12/22/2010	1
8	Pavement Demolition	12/22/2010	3
9	Utilities Demolition	12/22/2010	2
Public Utilities and Infrastructure		12/22/2010	4
10	Remove and replace ex. 32" SD w/ 48" RCP	12/22/2010	3
11	Realign 12" oil line	1/21/2011	3
12	Realign 12" Sewer	1/21/2011	2
13	Realign 12" Water	1/21/2011	2
Pedestrian Bridge		1/21/2011	20
14	Piles (& Pile Caps)	1/21/2011	1
	Set Pile Caps		2.5
15	80' Steel masts	5/1/2011	4
16	Bridge Deck	8/29/2011	9
17	Water Feature	5/25/2012	4
Interim Land Bridge (Rail/Street Tunnel)		1/21/2011	22
18	Foundation Piles	1/21/2011	5
19	Set Up for Concrete Pour	6/20/2011	11
	Concrete Pour		3
20	Retaining Walls	6/20/2011	6
21	Rough Fill/Grading	6/14/2012	4
22	Surface Fill/Grading	10/12/2012	1
Circulation Improvements		3/22/2011	20
23	Realign and reconstruct Avalon Blvd	3/22/2011	3
24	Realign and Reconstruct Broad Avenue	3/22/2011	3
25	Realign and Reconstruct Water Street	6/14/2012	5
Off Street Parking Lots		12/17/2011	6
26	1st parking lot south of Water Street at Fries Avenue	12/17/2011	6
27	2nd parking lot south of Water Street at Avalon	12/17/2011	6
Waterfront Promenade		9/23/2010	37
28	Removal of existing wharf structure & Bulkhead Demolition & isntallation of rock slope protection	9/23/2010	8
29	Installation of perimeter sheet pile bulkheads within US waters	5/21/2011	8
30	Piles in water	1/16/2012	6
31	Waterfront Boardwalk over water	7/14/2012	3
32	Public dock	10/12/2012	2
33	Hardscaping	12/11/2012	6
34	Landscaping	6/9/2013	4
35	Trees	6/9/2013	2
36	Water Feature on tunnel	11/11/2012	6
Observation Tower		2/20/2011	18
37	Concrete Prep.	2/20/2011	7
37.1	Concrete Pour		1
37.2	Steel Work		10
37.3	Miscellaneous		1
Development		10/1/2010	55
38	Mercado on SW corner of Harry Bridges and Avalon	10/7/2013	18
39	Light Industrial	10/1/2010	24
PHASE II		6/1/2011	
LADWP Oil Tanks		2/26/2012	24
40	Demolition of 2 tanks	2/26/2012	12
41	Remediation of soil under tanks	2/20/2013	24
General Site Preparation		2/10/2015	8
42	Clearing and Grubbing	2/10/2015	1
43	Pavement Demolition	2/10/2015	1
44	Utilities Demolition	3/12/2015	2
45	Rough Fill/Grading	5/11/2015	4
46	Surface Fill/Grading	9/8/2015	1
Complete Land Bridge		10/8/2015	7
47	Hardscaping	10/8/2015	5
48	Landscaping	3/6/2016	2
49	Trees	3/6/2016	1
Off Street Parking Lots		5/11/2015	29
50	Parking Lot West of Land Bridge and South of A Street	5/11/2015	9
Pedestrian Corridor		1/1/2016	12
51	Demolish concrete pavement	1/1/2016	1
52	Demolish AC pavement	1/31/2016	1
53	Clear and Grub	3/1/2016	1
54	New Concrete Pathway	3/31/2016	6
55	Landscaping	9/27/2016	3
Red Car Corridor		1/1/2016	12
56	Construct track and Catenary Wires	1/1/2016	12
57	Construct Stations	3/31/2016	9
Development		1/1/2016	24
58	Restaurant space at the waterfront	2/5/2016	18
59	Light Industrial	1/1/2016	24



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Construction Emission Results

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Emission Rates

PHASE I

Avalon Boulevard Corridor - North

Railroad Green
1 (landscaping/hardscaping)

c

2010

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2750	0.8550	2.6750	0.0030	0.0990	0.0901	324.2220	1.18	3.68	11.51	0.01	0.43	0.39	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.3080	0.8680	3.1660	0.0030	0.1160	0.1056	307.1580	0.40	1.12	4.07	0.00	0.15	0.14	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6490	2.2550	3.9870	0.0040	0.3460	0.3149	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8350	2.6620	4.9400	0.0040	0.4350	0.3959	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3690	1.4850	2.8320	0.0030	0.1640	0.1492	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2710	0.8700	2.8190	0.0030	0.1000	0.0910	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2970	0.7810	3.1880	0.0030	0.1080	0.0983	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2820	0.9910	2.8100	0.0030	0.1060	0.0965	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/kW-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.3090	1.0040	3.2550	0.0030	0.1150	0.1047	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2170	0.7850	2.6870	0.0050	0.0870	0.0792	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7700	2.7670	4.9440	0.0050	0.3990	0.3631	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	7.225	20.692	27.282	0.03	1.795	1.63345	3103.352	0.01	0.02	0.03	0.00	0.00	0.00	3.42
On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.02	0.04	0.00	0.00	0.00	4.38
On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.903	5.314	15.255	0.015	0.604	0.54964	1614.326	0.16	0.94	2.69	0.00	0.11	0.10	284.71
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			2	5			g/mile	11.967	46.283	105.673	0.061	1.718	1.56338	6341.961	0.00	0.02	0.04	0.00	0.00	0.00	2.33
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.079	2.518	0.24	0.003	0.01	0.0091	342.212	0.01	0.45	0.04	0.00	0.00	0.00	61.11
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.061	1.991	0.235	0.003	0.007	0.00637	310.055	0.01	0.36	0.04	0.00	0.00	0.00	55.37
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.76	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	12.90	2.68	0.00
															Total	3.29	11.30	32.17	0.04	14.12	3.79	3788.27

demo approximately 55, 000 square
2 feet of existing buildings

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2009

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.3100	0.9560	2.9550	0.0030	0.1100	0.1001	324.2200	1.45	4.47	13.81	0.01	0.51	0.47	1515.60
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2870	0.9150	2.8650	0.0030	0.1050	0.0956	324.2220	1.23	3.94	12.33	0.01	0.45	0.41	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.3250	0.9140	3.3670	0.0030	0.1240	0.1128	307.1580	0.42	1.18	4.33	0.00	0.16	0.15	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6910	2.2790	4.2020	0.0040	0.3630	0.3303	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8810	2.6950	5.1800	0.0040	0.4530	0.4122	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3890	1.4930	2.9980	0.0030	0.1720	0.1565	244.5860	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2600	0.9720	2.5490	0.0020	0.0990	0.0901	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2600	0.9720	2.5490	0.0020	0.0990	0.0901	244.5890	0.50	1.85	4.86	0.00	0.19	0.17	466.05
Welding Machine	nonroad	26	0.45	1	8	93.6	1	g/hp-hr	1.2590	3.0190	2.7130	0.0030	0.2920	0.2657	255.9650	0.26	0.62	0.56	0.00	0.06	0.05	52.82
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7420	3.0340	4.9070	0.0070	0.2990	0.2721	420.9200	0.13	0.51	0.83	0.00	0.05	0.05	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.3100	0.9560	2.9550	0.0030	0.1100	0.1001	324.2200	0.72	2.23	6.91	0.01	0.26	0.23	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2840	0.9520	2.9770	0.0030	0.1060	0.0965	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.3140	0.8310	3.3610	0.0030	0.1160	0.1056	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	1	8	1760	1	g/hp-hr	0.2950	1.0650	2.9850	0.0030	0.1120	0.1019	307.1580	1.14	4.13	11.58	0.01	0.43	0.40	1191.79
Dump Truck	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.3100	0.9560	2.9550	0.0030	0.1100	0.1001	324.2200	1.45	4.47	13.81	0.01	0.51	0.47	1515.60
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.3250	1.0990	3.4370	0.0030	0.1220	0.1110	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5080	1.7100	3.2630	0.0050	0.1780	0.1620	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2270	0.7890	2.9740	0.0050	0.0900	0.0819	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.3100	0.9560	2.9550	0.0030	0.1100	0.1001	324.2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.8170	2.7910	5.1830	0.0050	0.4140	0.3767	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5080	1.7100	3.2630	0.0050	0.1780	0.1620	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	7.776	22.618	29.578	0.03	2.012	1.83092	3096.795	0.01	0.04	0.05	0.00	0.00	0.00	5.12
On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	1.683	10.219	17.768	0.019	0.766	0.69706	1980.264	0.01	0.03	0.06	0.00	0.00	0.00	6.55
On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.978	5.738	16.77	0.015	0.653	0.59423	1609.255	0.26	1.52	4.44	0.00	0.17	0.16	425.73
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.683	10.219	17.768	0.019	0.766	0.69706	1980.264	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.683	10.219	17.768	0.019	0.766	0.69706	1980.264	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			3	5			g/mile	12.541	46.902	103.478	0.06	1.884	1.71444	6312.903	0.01	0.03	0.06	0.00	0.00	0.00	3.48
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.094	2.787	0.269	0.003	0.01	0.0091	343.095	0.02	0.50	0.05	0.00	0.00	0.00	61.27
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.073	2.241	0.265	0.003	0.007	0.00637	310.863	0.01	0.40	0.05	0.00	0.00	0.00	55.51
Building Demolition	demo	6111.111111						lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	2.57	0.54	0.00
Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
															Total	7.62	25.92	73.72	0.07	5.38	3.10	7918.66

Emission Rates

3	Demolish existing sidewalks, back of curb to ROW	2010								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	1.39	4.20	12.91	0.01	0.49	0.44	1515.61
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2750	0.8550	2.6750	0.0030	0.0990	0.0901	324.2220	1.18	3.68	11.51	0.01	0.43	0.39	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.3080	0.8680	3.1660	0.0030	0.1160	0.1056	307.1580	0.40	1.12	4.07	0.00	0.15	0.14	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6490	2.2550	3.9870	0.0040	0.3460	0.3149	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8350	2.6620	4.9400	0.0040	0.4350	0.3959	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3690	1.4850	2.8320	0.0030	0.1640	0.1492	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2710	0.8700	2.8190	0.0030	0.1000	0.0910	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2970	0.7810	3.1880	0.0030	0.1080	0.0983	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2820	0.9910	2.8100	0.0030	0.1060	0.0965	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.3090	1.0040	3.2550	0.0030	0.1150	0.1047	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2170	0.7850	2.6870	0.0050	0.0870	0.0792	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7700	2.7670	4.9440	0.0050	0.3990	0.3631	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	7.225	20.692	27.282	0.03	1.795	1.63345	3103.352	0.01	0.02	0.03	0.00	0.00	0.00	3.42
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.02	0.04	0.00	0.00	0.00	4.38
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.903	5.314	15.255	0.015	0.604	0.54964	1614.326	0.16	0.94	2.69	0.00	0.11	0.10	284.71
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	11.967	46.283	105.673	0.061	1.718	1.56338	6341.961	0.00	0.02	0.04	0.00	0.00	0.00	2.33
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.079	2.518	0.24	0.003	0.01	0.0091	342.212	0.01	0.45	0.04	0.00	0.00	0.00	61.11
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.061	1.991	0.235	0.003	0.007	0.00637	310.055	0.01	0.36	0.04	0.00	0.00	0.00	55.37
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						1.662	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	12.18	2.53	0.00
																Total	3.98	13.40	38.62	0.04	13.65	3.86	4546.08

4	Construct new sidewalk, incl. tree wells	2010								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2750	0.8550	2.6750	0.0030	0.0990	0.0901	324.2220	1.18	3.68	11.51	0.01	0.43	0.39	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.3080	0.8680	3.1660	0.0030	0.1160	0.1056	307.1580	0.40	1.12	4.07	0.00	0.15	0.14	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6490	2.2550	3.9870	0.0040	0.3460	0.3149	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8350	2.6620	4.9400	0.0040	0.4350	0.3959	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3690	1.4850	2.8320	0.0030	0.1640	0.1492	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2710	0.8700	2.8190	0.0030	0.1000	0.0910	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2970	0.7810	3.1880	0.0030	0.1080	0.0983	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2820	0.9910	2.8100	0.0030	0.1060	0.0965	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.3090	1.0040	3.2550	0.0030	0.1150	0.1047	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2170	0.7850	2.6870	0.0050	0.0870	0.0792	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7700	2.7670	4.9440	0.0050	0.3990	0.3631	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	7.225	20.692	27.282	0.03	1.795	1.63345	3103.352	0.01	0.02	0.03	0.00	0.00	0.00	3.42
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.02	0.04	0.00	0.00	0.00	4.38
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.903	5.314	15.255	0.015	0.604	0.54964	1614.326	0.16	0.94	2.69	0.00	0.11	0.10	284.71
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	11.967	46.283	105.673	0.061	1.718	1.56338	6341.961	0.00	0.02	0.04	0.00	0.00	0.00	2.33
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.079	2.518	0.24	0.003	0.01	0.0091	342.212	0.01	0.45	0.04	0.00	0.00	0.00	61.11
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.061	1.991	0.235	0.003	0.007	0.00637	310.055	0.01	0.36	0.04	0.00	0.00	0.00	55.37
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						1.719	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	12.60	2.61	0.00
																Total	3.29	11.30	32.17	0.04	13.82	3.73	3788.27

Emission Rates

5 Place new street trees	2010									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
d	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2750	0.8550	2.6750	0.0030	0.0990	0.0901	324.2220	1.18	3.68	11.51	0.01	0.43	0.39	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.3080	0.8680	3.1660	0.0030	0.1160	0.1056	307.1580	0.40	1.12	4.07	0.00	0.15	0.14	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6490	2.2550	3.9870	0.0040	0.3460	0.3149	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8350	2.6620	4.9400	0.0040	0.4350	0.3959	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3690	1.4850	2.8320	0.0030	0.1640	0.1492	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2710	0.8700	2.8190	0.0030	0.1000	0.0910	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2970	0.7810	3.1880	0.0030	0.1080	0.0983	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2820	0.9910	2.8100	0.0030	0.1060	0.0965	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.3090	1.0040	3.2550	0.0030	0.1150	0.1047	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2170	0.7850	2.6870	0.0050	0.0870	0.0792	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7700	2.7670	4.9440	0.0050	0.3990	0.3631	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	7.225	20.692	27.282	0.03	1.795	1.63345	3103.352	0.01	0.02	0.03	0.00	0.00	0.00	3.42
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.02	0.04	0.00	0.00	0.00	4.38
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.903	5.314	15.255	0.015	0.604	0.54964	1614.326	0.16	0.94	2.69	0.00	0.11	0.10	284.71
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	11.967	46.283	105.673	0.061	1.718	1.56338	6341.961	0.00	0.02	0.04	0.00	0.00	0.00	2.33
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.079	2.518	0.24	0.003	0.01	0.0091	342.212	0.01	0.25	0.02	0.00	0.00	0.00	33.95
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.061	1.991	0.235	0.003	0.007	0.00637	310.055	0.01	0.20	0.02	0.00	0.00	0.00	30.76
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	3.28	10.94	32.13	0.04	1.22	1.11	3736.51

6 Red Car Museum in Bekins Building	2010									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2750	0.8550	2.6750	0.0030	0.0990	0.0901	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.3080	0.8680	3.1660	0.0030	0.1160	0.1056	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6490	2.2550	3.9870	0.0040	0.3460	0.3149	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8350	2.6620	4.9400	0.0040	0.4350	0.3959	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3690	1.4850	2.8320	0.0030	0.1640	0.1492	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2710	0.8700	2.8190	0.0030	0.1000	0.0910	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2970	0.7810	3.1880	0.0030	0.1080	0.0983	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2820	0.9910	2.8100	0.0030	0.1060	0.0965	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.3090	1.0040	3.2550	0.0030	0.1150	0.1047	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2170	0.7850	2.6870	0.0050	0.0870	0.0792	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7700	2.7670	4.9440	0.0050	0.3990	0.3631	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	7.225	20.692	27.282	0.03	1.795	1.63345	3103.352	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.903	5.314	15.255	0.015	0.604	0.54964	1614.326	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	11.967	46.283	105.673	0.061	1.718	1.56338	6341.961	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.079	2.518	0.24	0.003	0.01	0.0091	342.212	0.01	0.45	0.04	0.00	0.00	0.00	61.11
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.061	1.991	0.235	0.003	0.007	0.00637	310.055	0.01	0.36	0.04	0.00	0.00	0.00	55.37
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	0.03	0.81	0.08	0.00	0.00	0.00	116.48

Emission Rates

General Site Preparation 2010

7 Clearing and Grubbing

c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	1.39	4.20	12.91	0.01	0.49	0.44	1515.61
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2750	0.8550	2.6750	0.0030	0.0990	0.0901	324.2220	1.18	3.68	11.51	0.01	0.43	0.39	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.3080	0.8680	3.1660	0.0030	0.1160	0.1056	307.1580	0.40	1.12	4.07	0.00	0.15	0.14	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6490	2.2550	3.9870	0.0040	0.3460	0.3149	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8350	2.6620	4.9400	0.0040	0.4350	0.3959	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3690	1.4850	2.8320	0.0030	0.1640	0.1492	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2710	0.8700	2.8190	0.0030	0.1000	0.0910	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2970	0.7810	3.1880	0.0030	0.1080	0.0983	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2820	0.9910	2.8100	0.0030	0.1060	0.0965	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.3090	1.0040	3.2550	0.0030	0.1150	0.1047	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2170	0.7850	2.6870	0.0050	0.0870	0.0792	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7700	2.7670	4.9440	0.0050	0.3990	0.3631	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	7.225	20.692	27.282	0.03	1.795	1.63345	3103.352	0.01	0.03	0.05	0.00	0.00	0.00	5.13
On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.01	0.03	0.05	0.00	0.00	0.00	6.57
On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.903	5.314	15.255	0.015	0.604	0.54964	1614.326	0.24	1.41	4.04	0.00	0.16	0.15	427.07
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			3	5			g/mile	11.967	46.283	105.673	0.061	1.718	1.56338	6341.961	0.01	0.03	0.06	0.00	0.00	0.00	3.50
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.079	2.518	0.24	0.003	0.01	0.0091	342.212	0.01	0.45	0.04	0.00	0.00	0.00	61.11
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.061	1.991	0.235	0.003	0.007	0.00637	310.055	0.01	0.36	0.04	0.00	0.00	0.00	55.37
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						6	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	43.98	9.12	0.00
															Total	4.76	16.00	46.47	0.05	45.74	10.73	5451.30

2010

8 Pavement Demolition

c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	1.39	4.20	12.91	0.01	0.49	0.44	1515.61
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2750	0.8550	2.6750	0.0030	0.0990	0.0901	324.2220	1.18	3.68	11.51	0.01	0.43	0.39	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.3080	0.8680	3.1660	0.0030	0.1160	0.1056	307.1580	0.40	1.12	4.07	0.00	0.15	0.14	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6490	2.2550	3.9870	0.0040	0.3460	0.3149	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8350	2.6620	4.9400	0.0040	0.4350	0.3959	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3690	1.4850	2.8320	0.0030	0.1640	0.1492	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2710	0.8700	2.8190	0.0030	0.1000	0.0910	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2970	0.7810	3.1880	0.0030	0.1080	0.0983	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2820	0.9910	2.8100	0.0030	0.1060	0.0965	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.3090	1.0040	3.2550	0.0030	0.1150	0.1047	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2170	0.7850	2.6870	0.0050	0.0870	0.0792	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7700	2.7670	4.9440	0.0050	0.3990	0.3631	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	7.225	20.692	27.282	0.03	1.795	1.63345	3103.352	0.01	0.03	0.05	0.00	0.00	0.00	5.13
On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.01	0.03	0.05	0.00	0.00	0.00	6.57
On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.903	5.314	15.255	0.015	0.604	0.54964	1614.326	0.24	1.41	4.04	0.00	0.16	0.15	427.07
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			3	5			g/mile	11.967	46.283	105.673	0.061	1.718	1.56338	6341.961	0.01	0.03	0.06	0.00	0.00	0.00	3.50
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.079	2.518	0.24	0.003	0.01	0.0091	342.212	0.01	0.45	0.04	0.00	0.00	0.00	61.11
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.061	1.991	0.235	0.003	0.007	0.00637	310.055	0.01	0.36	0.04	0.00	0.00	0.00	55.37
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						9.045	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	66.30	13.75	0.00
															Total	4.76	16.00	46.47	0.05	68.06	15.35	5451.30

Emission Rates

9 Utilities Demolition	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	1.39	4.20	12.91	0.01	0.49	0.44	1515.61
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2750	0.8550	2.6750	0.0030	0.0990	0.0901	324.2220	1.18	3.68	11.51	0.01	0.43	0.39	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.3080	0.8680	3.1660	0.0030	0.1160	0.1056	307.1580	0.40	1.12	4.07	0.00	0.15	0.14	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6490	2.2550	3.9870	0.0040	0.3460	0.3149	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8350	2.6620	4.9400	0.0040	0.4350	0.3959	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3690	1.4850	2.8320	0.0030	0.1640	0.1492	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2710	0.8700	2.8190	0.0030	0.1000	0.0910	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2970	0.7810	3.1880	0.0030	0.1080	0.0983	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2820	0.9910	2.8100	0.0030	0.1060	0.0965	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.3090	1.0040	3.2550	0.0030	0.1150	0.1047	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2170	0.7850	2.6870	0.0050	0.0870	0.0792	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7700	2.7670	4.9440	0.0050	0.3990	0.3631	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	7.225	20.692	27.282	0.03	1.795	1.63345	3103.352	0.01	0.03	0.05	0.00	0.00	0.00	5.13
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.01	0.03	0.05	0.00	0.00	0.00	6.57
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.903	5.314	15.255	0.015	0.604	0.54964	1614.326	0.24	1.41	4.04	0.00	0.16	0.15	427.07
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	11.967	46.283	105.673	0.061	1.718	1.56338	6341.961	0.01	0.03	0.06	0.00	0.00	0.00	3.50
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.079	2.518	0.24	0.003	0.01	0.0091	342.212	0.01	0.45	0.04	0.00	0.00	0.00	61.11
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.061	1.991	0.235	0.003	0.007	0.00637	310.055	0.01	0.36	0.04	0.00	0.00	0.00	55.37
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	4.76	16.00	46.47	0.05	1.76	1.61	5451.30

Public Utilities and Infrastructure	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
10 Remove and replace ex. 32" SD w/ 48" RCP																							
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2750	0.8550	2.6750	0.0030	0.0990	0.0901	324.2220	1.18	3.68	11.51	0.01	0.43	0.39	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.3080	0.8680	3.1660	0.0030	0.1160	0.1056	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6490	2.2550	3.9870	0.0040	0.3460	0.3149	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8350	2.6620	4.9400	0.0040	0.4350	0.3959	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3690	1.4850	2.8320	0.0030	0.1640	0.1492	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2710	0.8700	2.8190	0.0030	0.1000	0.0910	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2970	0.7810	3.1880	0.0030	0.1080	0.0983	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2820	0.9910	2.8100	0.0030	0.1060	0.0965	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.3090	1.0040	3.2550	0.0030	0.1150	0.1047	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2170	0.7850	2.6870	0.0050	0.0870	0.0792	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7700	2.7670	4.9440	0.0050	0.3990	0.3631	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	7.225	20.692	27.282	0.03	1.795	1.63345	3103.352	0.01	0.02	0.03	0.00	0.00	0.00	3.42
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.02	0.04	0.00	0.00	0.00	4.38
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.903	5.314	15.255	0.015	0.604	0.54964	1614.326	0.16	0.94	2.69	0.00	0.11	0.10	284.71
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	11.967	46.283	105.673	0.061	1.718	1.56338	6341.961	0.00	0.02	0.04	0.00	0.00	0.00	2.33
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.079	2.518	0.24	0.003	0.01	0.0091	342.212	0.01	0.45	0.04	0.00	0.00	0.00	61.11
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.061	1.991	0.235	0.003	0.007	0.00637	310.055	0.01	0.36	0.04	0.00	0.00	0.00	55.37
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.165289256	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	1.21	0.25	0.00
																Total	2.89	10.19	28.10	0.03	2.29	1.23	3393.36

Emission Rates

11 Realign 12" oil line	2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	1.13	3.46	10.52	0.01	0.38	0.35	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.02	0.03	0.00	0.00	0.00	3.43
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.02	0.03	0.00	0.00	0.00	4.39
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.15	0.86	2.42	0.00	0.10	0.09	285.52
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.02	0.04	0.00	0.00	0.00	2.34
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.146923783	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	1.08	0.22	0.00
																Total	2.74	9.52	25.70	0.03	2.05	1.11	3393.93

12 Realign 12" Sewer	2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	1.13	3.46	10.52	0.01	0.38	0.35	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.02	0.03	0.00	0.00	0.00	3.43
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.02	0.03	0.00	0.00	0.00	4.39
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.15	0.86	2.42	0.00	0.10	0.09	285.52
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.02	0.04	0.00	0.00	0.00	2.34
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.073461892	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.54	0.11	0.00
																Total	2.74	9.52	25.70	0.03	1.51	1.00	3393.93

Emission Rates

13 Realign 12" Water	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	1.13	3.46	10.52	0.01	0.38	0.35	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.02	0.03	0.00	0.00	0.00	3.43
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.02	0.03	0.00	0.00	0.00	4.39
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.15	0.86	2.42	0.00	0.10	0.09	285.52
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.02	0.04	0.00	0.00	0.00	2.34
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.073461892	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.54	0.11	0.00
																Total	2.74	9.52	25.70	0.03	1.51	1.00	3393.93

Pedestrian Bridge	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
14 Piles (& Pile Caps)																							
b																							
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.45	1.59	4.27	0.00	0.16	0.15	466.05
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	1	6	903	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.51	1.57	5.19	0.01	0.18	0.16	577.50
	Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.52	1.37	5.58	0.01	0.18	0.17	546.80
	Front End Loader	nonroad	400	0.55	1	8	1760	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	1.04	3.60	10.09	0.01	0.38	0.34	1191.79
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.872	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	6.39	1.33	0.00
																Total	2.64	9.36	25.97	0.03	7.34	2.19	2969.78

Emission Rates

Set Pile Caps	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
a																							
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	1.32	3.93	11.82	0.01	0.44	0.40	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.45	1.59	4.27	0.00	0.16	0.15	466.05
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.52	1.37	5.58	0.01	0.18	0.17	546.80
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	1	8	1746	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.78	3.01	8.84	0.02	0.28	0.26	1642.10
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.03	0.04	0.00	0.00	0.00	5.14
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.03	0.05	0.00	0.00	0.00	6.59
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.22	1.29	3.63	0.00	0.15	0.13	428.28
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.01	0.03	0.06	0.00	0.00	0.00	3.51
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.872	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	6.39	1.33	0.00
																Total	4.10	14.45	41.04	0.06	7.88	2.68	5559.51

15 80' Steel masts	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
a																							
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	1.32	3.93	11.82	0.01	0.44	0.40	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.45	1.59	4.27	0.00	0.16	0.15	466.05
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.52	1.37	5.58	0.01	0.18	0.17	546.80
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.03	0.04	0.00	0.00	0.00	5.14
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.03	0.05	0.00	0.00	0.00	6.59
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.22	1.29	3.63	0.00	0.15	0.13	428.28
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.01	0.03	0.06	0.00	0.00	0.00	3.51
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.872	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	6.39	1.33	0.00
																Total	3.32	11.44	32.20	0.04	7.60	2.42	3917.41

Emission Rates

2011

16 Bridge Deck	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
a	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	1.32	3.93	11.82	0.01	0.44	0.40	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.45	1.59	4.27	0.00	0.16	0.15	466.05
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	1	8	1746	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.78	3.01	8.84	0.02	0.28	0.26	1642.10
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.02	0.03	0.00	0.00	0.00	3.43
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.02	0.03	0.00	0.00	0.00	4.39
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.15	0.86	2.42	0.00	0.10	0.09	285.52
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.02	0.04	0.00	0.00	0.00	2.34
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.872	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	6.39	1.33	0.00
																Total	2.84	10.66	28.30	0.04	7.42	2.26	4107.07

2012

17 Water Feature	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	1.26	3.71	10.83	0.01	0.39	0.36	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.01	0.02	0.02	0.00	0.00	0.00	3.43
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.02	0.03	0.00	0.00	0.00	4.40
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.13	0.78	2.15	0.00	0.09	0.08	286.28
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.00	0.02	0.04	0.00	0.00	0.00	2.35
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.872	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	6.39	1.33	0.00
																Total	1.53	5.68	13.88	0.02	6.92	1.81	1999.49

Emission Rates

Interim Land Bridge (Rail/Street Tunnel)

18 Foundation Piles

b

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	2011								*Emission Factor (g/hp-hr)*							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.37	1.06	3.77	0.00	0.14	0.12	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.45	1.59	4.27	0.00	0.16	0.15	466.05
Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.45	1.59	4.27	0.00	0.16	0.15	466.05
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	1	6	903	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.51	1.57	5.19	0.01	0.18	0.16	577.50
Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.52	1.37	5.58	0.01	0.18	0.17	546.80
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	31.51	6.53	0.00
															Total	2.43	8.41	23.92	0.03	32.38	7.32	2638.95

19 Set Up for Concrete Pour

a

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	2011								*Emission Factor (g/hp-hr)*							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	1.32	3.93	11.82	0.01	0.44	0.40	1515.61
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	1.13	3.46	10.52	0.01	0.38	0.35	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.37	1.06	3.77	0.00	0.14	0.12	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	1	6	392.16	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.30	1.28	2.31	0.00	0.14	0.12	211.46
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	1	8	93.6	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.23	0.59	0.54	0.00	0.06	0.05	52.82
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	4	8	233.6	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.26	0.88	1.64	0.00	0.07	0.07	213.84
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	4	8	233.6	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.26	0.88	1.64	0.00	0.07	0.07	213.84
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.03	0.04	0.00	0.00	0.00	5.14
On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.03	0.05	0.00	0.00	0.00	6.59
On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.22	1.29	3.63	0.00	0.15	0.13	428.28
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			3	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.01	0.03	0.06	0.00	0.00	0.00	3.51
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	31.51	6.53	0.00
															Total	4.91	16.64	42.78	0.05	33.22	8.09	5386.45

Emission Rates

Concrete Pour	2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
f	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	1.32	3.93	11.82	0.01	0.44	0.40	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.37	1.06	3.77	0.00	0.14	0.12	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	1	6	392.16	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.30	1.28	2.31	0.00	0.14	0.12	211.46
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	2	4	2184.24	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	1.36	4.04	12.18	0.01	0.45	0.41	1561.24
	Concrete Pump	nonroad	53	0.74	2	4	313.76	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.50	1.90	3.24	0.00	0.26	0.24	291.15
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	20		5		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.07	0.21	0.27	0.00	0.02	0.02	34.27
	On-road Truck - 25 mph	nonroad		0.5	20		10		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.03	0.18	0.33	0.00	0.01	0.01	43.91
	On-road Truck - 55 mph	nonroad		40	20		800		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	1.46	8.59	24.17	0.03	0.98	0.89	2855.17
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			20	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.04	0.17	0.40	0.00	0.01	0.01	23.40
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	18		162		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.02	0.81	0.08	0.00	0.00	0.00	121.95
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	18		162		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.02	0.63	0.07	0.00	0.00	0.00	110.49
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	31.51	6.53	0.00
																Total	5.61	23.30	59.41	0.07	34.00	8.80	7234.98

20 Retaining Walls	2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
f	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	1.32	3.93	11.82	0.01	0.44	0.40	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.02	0.03	0.00	0.00	0.00	3.43
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.02	0.03	0.00	0.00	0.00	4.39
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.15	0.86	2.42	0.00	0.10	0.09	285.52
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.02	0.04	0.00	0.00	0.00	2.34
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	18		162		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.02	0.81	0.08	0.00	0.00	0.00	121.95
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	18		162		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.02	0.63	0.07	0.00	0.00	0.00	110.49
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.478	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	3.50	0.73	0.00
																Total	1.52	6.29	14.49	0.02	4.05	1.22	2043.72

Emission Rates

21 Rough Fill/Grading	2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	1.08	3.28	9.62	0.01	0.34	0.31	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	31.51	6.53	0.00
																Total	1.72	5.79	15.10	0.02	32.05	7.03	2268.82

22 Surface Fill/Grading	2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	1.08	3.28	9.62	0.01	0.34	0.31	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	31.51	6.53	0.00
																Total	1.72	5.79	15.10	0.02	32.05	7.03	2268.82

Emission Rates

Circulation Improvements 2011

23 Realign and reconstruct Avalon Blvd

c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.37	1.06	3.77	0.00	0.14	0.12	394.92
Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.43	1.57	2.66	0.00	0.23	0.21	224.15
Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.58	1.92	3.43	0.00	0.30	0.28	257.13
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.02	0.03	0.00	0.00	0.00	3.43
On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.02	0.03	0.00	0.00	0.00	4.39
On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.15	0.86	2.42	0.00	0.10	0.09	285.52
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			2	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.02	0.04	0.00	0.00	0.00	2.34
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						0.091827365	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.67	0.14	0.00
															Total	3.54	12.08	30.19	0.03	2.11	1.45	3561.50

2011

24 Realign and Reconstruct Broad Avenue

c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.37	1.06	3.77	0.00	0.14	0.12	394.92
Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.43	1.57	2.66	0.00	0.23	0.21	224.15
Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.58	1.92	3.43	0.00	0.30	0.28	257.13
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.02	0.03	0.00	0.00	0.00	3.43
On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.02	0.03	0.00	0.00	0.00	4.39
On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.15	0.86	2.42	0.00	0.10	0.09	285.52
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			2	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.02	0.04	0.00	0.00	0.00	2.34
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						0.110192837	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.81	0.17	0.00
															Total	3.54	12.08	30.19	0.03	2.24	1.47	3561.50

Emission Rates

2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
25 Realign and Reconstruct Water Street	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.35	1.02	3.48	0.00	0.12	0.11	394.92
	Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.40	1.56	2.52	0.00	0.22	0.20	224.15
	Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.55	1.90	3.27	0.00	0.29	0.26	257.13
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.01	0.02	0.02	0.00	0.00	0.00	3.43
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.02	0.03	0.00	0.00	0.00	4.40
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.13	0.78	2.15	0.00	0.09	0.08	286.28
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.00	0.02	0.04	0.00	0.00	0.00	2.35
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.146923783	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	1.08	0.22	0.00
																Total	3.35	11.52	27.82	0.03	2.39	1.42	3562.08

Off Street Parking Lots									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
2011																						
1st parking lot south of Water Street at 26 Fries Avenue	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.37	1.06	3.77	0.00	0.14	0.12	394.92
	Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.43	1.57	2.66	0.00	0.23	0.21	224.15
	Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.58	1.92	3.43	0.00	0.30	0.28	257.13
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.02	0.03	0.00	0.00	0.00	3.43
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.02	0.03	0.00	0.00	0.00	4.39
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.15	0.86	2.42	0.00	0.10	0.09	285.52
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.02	0.04	0.00	0.00	0.00	2.34
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.574	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	4.21	0.87	0.00
																Total	3.54	12.08	30.19	0.03	5.64	2.18	3561.50

Emission Rates

2011

2nd parking lot south of Water Street at Avalon (27)

c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.37	1.06	3.77	0.00	0.14	0.12	394.92
Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.43	1.57	2.66	0.00	0.23	0.21	224.15
Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.58	1.92	3.43	0.00	0.30	0.28	257.13
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.01	0.02	0.03	0.00	0.00	0.00	3.43
On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.02	0.03	0.00	0.00	0.00	4.39
On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.15	0.86	2.42	0.00	0.10	0.09	285.52
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			2	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.02	0.04	0.00	0.00	0.00	2.34
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						0.62	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	4.54	0.94	0.00
															Total	3.54	12.08	30.19	0.03	5.98	2.25	3561.50

Waterfront Promenade

2010

Removal of existing wharf structure & Bulkhead Demolition & installation of rock slope protection (28)

a

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2750	0.8550	2.6750	0.0030	0.0990	0.0901	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.3080	0.8680	3.1660	0.0030	0.1160	0.1056	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6490	2.2550	3.9870	0.0040	0.3460	0.3149	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8350	2.6620	4.9400	0.0040	0.4350	0.3959	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3690	1.4850	2.8320	0.0030	0.1640	0.1492	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.47	1.71	4.59	0.00	0.18	0.16	466.05
Welding Machine	nonroad	26	0.45	2	8	187.2	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.49	1.22	1.10	0.00	0.12	0.11	105.64
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.69	2.10	6.45	0.01	0.24	0.22	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	1	6	903	1	g/hp-hr	0.2710	0.8700	2.8190	0.0030	0.1000	0.0910	290.0930	0.54	1.73	5.61	0.01	0.20	0.18	577.50
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2970	0.7810	3.1880	0.0030	0.1080	0.0983	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2820	0.9910	2.8100	0.0030	0.1060	0.0965	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	1	4	4162.4	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	3.42	7.53	90.36	0.04	4.93	4.53	0.00
Derrick Barge	nonroad	380	0.43	2	6	1960.8	1	g/hp-hr	0.3090	1.0040	3.2550	0.0030	0.1150	0.1047	335.5980	1.34	4.34	14.07	0.01	0.50	0.45	1450.71
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2170	0.7850	2.6870	0.0050	0.0870	0.0792	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7700	2.7670	4.9440	0.0050	0.3990	0.3631	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	4	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	7.225	20.692	27.282	0.03	1.795	1.63345	3103.352	0.01	0.02	0.03	0.00	0.00	0.00	3.42
On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.02	0.04	0.00	0.00	0.00	4.38
On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.903	5.314	15.255	0.015	0.604	0.54964	1614.326	0.16	0.94	2.69	0.00	0.11	0.10	284.71
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			2	5			g/mile	11.967	46.283	105.673	0.061	1.718	1.56338	6341.961	0.00	0.02	0.04	0.00	0.00	0.00	2.33
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.079	2.518	0.24	0.003	0.01	0.0091	342.212	0.01	0.45	0.04	0.00	0.00	0.00	61.11
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.061	1.991	0.235	0.003	0.007	0.00637	310.055	0.01	0.36	0.04	0.00	0.00	0.00	55.37
Building Demolition	demo	9375						lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	3.94	0.83	0.00
Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
															Total	7.97	23.05	132.32	0.08	10.50	6.85	4598.23

Emission Rates

Installation of perimeter sheet pile
29 bulkheads within US waters

b

2011

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.66	1.96	5.91	0.01	0.22	0.20	757.80
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2620	0.8030	2.4440	0.0030	0.0890	0.0810	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2900	0.8270	2.9300	0.0030	0.1050	0.0956	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6080	2.2330	3.7820	0.0040	0.3300	0.3003	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7910	2.6310	4.7100	0.0040	0.4170	0.3795	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3500	1.4790	2.6720	0.0030	0.1570	0.1429	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2340	0.8330	2.2400	0.0020	0.0850	0.0774	244.5890	0.45	1.59	4.27	0.00	0.16	0.15	466.05
Welding Machine	nonroad	26	0.45	2	8	187.2	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.46	1.19	1.09	0.00	0.11	0.10	105.64
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	1	6	903	1	g/hp-hr	0.2540	0.7900	2.6080	0.0030	0.0900	0.0819	290.0930	0.51	1.57	5.19	0.01	0.18	0.16	577.50
Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.2760	0.7290	2.9580	0.0030	0.0970	0.0883	290.0930	0.52	1.37	5.58	0.01	0.18	0.17	546.80
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2670	0.9290	2.6000	0.0030	0.0970	0.0883	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	1	4	4162.4	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	3.42	7.53	90.36	0.04	4.93	4.53	0.00
Derrick Barge	nonroad	380	0.43	2	6	1960.8	1	g/hp-hr	0.2900	0.9110	3.0120	0.0030	0.1030	0.0937	355.5980	1.25	3.94	13.02	0.01	0.45	0.41	1537.16
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2020	0.7810	2.2970	0.0050	0.0730	0.0664	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2820	0.8400	2.5290	0.0030	0.0940	0.0855	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7180	2.7400	4.6830	0.0050	0.3810	0.3467	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	4	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	6.631	18.678	24.88	0.03	1.577	1.43507	3109.241	0.00	0.01	0.01	0.00	0.00	0.00	1.71
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.01	0.02	0.00	0.00	0.00	2.20
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.825	4.871	13.705	0.015	0.555	0.50505	1618.88	0.07	0.43	1.21	0.00	0.05	0.04	142.76
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.438	8.268	14.833	0.019	0.607	0.55237	1991.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	11.43	45.685	107.71	0.061	1.557	1.41687	6368.055	0.00	0.01	0.02	0.00	0.00	0.00	1.17
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.067	2.281	0.214	0.003	0.01	0.0091	341.46	0.01	0.41	0.04	0.00	0.00	0.00	60.98
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.051	1.777	0.209	0.003	0.008	0.00728	309.366	0.01	0.32	0.04	0.00	0.00	0.00	55.24
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
															Total	7.49	20.83	127.52	0.08	6.33	5.81	4326.42

30 Piles in water

b

2012

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.42	1.47	3.97	0.00	0.15	0.14	466.05
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	1	6	903	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.48	1.46	4.80	0.01	0.16	0.15	579.17
Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.49	1.31	5.17	0.01	0.17	0.15	546.80
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	1	4	4162.4	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	3.42	7.53	90.36	0.04	4.93	4.53	0.00
Derrick Barge	nonroad	380	0.43	2	6	1960.8	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	1.19	3.66	12.04	0.01	0.41	0.37	1450.71
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	4	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.00	0.01	0.01	0.00	0.00	0.00	1.72
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.01	0.01	0.00	0.00	0.00	2.20
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.07	0.39	1.07	0.00	0.04	0.04	143.14
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.00	0.01	0.02	0.00	0.00	0.00	1.17
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
															Total	6.83	18.84	123.68	0.08	6.10	5.60	4136.17

Emission Rates

31 Waterfront Boardwalk over water

a

2012

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.35	1.02	3.48	0.00	0.12	0.11	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	1	8	93.6	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.21	0.57	0.53	0.00	0.05	0.05	52.82
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	4	8	233.6	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.26	0.88	1.64	0.00	0.07	0.06	213.84
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.01	0.02	0.02	0.00	0.00	0.00	3.43
On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.02	0.03	0.00	0.00	0.00	4.40
On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.13	0.78	2.15	0.00	0.09	0.08	286.28
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			2	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.00	0.02	0.04	0.00	0.00	0.00	2.35
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.033	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	7.57	1.57	0.00
															Total	2.35	8.15	19.53	0.03	8.34	2.27	2661.07

32 Public dock

a

2012

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.42	1.47	3.97	0.00	0.15	0.14	466.05
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						0.184	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	1.35	0.28	0.00
															Total	0.44	2.13	4.03	0.00	1.50	0.42	582.05

Emission Rates

2012

33 Hardscaping	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
d																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	1.08	3.28	9.62	0.01	0.34	0.31	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.35	1.02	3.48	0.00	0.12	0.11	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.01	0.02	0.02	0.00	0.00	0.00	3.43
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.02	0.03	0.00	0.00	0.00	4.40
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.13	0.78	2.15	0.00	0.09	0.08	286.28
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.00	0.02	0.04	0.00	0.00	0.00	2.35
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.21	0.02	0.00	0.00	0.00	33.81
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.00	0.16	0.02	0.00	0.00	0.00	30.63
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.626	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	33.91	7.03	0.00
																Total	2.95	9.68	26.95	0.04	34.90	7.94	3737.86

2013

34 Landscaping	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
d																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.60	1.77	4.97	0.01	0.18	0.16	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2410	0.7310	2.0480	0.0030	0.0720	0.0655	324.2220	1.04	3.15	8.81	0.01	0.31	0.28	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2590	0.7600	2.5000	0.0030	0.0860	0.0783	307.1580	0.33	0.98	3.21	0.00	0.11	0.10	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5330	2.1940	3.3770	0.0040	0.3000	0.2730	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7070	2.5770	4.2590	0.0040	0.3720	0.3385	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3140	1.4680	2.3650	0.0030	0.1360	0.1238	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2110	0.7190	1.9330	0.0020	0.0700	0.0637	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2110	0.7190	1.9330	0.0020	0.0700	0.0637	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.9460	2.6880	2.4890	0.0030	0.2330	0.2120	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6100	2.8120	4.1600	0.0070	0.2360	0.2148	420.9200	0.10	0.48	0.71	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.60	1.77	4.97	0.01	0.18	0.16	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2310	0.6920	2.2240	0.0030	0.0750	0.0683	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2480	0.6750	2.5340	0.0030	0.0800	0.0728	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2420	0.8290	2.2240	0.0030	0.0790	0.0719	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2630	0.7980	2.5690	0.0030	0.0860	0.0783	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1800	0.7780	1.7310	0.0050	0.0500	0.0455	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6100	2.6840	4.1200	0.0050	0.3280	0.2985	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	5.39	14.66	20.105	0.03	1.163	1.05833	3120.276	0.01	0.02	0.02	0.00	0.00	0.00	3.44
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.01	0.03	0.00	0.00	0.00	4.41
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.665	3.982	10.692	0.016	0.454	0.41314	1627.416	0.12	0.70	1.89	0.00	0.08	0.07	287.02
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	10.477	44.601	111.397	0.061	1.257	1.14387	6416.956	0.00	0.02	0.04	0.00	0.00	0.00	2.36
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.049	1.885	0.172	0.003	0.01	0.0091	340.293	0.00	0.19	0.02	0.00	0.00	0.00	33.76
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.037	1.429	0.166	0.003	0.008	0.00728	308.297	0.00	0.14	0.02	0.00	0.00	0.00	30.59
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						1.524	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	11.17	2.32	0.00
																Total	2.82	9.22	24.68	0.04	12.07	3.13	3738.53

Emission Rates

35 Trees	2013									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
d	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.60	1.77	4.97	0.01	0.18	0.16	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2410	0.7310	2.0480	0.0030	0.0720	0.0655	324.2220	1.04	3.15	8.81	0.01	0.31	0.28	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2590	0.7600	2.5000	0.0030	0.0860	0.0783	307.1580	0.33	0.98	3.21	0.00	0.11	0.10	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5330	2.1940	3.3770	0.0040	0.3000	0.2730	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7070	2.5770	4.2590	0.0040	0.3720	0.3385	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3140	1.4680	2.3650	0.0030	0.1360	0.1238	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2110	0.7190	1.9330	0.0020	0.0700	0.0637	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2110	0.7190	1.9330	0.0020	0.0700	0.0637	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.9460	2.6880	2.4890	0.0030	0.2330	0.2120	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6100	2.8120	4.1600	0.0070	0.2360	0.2148	420.9200	0.10	0.48	0.71	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.60	1.77	4.97	0.01	0.18	0.16	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2310	0.6920	2.2240	0.0030	0.0750	0.0683	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2480	0.6750	2.5340	0.0030	0.0800	0.0728	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2420	0.8290	2.2240	0.0030	0.0790	0.0719	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2630	0.7980	2.5690	0.0030	0.0860	0.0783	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1800	0.7780	1.7310	0.0050	0.0500	0.0455	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6100	2.6840	4.1200	0.0050	0.3280	0.2985	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	5.39	14.66	20.105	0.03	1.163	1.05833	3120.276	0.01	0.02	0.02	0.00	0.00	0.00	3.44
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.01	0.03	0.00	0.00	0.00	4.41
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.665	3.982	10.692	0.016	0.454	0.41314	1627.416	0.12	0.70	1.89	0.00	0.08	0.07	287.02
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	10.477	44.601	111.397	0.061	1.257	1.14387	6416.956	0.00	0.02	0.04	0.00	0.00	0.00	2.36
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.049	1.885	0.172	0.003	0.01	0.0091	340.293	0.00	0.19	0.02	0.00	0.00	0.00	33.76
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.037	1.429	0.166	0.003	0.008	0.00728	308.297	0.00	0.14	0.02	0.00	0.00	0.00	30.59
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	2.82	9.22	24.68	0.04	0.90	0.82	3738.53

36 Water Feature on tunnel	2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
f	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	18		162		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.02	0.74	0.07	0.00	0.00	0.00	121.72
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	18		162		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.02	0.57	0.07	0.00	0.00	0.00	110.28
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	0.04	1.31	0.14	0.00	0.01	0.01	232.00

Emission Rates

Observation Tower 2012

37 Concrete Prep.

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	1.26	3.71	10.83	0.01	0.39	0.36	1515.61
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	1.08	3.28	9.62	0.01	0.34	0.31	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.35	1.02	3.48	0.00	0.12	0.11	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	1	6	392.16	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.29	1.27	2.17	0.00	0.13	0.11	211.46
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	1	8	93.6	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.21	0.57	0.53	0.00	0.05	0.05	52.82
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	4	8	233.6	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.26	0.88	1.64	0.00	0.07	0.06	213.84
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	4	8	233.6	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.26	0.88	1.64	0.00	0.07	0.06	213.84
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.01	0.03	0.04	0.00	0.00	0.00	5.15
On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.02	0.04	0.00	0.00	0.00	6.60
On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.20	1.17	3.22	0.00	0.13	0.12	429.42
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			3	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.01	0.02	0.06	0.00	0.00	0.00	3.52
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	31.51	6.53	0.00
															Total	4.68	15.85	39.49	0.05	33.05	7.94	5387.41

2012

37.1 Concrete Pour

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	1.26	3.71	10.83	0.01	0.39	0.36	1515.61
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.35	1.02	3.48	0.00	0.12	0.11	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	1	6	392.16	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.29	1.27	2.17	0.00	0.13	0.11	211.46
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	2	4	2184.24	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	1.30	3.82	11.16	0.01	0.40	0.37	1561.24
Concrete Pump	nonroad	53	0.74	2	4	313.76	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.46	1.88	3.04	0.00	0.25	0.22	291.15
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	4		1		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.01	0.04	0.05	0.00	0.00	0.00	6.87
On-road Truck - 25 mph	nonroad		0.5	4		2		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.01	0.03	0.06	0.00	0.00	0.00	8.80
On-road Truck - 55 mph	nonroad		40	4		160		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.26	1.56	4.29	0.01	0.18	0.16	572.56
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			4	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.01	0.03	0.08	0.00	0.00	0.00	4.70
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	31.51	6.53	0.00
															Total	4.07	14.49	35.97	0.05	33.03	7.92	4754.72

Emission Rates

2012

37.2 Steel Work	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	1.26	3.71	10.83	0.01	0.39	0.36	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.42	1.47	3.97	0.00	0.15	0.14	466.05
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.49	1.31	5.17	0.01	0.17	0.15	546.80
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.01	0.03	0.04	0.00	0.00	0.00	5.15
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.02	0.04	0.00	0.00	0.00	6.60
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.20	1.17	3.22	0.00	0.13	0.12	429.42
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.01	0.02	0.06	0.00	0.00	0.00	3.52
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	31.51	6.53	0.00
																Total	3.15	10.73	29.55	0.04	32.59	7.52	3918.37

2012

37.3 Miscellaneous	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	1.26	3.71	10.83	0.01	0.39	0.36	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.42	1.47	3.97	0.00	0.15	0.14	466.05
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.49	1.31	5.17	0.01	0.17	0.15	546.80
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.01	0.03	0.04	0.00	0.00	0.00	5.15
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.02	0.04	0.00	0.00	0.00	6.60
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.20	1.17	3.22	0.00	0.13	0.12	429.42
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.01	0.02	0.06	0.00	0.00	0.00	3.52
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	31.51	6.53	0.00
																Total	3.15	10.73	29.55	0.04	32.59	7.52	3918.37

Emission Rates

Development 2013

Mercado on SW corner of Harry
38 Bridges and Avalon
c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2410	0.7310	2.0480	0.0030	0.0720	0.0655	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2590	0.7600	2.5000	0.0030	0.0860	0.0783	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5330	2.1940	3.3770	0.0040	0.3000	0.2730	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7070	2.5770	4.2590	0.0040	0.3720	0.3385	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3140	1.4680	2.3650	0.0030	0.1360	0.1238	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2110	0.7190	1.9330	0.0020	0.0700	0.0637	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2110	0.7190	1.9330	0.0020	0.0700	0.0637	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.9460	2.6880	2.4890	0.0030	0.2330	0.2120	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6100	2.8120	4.1600	0.0070	0.2360	0.2148	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2580	0.7570	1.2270	0.0030	0.0750	0.0683	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2310	0.6920	2.2240	0.0030	0.0750	0.0683	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2480	0.6750	2.5340	0.0030	0.0800	0.0728	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2420	0.8290	2.2240	0.0030	0.0790	0.0719	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2580	0.7570	1.2270	0.0030	0.0750	0.0683	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2630	0.7980	2.5690	0.0030	0.0860	0.0783	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1800	0.7780	1.7310	0.0050	0.0500	0.0455	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6100	2.6840	4.1200	0.0050	0.3280	0.2985	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	5.39	14.66	20.105	0.03	1.163	1.05833	3120.276	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.665	3.982	10.692	0.016	0.454	0.41314	1627.416	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	10.477	44.601	111.397	0.061	1.257	1.14387	6416.956	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.049	1.885	0.172	0.003	0.01	0.0091	340.293	0.01	0.34	0.03	0.00	0.00	0.00	60.77
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.037	1.429	0.166	0.003	0.008	0.00728	308.297	0.01	0.26	0.03	0.00	0.00	0.00	55.05
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.331	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	9.76	2.02	0.00
															Total	0.02	0.59	0.06	0.00	9.76	2.03	115.82

2010

39 Light Industrial
e

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2750	0.8550	2.6750	0.0030	0.0990	0.0901	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.3080	0.8680	3.1660	0.0030	0.1160	0.1056	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.6490	2.2550	3.9870	0.0040	0.3460	0.3149	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.8350	2.6620	4.9400	0.0040	0.4350	0.3959	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3690	1.4850	2.8320	0.0030	0.1640	0.1492	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2470	0.9000	2.4070	0.0020	0.0930	0.0846	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2710	0.8700	2.8190	0.0030	0.1000	0.0910	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2970	0.7810	3.1880	0.0030	0.1080	0.0983	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2820	0.9910	2.8100	0.0030	0.1060	0.0965	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.3090	1.0040	3.2550	0.0030	0.1150	0.1047	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.2170	0.7850	2.6870	0.0050	0.0870	0.0792	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2970	0.8980	2.7610	0.0030	0.1040	0.0946	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.7700	2.7670	4.9440	0.0050	0.3990	0.3631	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	7.225	20.692	27.282	0.03	1.795	1.63345	3103.352	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.903	5.314	15.255	0.015	0.604	0.54964	1614.326	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.564	9.253	16.327	0.019	0.686	0.62426	1986.225	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	11.967	46.283	105.673	0.061	1.718	1.56338	6341.961	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.079	2.518	0.24	0.003	0.01	0.0091	342.212	0.01	0.25	0.02	0.00	0.00	0.00	33.95
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.061	1.991	0.235	0.003	0.007	0.00637	310.055	0.01	0.20	0.02	0.00	0.00	0.00	30.76
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.721	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	12.61	2.62	0.00
															Total	0.01	0.45	0.05	0.00	12.62	2.62	64.71

Emission Rates

PHASE II

LADWP Oil Tanks

40 Demolition of 2 tanks — 2012

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.63	1.85	5.42	0.01	0.20	0.18	757.80
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2500	0.7620	2.2350	0.0030	0.0800	0.0728	324.2220	1.08	3.28	9.62	0.01	0.34	0.31	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2740	0.7910	2.7070	0.0030	0.0950	0.0865	307.1580	0.35	1.02	3.48	0.00	0.12	0.11	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5690	2.2130	3.5740	0.0040	0.3100	0.2821	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7480	2.6030	4.4790	0.0040	0.3950	0.3595	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3310	1.4730	2.5140	0.0030	0.1460	0.1329	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.2220	0.7730	2.0820	0.0020	0.0780	0.0710	244.5890	0.42	1.47	3.97	0.00	0.15	0.14	466.05
Welding Machine	nonroad	26	0.45	1	8	93.6	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.21	0.57	0.53	0.00	0.05	0.05	52.82
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2410	0.7340	2.4120	0.0030	0.0820	0.0746	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2610	0.6970	2.7420	0.0030	0.0880	0.0801	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2540	0.8750	2.4050	0.0030	0.0880	0.0801	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2750	0.8460	2.7850	0.0030	0.0940	0.0855	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1900	0.7790	1.9780	0.0050	0.0610	0.0555	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2690	0.7930	2.3170	0.0030	0.0840	0.0764	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6640	2.7110	4.3990	0.0050	0.3570	0.3249	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	6.014	16.653	22.473	0.03	1.365	1.24215	3114.823	0.00	0.01	0.01	0.00	0.00	0.00	1.72
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.01	0.01	0.00	0.00	0.00	2.20
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.745	4.425	12.174	0.016	0.504	0.45864	1623.198	0.07	0.39	1.07	0.00	0.04	0.04	143.14
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.309	7.299	13.345	0.019	0.531	0.48321	1996.655	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	10.935	45.125	109.606	0.061	1.404	1.27764	6392.797	0.00	0.01	0.02	0.00	0.00	0.00	1.17
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.057	2.071	0.192	0.003	0.01	0.0091	340.825	0.01	0.37	0.03	0.00	0.00	0.00	60.86
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.043	1.59	0.186	0.003	0.008	0.00728	308.785	0.01	0.28	0.03	0.00	0.00	0.00	55.14
Building Demolition	demo	9833.333333						lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	4.13	0.87	0.00
Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
															Total	2.89	9.75	24.94	0.03	5.09	1.74	3402.25

41 Remediation of soil under tanks — 2013

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.60	1.77	4.97	0.01	0.18	0.16	757.80
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2410	0.7310	2.0480	0.0030	0.0720	0.0655	324.2220	1.04	3.15	8.81	0.01	0.31	0.28	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2590	0.7600	2.5000	0.0030	0.0860	0.0783	307.1580	0.33	0.98	3.21	0.00	0.11	0.10	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.5330	2.1940	3.3770	0.0040	0.3000	0.2730	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.7070	2.5770	4.2590	0.0040	0.3720	0.3385	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.3140	1.4680	2.3650	0.0030	0.1360	0.1238	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2110	0.7190	1.9330	0.0020	0.0700	0.0637	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.2110	0.7190	1.9330	0.0020	0.0700	0.0637	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.9460	2.6880	2.4890	0.0030	0.2330	0.2120	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6100	2.8120	4.1600	0.0070	0.2360	0.2148	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.60	1.77	4.97	0.01	0.18	0.16	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2310	0.6920	2.2240	0.0030	0.0750	0.0683	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2480	0.6750	2.5340	0.0030	0.0800	0.0728	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2420	0.8290	2.2240	0.0030	0.0790	0.0719	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2630	0.7980	2.5690	0.0030	0.0860	0.0783	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1800	0.7780	1.7310	0.0050	0.0500	0.0455	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2580	0.7570	2.1270	0.0030	0.0750	0.0683	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.6100	2.6840	4.1200	0.0050	0.3280	0.2985	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	5.39	14.66	20.105	0.03	1.163	1.05833	3120.276	0.01	0.02	0.02	0.00	0.00	0.00	3.44
On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.01	0.03	0.00	0.00	0.00	4.41
On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.665	3.982	10.692	0.016	0.454	0.41314	1627.416	0.12	0.70	1.89	0.00	0.08	0.07	287.02
Dredge Materials Haul Truck - Composit	nonroad							g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	1.179	6.36	11.89	0.019	0.46	0.4186	2001.613	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			2	5			g/mile	10.477	44.601	111.397	0.061	1.257	1.14387	6416.956	0.00	0.02	0.04	0.00	0.00	0.00	2.36
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.049	1.885	0.172	0.003	0.01	0.0091	340.293	0.01	0.34	0.03	0.00	0.00	0.00	60.77
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.037	1.429	0.166	0.003	0.008	0.00728	308.297	0.01	0.26	0.03	0.00	0.00	0.00	55.05
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						7	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	51.31	10.64	0.00
															Total	2.72	9.00	24.00	0.03	52.17	11.42	3718.59

Emission Rates

General Site Preparation 2015

42 Clearing and Grubbing

c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2190	0.6890	1.6120	0.0030	0.0570	0.0519	324.2220	0.94	2.96	6.94	0.01	0.25	0.22	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2310	0.7100	2.0390	0.0030	0.0690	0.0628	307.1580	0.30	0.91	2.62	0.00	0.09	0.08	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4630	2.1600	2.9690	0.0040	0.2450	0.2230	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.6300	2.5320	3.8110	0.0040	0.3240	0.2948	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2800	1.4590	2.0350	0.0030	0.1150	0.1047	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2090	0.6310	1.7960	0.0030	0.0610	0.0555	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2220	0.6420	2.0660	0.0030	0.0660	0.0601	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2170	0.7540	1.8120	0.0030	0.0650	0.0592	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2380	0.7280	2.0750	0.0030	0.0700	0.0637	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1540	0.7770	1.1110	0.0050	0.0330	0.0300	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.5030	2.6320	3.5870	0.0050	0.2700	0.2457	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	4.222	11.38	15.738	0.03	0.808	0.73528	3129.144	0.00	0.01	0.01	0.00	0.00	0.00	1.72
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.01	0.01	0.00	0.00	0.00	2.22
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.518	3.263	8.038	0.016	0.359	0.32669	1634.274	0.05	0.29	0.71	0.00	0.03	0.03	144.12
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	9.652	43.621	114.525	0.062	0.978	0.88998	6456.258	0.00	0.01	0.02	0.00	0.00	0.00	1.19
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.036	1.58	0.141	0.003	0.011	0.01001	339.5	0.01	0.28	0.03	0.00	0.00	0.00	60.63
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.027	1.169	0.135	0.003	0.008	0.00728	307.569	0.00	0.21	0.02	0.00	0.00	0.00	54.92
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						6	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	43.98	9.12	0.00
															Total	1.85	6.33	14.30	0.03	44.49	9.58	2812.52

2015

43 Pavement Demolition

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2190	0.6890	1.6120	0.0030	0.0570	0.0519	324.2220	0.94	2.96	6.94	0.01	0.25	0.22	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2310	0.7100	2.0390	0.0030	0.0690	0.0628	307.1580	0.30	0.91	2.62	0.00	0.09	0.08	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4630	2.1600	2.9690	0.0040	0.2450	0.2230	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.6300	2.5320	3.8110	0.0040	0.3240	0.2948	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2800	1.4590	2.0350	0.0030	0.1150	0.1047	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2090	0.6310	1.7960	0.0030	0.0610	0.0555	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2220	0.6420	2.0660	0.0030	0.0660	0.0601	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2170	0.7540	1.8120	0.0030	0.0650	0.0592	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2380	0.7280	2.0750	0.0030	0.0700	0.0637	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1540	0.7770	1.1110	0.0050	0.0330	0.0300	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.5030	2.6320	3.5870	0.0050	0.2700	0.2457	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	4.222	11.38	15.738	0.03	0.808	0.73528	3129.144	0.00	0.01	0.01	0.00	0.00	0.00	1.72
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.01	0.01	0.00	0.00	0.00	2.22
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.518	3.263	8.038	0.016	0.359	0.32669	1634.274	0.05	0.29	0.71	0.00	0.03	0.03	144.12
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	9.652	43.621	114.525	0.062	0.978	0.88998	6456.258	0.00	0.01	0.02	0.00	0.00	0.00	1.19
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.036	1.58	0.141	0.003	0.011	0.01001	339.5	0.01	0.28	0.03	0.00	0.00	0.00	60.63
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.027	1.169	0.135	0.003	0.008	0.00728	307.569	0.00	0.21	0.02	0.00	0.00	0.00	54.92
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						3	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	21.99	4.56	0.00
															Total	1.85	6.33	14.30	0.03	22.50	5.02	2812.52

Emission Rates

2015

44 Utilities Demolition

c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2190	0.6890	1.6120	0.0030	0.0570	0.0519	324.2220	0.94	2.96	6.94	0.01	0.25	0.22	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2310	0.7100	2.0390	0.0030	0.0690	0.0628	307.1580	0.30	0.91	2.62	0.00	0.09	0.08	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4630	2.1600	2.9690	0.0040	0.2450	0.2230	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.6300	2.5320	3.8110	0.0040	0.3240	0.2948	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2800	1.4590	2.0350	0.0030	0.1150	0.1047	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2090	0.6310	1.7960	0.0030	0.0610	0.0555	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2220	0.6420	2.0660	0.0030	0.0660	0.0601	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2170	0.7540	1.8120	0.0030	0.0650	0.0592	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2380	0.7280	2.0750	0.0030	0.0700	0.0637	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1540	0.7770	1.1110	0.0050	0.0330	0.0300	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.5030	2.6320	3.5870	0.0050	0.2700	0.2457	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	4.222	11.38	15.738	0.03	0.808	0.73528	3129.144	0.00	0.01	0.01	0.00	0.00	0.00	1.72
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.01	0.01	0.00	0.00	0.00	2.22
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.518	3.263	8.038	0.016	0.359	0.32669	1634.274	0.05	0.29	0.71	0.00	0.03	0.03	144.12
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	9.652	43.621	114.525	0.062	0.978	0.88998	6456.258	0.00	0.01	0.02	0.00	0.00	0.00	1.19
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.036	1.58	0.141	0.003	0.011	0.01001	339.5	0.01	0.28	0.03	0.00	0.00	0.00	60.63
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.027	1.169	0.135	0.003	0.008	0.00728	307.569	0.00	0.21	0.02	0.00	0.00	0.00	54.92
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						0.059687787	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.44	0.09	0.00
															Total	1.85	6.33	14.30	0.03	0.95	0.56	2812.52

2015

45 Rough Fill/Grading

c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2190	0.6890	1.6120	0.0030	0.0570	0.0519	324.2220	0.94	2.96	6.94	0.01	0.25	0.22	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2310	0.7100	2.0390	0.0030	0.0690	0.0628	307.1580	0.30	0.91	2.62	0.00	0.09	0.08	394.92
Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.4630	2.1600	2.9690	0.0040	0.2450	0.2230	318.5340	0.33	1.52	2.09	0.00	0.17	0.16	224.15
Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.6300	2.5320	3.8110	0.0040	0.3240	0.2948	352.6630	0.46	1.85	2.78	0.00	0.24	0.21	257.13
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2800	1.4590	2.0350	0.0030	0.1150	0.1047	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2090	0.6310	1.7960	0.0030	0.0610	0.0555	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2220	0.6420	2.0660	0.0030	0.0660	0.0601	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2170	0.7540	1.8120	0.0030	0.0650	0.0592	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2380	0.7280	2.0750	0.0030	0.0700	0.0637	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1540	0.7770	1.1110	0.0050	0.0330	0.0300	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.5030	2.6320	3.5870	0.0050	0.2700	0.2457	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	4.222	11.38	15.738	0.03	0.808	0.73528	3129.144	0.00	0.01	0.01	0.00	0.00	0.00	1.72
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.01	0.01	0.00	0.00	0.00	2.22
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.518	3.263	8.038	0.016	0.359	0.32669	1634.274	0.05	0.29	0.71	0.00	0.03	0.03	144.12
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	9.652	43.621	114.525	0.062	0.978	0.88998	6456.258	0.00	0.01	0.02	0.00	0.00	0.00	1.19
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.036	1.58	0.141	0.003	0.011	0.01001	339.5	0.01	0.28	0.03	0.00	0.00	0.00	60.63
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.027	1.169	0.135	0.003	0.008	0.00728	307.569	0.00	0.21	0.02	0.00	0.00	0.00	54.92
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						9	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	65.97	13.68	0.00
															Total	3.18	11.35	23.10	0.04	67.03	14.64	4051.61

Emission Rates

46 Surface Fill/Grading	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2190	0.6890	1.6120	0.0030	0.0570	0.0519	324.2220	0.94	2.96	6.94	0.01	0.25	0.22	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2310	0.7100	2.0390	0.0030	0.0690	0.0628	307.1580	0.30	0.91	2.62	0.00	0.09	0.08	394.92
	Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.4630	2.1600	2.9690	0.0040	0.2450	0.2230	318.5340	0.33	1.52	2.09	0.00	0.17	0.16	224.15
	Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.6300	2.5320	3.8110	0.0040	0.3240	0.2948	352.6630	0.46	1.85	2.78	0.00	0.24	0.21	257.13
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2800	1.4590	2.0350	0.0030	0.1150	0.1047	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2090	0.6310	1.7960	0.0030	0.0610	0.0555	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2220	0.6420	2.0660	0.0030	0.0660	0.0601	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2170	0.7540	1.8120	0.0030	0.0650	0.0592	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2380	0.7280	2.0750	0.0030	0.0700	0.0637	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1540	0.7770	1.1110	0.0050	0.0330	0.0300	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.5030	2.6320	3.5870	0.0050	0.2700	0.2457	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	4.222	11.38	15.738	0.03	0.808	0.73528	3129.144	0.00	0.01	0.01	0.00	0.00	0.00	1.72
	On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.01	0.01	0.00	0.00	0.00	2.22
	On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.518	3.263	8.038	0.016	0.359	0.32669	1634.274	0.05	0.29	0.71	0.00	0.03	0.03	144.12
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			1	5			g/mile	9.652	43.621	114.525	0.062	0.978	0.88998	6456.258	0.00	0.01	0.02	0.00	0.00	0.00	1.19
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.036	1.58	0.141	0.003	0.011	0.01001	339.5	0.01	0.28	0.03	0.00	0.00	0.00	60.63
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.027	1.169	0.135	0.003	0.008	0.00728	307.569	0.00	0.21	0.02	0.00	0.00	0.00	54.92
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						9	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	65.97	13.68	0.00
																Total	3.18	11.35	23.10	0.04	67.03	14.64	4051.61

Complete Land Bridge	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
47 Hardscaping																							
d																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2190	0.6890	1.6120	0.0030	0.0570	0.0519	324.2220	0.94	2.96	6.94	0.01	0.25	0.22	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2310	0.7100	2.0390	0.0030	0.0690	0.0628	307.1580	0.30	0.91	2.62	0.00	0.09	0.08	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4630	2.1600	2.9690	0.0040	0.2450	0.2230	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.6300	2.5320	3.8110	0.0040	0.3240	0.2948	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2800	1.4590	2.0350	0.0030	0.1150	0.1047	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.09	0.46	0.65	0.00	0.04	0.03	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2090	0.6310	1.7960	0.0030	0.0610	0.0555	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2220	0.6420	2.0660	0.0030	0.0660	0.0601	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2170	0.7540	1.8120	0.0030	0.0650	0.0592	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2380	0.7280	2.0750	0.0030	0.0700	0.0637	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1540	0.7770	1.1110	0.0050	0.0330	0.0300	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.5030	2.6320	3.5870	0.0050	0.2700	0.2457	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	4.222	11.38	15.738	0.03	0.808	0.73528	3129.144	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.01	0.02	0.00	0.00	0.00	4.43
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.518	3.263	8.038	0.016	0.359	0.32669	1634.274	0.09	0.58	1.42	0.00	0.06	0.06	288.23
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	9.652	43.621	114.525	0.062	0.978	0.88998	6456.258	0.00	0.02	0.04	0.00	0.00	0.00	2.37
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.036	1.58	0.141	0.003	0.011	0.01001	339.5	0.00	0.16	0.01	0.00	0.00	0.00	33.68
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.027	1.169	0.135	0.003	0.008	0.00728	307.569	0.00	0.12	0.01	0.00	0.00	0.00	30.51
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						2.893	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	21.21	4.40	0.00
																Total	2.53	8.53	19.61	0.03	21.92	5.05	3739.63

Emission Rates

48 Landscaping	2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
d	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.52	1.61	3.48	0.01	0.12	0.11	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2070	0.6730	1.4200	0.0030	0.0510	0.0464	324.2220	0.89	2.90	6.11	0.01	0.22	0.20	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2180	0.6920	1.8350	0.0030	0.0620	0.0564	307.1580	0.28	0.89	2.36	0.00	0.08	0.07	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4300	2.1440	2.7610	0.0040	0.2250	0.2048	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.5930	2.5130	3.5830	0.0040	0.3010	0.2739	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2630	1.4560	1.8570	0.0030	0.1050	0.0956	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.09	0.46	0.63	0.00	0.03	0.03	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.52	1.61	3.48	0.01	0.12	0.11	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.1980	0.6090	1.5980	0.0030	0.0550	0.0501	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2100	0.6290	1.8440	0.0030	0.0590	0.0537	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2060	0.7250	1.6300	0.0030	0.0580	0.0528	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2260	0.7020	1.8460	0.0030	0.0630	0.0573	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1420	0.7770	0.8820	0.0050	0.0260	0.0237	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.4520	2.6090	3.3170	0.0050	0.2410	0.2193	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	3.766	10.117	14.071	0.03	0.676	0.61516	3132.745	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.01	0.02	0.00	0.00	0.00	4.44
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.461	2.984	7.034	0.016	0.322	0.29302	1637.06	0.08	0.53	1.24	0.00	0.06	0.05	288.72
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	9.331	43.235	115.753	0.062	0.863	0.78533	6472.218	0.00	0.02	0.04	0.00	0.00	0.00	2.38
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.032	1.459	0.129	0.003	0.011	0.01001	339.216	0.00	0.14	0.01	0.00	0.00	0.00	33.65
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.023	1.069	0.123	0.003	0.008	0.00728	307.308	0.00	0.11	0.01	0.00	0.00	0.00	30.49
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						5.978	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	43.82	9.09	0.00
																Total	2.39	8.28	17.41	0.04	44.46	9.67	3740.09

49 Trees	2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
d	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.52	1.61	3.48	0.01	0.12	0.11	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2070	0.6730	1.4200	0.0030	0.0510	0.0464	324.2220	0.89	2.90	6.11	0.01	0.22	0.20	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2180	0.6920	1.8350	0.0030	0.0620	0.0564	307.1580	0.28	0.89	2.36	0.00	0.08	0.07	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4300	2.1440	2.7610	0.0040	0.2250	0.2048	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.5930	2.5130	3.5830	0.0040	0.3010	0.2739	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2630	1.4560	1.8570	0.0030	0.1050	0.0956	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.09	0.46	0.63	0.00	0.03	0.03	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.52	1.61	3.48	0.01	0.12	0.11	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.1980	0.6090	1.5980	0.0030	0.0550	0.0501	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2100	0.6290	1.8440	0.0030	0.0590	0.0537	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2060	0.7250	1.6300	0.0030	0.0580	0.0528	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2260	0.7020	1.8460	0.0030	0.0630	0.0573	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1420	0.7770	0.8820	0.0050	0.0260	0.0237	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.4520	2.6090	3.3170	0.0050	0.2410	0.2193	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	3.766	10.117	14.071	0.03	0.676	0.61516	3132.745	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.01	0.02	0.00	0.00	0.00	4.44
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.461	2.984	7.034	0.016	0.322	0.29302	1637.06	0.08	0.53	1.24	0.00	0.06	0.05	288.72
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	9.331	43.235	115.753	0.062	0.863	0.78533	6472.218	0.00	0.02	0.04	0.00	0.00	0.00	2.38
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.032	1.459	0.129	0.003	0.011	0.01001	339.216	0.00	0.14	0.01	0.00	0.00	0.00	33.65
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.023	1.069	0.123	0.003	0.008	0.00728	307.308	0.00	0.11	0.01	0.00	0.00	0.00	30.49
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	0.64	0.58	3740.09
																Total	2.39	8.28	17.41	0.04	0.64	0.58	3740.09

Emission Rates

Off Street Parking Lots — 2015

50 Parking Lot West of Land Bridge and South of A Street

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2190	0.6890	1.6120	0.0030	0.0570	0.0519	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2310	0.7100	2.0390	0.0030	0.0690	0.0628	307.1580	0.30	0.91	2.62	0.00	0.09	0.08	394.92
Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.4630	2.1600	2.9690	0.0040	0.2450	0.2230	318.5340	0.33	1.52	2.09	0.00	0.17	0.16	224.15
Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.6300	2.5320	3.8110	0.0040	0.3240	0.2948	352.6630	0.46	1.85	2.78	0.00	0.24	0.21	257.13
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2800	1.4590	2.0350	0.0030	0.1150	0.1047	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1890	0.6330	1.6040	0.0020	0.0580	0.0528	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.2090	0.6310	1.7960	0.0030	0.0610	0.0555	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2220	0.6420	2.0660	0.0030	0.0660	0.0601	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2170	0.7540	1.8120	0.0030	0.0650	0.0592	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.54	1.65	3.94	0.01	0.14	0.13	757.80
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2380	0.7280	2.0750	0.0030	0.0700	0.0637	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1540	0.7770	1.1110	0.0050	0.0330	0.0300	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2330	0.7080	1.6860	0.0030	0.0600	0.0546	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.5030	2.6320	3.5870	0.0050	0.2700	0.2457	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	4.222	11.38	15.738	0.03	0.808	0.73528	3129.144	0.00	0.01	0.02	0.00	0.00	0.00	3.45
On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.01	0.02	0.00	0.00	0.00	4.43
On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.518	3.263	8.038	0.016	0.359	0.32669	1634.274	0.09	0.58	1.42	0.00	0.06	0.06	288.23
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.938	4.829	9.231	0.019	0.334	0.30394	2009.677	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			2	5			g/mile	9.652	43.621	114.525	0.062	0.978	0.88998	6456.258	0.00	0.02	0.04	0.00	0.00	0.00	2.37
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.036	1.58	0.141	0.003	0.011	0.01001	339.5	0.01	0.28	0.03	0.00	0.00	0.00	60.63
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.027	1.169	0.135	0.003	0.008	0.00728	307.569	0.00	0.21	0.02	0.00	0.00	0.00	54.92
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.056	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	7.74	1.61	0.00
															Total	2.83	10.35	20.86	0.03	8.73	2.50	3563.64

Pedestrian Corridor — 2016

51 Demolish concrete pavement

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.52	1.61	3.48	0.01	0.12	0.11	757.80
Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2070	0.6730	1.4200	0.0030	0.0510	0.0464	324.2220	0.89	2.90	6.11	0.01	0.22	0.20	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2180	0.6920	1.8350	0.0030	0.0620	0.0564	307.1580	0.28	0.89	2.36	0.00	0.08	0.07	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4300	2.1440	2.7610	0.0040	0.2250	0.2048	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.5930	2.5130	3.5830	0.0040	0.3010	0.2739	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2630	1.4560	1.8570	0.0030	0.1050	0.0956	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.1980	0.6090	1.5980	0.0030	0.0550	0.0501	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2100	0.6290	1.8440	0.0030	0.0590	0.0537	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2060	0.7250	1.6300	0.0030	0.0580	0.0528	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2260	0.7020	1.8460	0.0030	0.0630	0.0573	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1420	0.7770	0.8820	0.0050	0.0260	0.0237	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.4520	2.6090	3.3170	0.0050	0.2410	0.2193	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	3.766	10.117	14.071	0.03	0.676	0.61516	3132.745	0.00	0.01	0.01	0.00	0.00	0.00	1.73
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.01	0.00	0.00	0.00	2.22
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.461	2.984	7.034	0.016	0.322	0.29302	1637.06	0.04	0.26	0.62	0.00	0.03	0.03	144.36
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	9.331	43.235	115.753	0.062	0.863	0.78533	6472.218	0.00	0.01	0.02	0.00	0.00	0.00	1.19
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.032	1.459	0.129	0.003	0.011	0.01001	339.216	0.01	0.26	0.02	0.00	0.00	0.00	60.57
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.023	1.069	0.123	0.003	0.008	0.00728	307.308	0.00	0.19	0.02	0.00	0.00	0.00	54.88
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						2.176	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	15.95	3.31	0.00
															Total	1.74	6.13	12.66	0.03	16.41	3.72	2812.68

Emission Rates

52 Demolish AC pavement	2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.52	1.61	3.48	0.01	0.12	0.11	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2070	0.6730	1.4200	0.0030	0.0510	0.0464	324.2220	0.89	2.90	6.11	0.01	0.22	0.20	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2180	0.6920	1.8350	0.0030	0.0620	0.0564	307.1580	0.28	0.89	2.36	0.00	0.08	0.07	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4300	2.1440	2.7610	0.0040	0.2250	0.2048	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.5930	2.5130	3.5830	0.0040	0.3010	0.2739	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2630	1.4560	1.8570	0.0030	0.1050	0.0956	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.1980	0.6090	1.5980	0.0030	0.0550	0.0501	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2100	0.6290	1.8440	0.0030	0.0590	0.0537	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2060	0.7250	1.6300	0.0030	0.0580	0.0528	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2260	0.7020	1.8460	0.0030	0.0630	0.0573	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1420	0.7770	0.8820	0.0050	0.0260	0.0237	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.4520	2.6090	3.3170	0.0050	0.2410	0.2193	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	3.766	10.117	14.071	0.03	0.676	0.61516	3132.745	0.00	0.01	0.01	0.00	0.00	0.00	1.73
	On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.01	0.00	0.00	0.00	2.22
	On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.461	2.984	7.034	0.016	0.322	0.29302	1637.06	0.04	0.26	0.62	0.00	0.03	0.03	144.36
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			1	5			g/mile	9.331	43.235	115.753	0.062	0.863	0.78533	6472.218	0.00	0.01	0.02	0.00	0.00	0.00	1.19
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.032	1.459	0.129	0.003	0.011	0.01001	339.216	0.01	0.26	0.02	0.00	0.00	0.00	60.57
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.023	1.069	0.123	0.003	0.008	0.00728	307.308	0.00	0.19	0.02	0.00	0.00	0.00	54.88
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.698	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	5.12	1.06	0.00
																Total	1.74	6.13	12.66	0.03	5.57	1.48	2812.68

53 Clear and Grub	2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.52	1.61	3.48	0.01	0.12	0.11	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2070	0.6730	1.4200	0.0030	0.0510	0.0464	324.2220	0.89	2.90	6.11	0.01	0.22	0.20	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2180	0.6920	1.8350	0.0030	0.0620	0.0564	307.1580	0.28	0.89	2.36	0.00	0.08	0.07	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4300	2.1440	2.7610	0.0040	0.2250	0.2048	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.5930	2.5130	3.5830	0.0040	0.3010	0.2739	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2630	1.4560	1.8570	0.0030	0.1050	0.0956	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.1980	0.6090	1.5980	0.0030	0.0550	0.0501	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2100	0.6290	1.8440	0.0030	0.0590	0.0537	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2060	0.7250	1.6300	0.0030	0.0580	0.0528	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2260	0.7020	1.8460	0.0030	0.0630	0.0573	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1420	0.7770	0.8820	0.0050	0.0260	0.0237	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.4520	2.6090	3.3170	0.0050	0.2410	0.2193	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	3.766	10.117	14.071	0.03	0.676	0.61516	3132.745	0.00	0.01	0.01	0.00	0.00	0.00	1.73
	On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.01	0.00	0.00	0.00	2.22
	On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.461	2.984	7.034	0.016	0.322	0.29302	1637.06	0.04	0.26	0.62	0.00	0.03	0.03	144.36
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			1	5			g/mile	9.331	43.235	115.753	0.062	0.863	0.78533	6472.218	0.00	0.01	0.02	0.00	0.00	0.00	1.19
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.032	1.459	0.129	0.003	0.011	0.01001	339.216	0.01	0.26	0.02	0.00	0.00	0.00	60.57
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.023	1.069	0.123	0.003	0.008	0.00728	307.308	0.00	0.19	0.02	0.00	0.00	0.00	54.88
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						2.176	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	15.95	3.31	0.00
																Total	1.74	6.13	12.66	0.03	16.41	3.72	2812.68

Emission Rates

54 New Concrete Pathway	2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.52	1.61	3.48	0.01	0.12	0.11	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2070	0.6730	1.4200	0.0030	0.0510	0.0464	324.2220	0.89	2.90	6.11	0.01	0.22	0.20	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2180	0.6920	1.8350	0.0030	0.0620	0.0564	307.1580	0.28	0.89	2.36	0.00	0.08	0.07	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4300	2.1440	2.7610	0.0040	0.2250	0.2048	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.5930	2.5130	3.5830	0.0040	0.3010	0.2739	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2630	1.4560	1.8570	0.0030	0.1050	0.0956	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.09	0.46	0.63	0.00	0.03	0.03	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.52	1.61	3.48	0.01	0.12	0.11	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.1980	0.6090	1.5980	0.0030	0.0550	0.0501	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2100	0.6290	1.8440	0.0030	0.0590	0.0537	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2060	0.7250	1.6300	0.0030	0.0580	0.0528	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2260	0.7020	1.8460	0.0030	0.0630	0.0573	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	2	8	116.8	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.13	0.44	0.81	0.00	0.03	0.03	106.92
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1420	0.7770	0.8820	0.0050	0.0260	0.0237	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	1	4	1092.12	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.53	1.66	3.59	0.01	0.13	0.12	780.62
	Concrete Pump	nonroad	53	0.74	1	4	156.88	1	g/hp-hr	0.4520	2.6090	3.3170	0.0050	0.2410	0.2193	420.9200	0.16	0.90	1.15	0.00	0.08	0.08	145.58
	Wood Saw	nonroad	10	0.73	2	8	116.8	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.13	0.44	0.81	0.00	0.03	0.03	106.92
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	3.766	10.117	14.071	0.03	0.676	0.61516	3132.745	0.01	0.02	0.02	0.00	0.00	0.00	5.18
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.01	0.03	0.00	0.00	0.00	6.66
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.461	2.984	7.034	0.016	0.322	0.29302	1637.06	0.12	0.79	1.86	0.00	0.09	0.08	433.08
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	9.331	43.235	115.753	0.062	0.863	0.78533	6472.218	0.01	0.02	0.06	0.00	0.00	0.00	3.57
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.032	1.459	0.129	0.003	0.011	0.01001	339.216	0.01	0.26	0.02	0.00	0.00	0.00	60.57
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.023	1.069	0.123	0.003	0.008	0.00728	307.308	0.00	0.19	0.02	0.00	0.00	0.00	54.88
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.04	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	29.61	6.14	0.00
																Total	3.39	12.21	24.45	0.05	30.56	7.00	5080.93

55 Landscaping	2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
d	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.52	1.61	3.48	0.01	0.12	0.11	757.80
	Excavator	nonroad	428	0.57	1	8	1951.68	1	g/hp-hr	0.2070	0.6730	1.4200	0.0030	0.0510	0.0464	324.2220	0.89	2.90	6.11	0.01	0.22	0.20	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.2180	0.6920	1.8350	0.0030	0.0620	0.0564	307.1580	0.28	0.89	2.36	0.00	0.08	0.07	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4300	2.1440	2.7610	0.0040	0.2250	0.2048	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.5930	2.5130	3.5830	0.0040	0.3010	0.2739	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2630	1.4560	1.8570	0.0030	0.1050	0.0956	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.09	0.46	0.63	0.00	0.03	0.03	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.52	1.61	3.48	0.01	0.12	0.11	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.1980	0.6090	1.5980	0.0030	0.0550	0.0501	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2100	0.6290	1.8440	0.0030	0.0590	0.0537	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2060	0.7250	1.6300	0.0030	0.0580	0.0528	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2260	0.7020	1.8460	0.0030	0.0630	0.0573	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1420	0.7770	0.8820	0.0050	0.0260	0.0237	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.4520	2.6090	3.3170	0.0050	0.2410	0.2193	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	3.766	10.117	14.071	0.03	0.676	0.61516	3132.745	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.01	0.02	0.00	0.00	0.00	4.44
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.461	2.984	7.034	0.016	0.322	0.29302	1637.06	0.08	0.53	1.24	0.00	0.06	0.05	288.72
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	9.331	43.235	115.753	0.062	0.863	0.78533	6472.218	0.00	0.02	0.04	0.00	0.00	0.00	2.38
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.032	1.459	0.129	0.003	0.011	0.01001	339.216	0.00	0.14	0.01	0.00	0.00	0.00	33.65
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.023	1.069	0.123	0.003	0.008	0.00728	307.308	0.00	0.11	0.01	0.00	0.00	0.00	30.49
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						1.01	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	7.40	1.54	0.00
																Total	2.39	8.28	17.41	0.04	8.04	2.12	3740.09

Emission Rates

Red Car Corridor 2016

56 Construct track and Catenary Wires

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2070	0.6730	1.4200	0.0030	0.0510	0.0464	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2180	0.6920	1.8350	0.0030	0.0620	0.0564	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4300	2.1440	2.7610	0.0040	0.2250	0.2048	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.5930	2.5130	3.5830	0.0040	0.3010	0.2739	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2630	1.4560	1.8570	0.0030	0.1050	0.0956	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.1980	0.6090	1.5980	0.0030	0.0550	0.0501	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2100	0.6290	1.8440	0.0030	0.0590	0.0537	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2060	0.7250	1.6300	0.0030	0.0580	0.0528	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2260	0.7020	1.8460	0.0030	0.0630	0.0573	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1420	0.7770	0.8820	0.0050	0.0260	0.0237	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.4520	2.6090	3.3170	0.0050	0.2410	0.2193	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	3.766	10.117	14.071	0.03	0.676	0.61516	3132.745	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.461	2.984	7.034	0.016	0.322	0.29302	1637.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	9.331	43.235	115.753	0.062	0.863	0.78533	6472.218	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	14		126		g/mile	0.032	1.459	0.129	0.003	0.011	0.01001	339.216	0.01	0.41	0.04	0.00	0.00	0.00	94.23
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	14		126		g/mile	0.023	1.069	0.123	0.003	0.008	0.00728	307.308	0.01	0.30	0.03	0.00	0.00	0.00	85.36
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.561065197	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	11.44	2.37	0.00
															Total	0.02	0.70	0.07	0.00	11.45	2.38	179.59

2016

57 Construct Stations

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2070	0.6730	1.4200	0.0030	0.0510	0.0464	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2180	0.6920	1.8350	0.0030	0.0620	0.0564	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4300	2.1440	2.7610	0.0040	0.2250	0.2048	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.5930	2.5130	3.5830	0.0040	0.3010	0.2739	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2630	1.4560	1.8570	0.0030	0.1050	0.0956	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.1980	0.6090	1.5980	0.0030	0.0550	0.0501	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2100	0.6290	1.8440	0.0030	0.0590	0.0537	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2060	0.7250	1.6300	0.0030	0.0580	0.0528	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2260	0.7020	1.8460	0.0030	0.0630	0.0573	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1420	0.7770	0.8820	0.0050	0.0260	0.0237	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.4520	2.6090	3.3170	0.0050	0.2410	0.2193	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	3.766	10.117	14.071	0.03	0.676	0.61516	3132.745	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.461	2.984	7.034	0.016	0.322	0.29302	1637.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	9.331	43.235	115.753	0.062	0.863	0.78533	6472.218	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	14		126		g/mile	0.032	1.459	0.129	0.003	0.011	0.01001	339.216	0.01	0.41	0.04	0.00	0.00	0.00	94.23
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	14		126		g/mile	0.023	1.069	0.123	0.003	0.008	0.00728	307.308	0.01	0.30	0.03	0.00	0.00	0.00	85.36
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.561065197	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	11.44	2.37	0.00
															Total	0.02	0.70	0.07	0.00	11.45	2.38	179.59

Emission Rates

Development 2016

58 Restaurant space at the waterfront

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2070	0.6730	1.4200	0.0030	0.0510	0.0464	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2180	0.6920	1.8350	0.0030	0.0620	0.0564	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4300	2.1440	2.7610	0.0040	0.2250	0.2048	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.5930	2.5130	3.5830	0.0040	0.3010	0.2739	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2630	1.4560	1.8570	0.0030	0.1050	0.0956	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.1980	0.6090	1.5980	0.0030	0.0550	0.0501	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2100	0.6290	1.8440	0.0030	0.0590	0.0537	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2060	0.7250	1.6300	0.0030	0.0580	0.0528	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2260	0.7020	1.8460	0.0030	0.0630	0.0573	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1420	0.7770	0.8820	0.0050	0.0260	0.0237	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.4520	2.6090	3.3170	0.0050	0.2410	0.2193	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	3.766	10.117	14.071	0.03	0.676	0.61516	3132.745	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.461	2.984	7.034	0.016	0.322	0.29302	1637.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	9.331	43.235	115.753	0.062	0.863	0.78533	6472.218	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.032	1.459	0.129	0.003	0.011	0.01001	339.216	0.01	0.26	0.02	0.00	0.00	0.00	60.57
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.023	1.069	0.123	0.003	0.008	0.00728	307.308	0.00	0.19	0.02	0.00	0.00	0.00	54.88
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						0.275	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	2.02	0.42	0.00
															Total	0.01	0.45	0.05	0.00	2.02	0.42	115.45

2016

59 Light Industrial

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.2070	0.6730	1.4200	0.0030	0.0510	0.0464	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.2180	0.6920	1.8350	0.0030	0.0620	0.0564	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.4300	2.1440	2.7610	0.0040	0.2250	0.2048	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.5930	2.5130	3.5830	0.0040	0.3010	0.2739	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.2630	1.4560	1.8570	0.0030	0.1050	0.0956	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.1800	0.6020	1.4560	0.0020	0.0530	0.0482	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.1980	0.6090	1.5980	0.0030	0.0550	0.0501	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.2100	0.6290	1.8440	0.0030	0.0590	0.0537	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.2060	0.7250	1.6300	0.0030	0.0580	0.0528	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	1.1000	13.2000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.2260	0.7020	1.8460	0.0030	0.0630	0.0573	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.1420	0.7770	0.8820	0.0050	0.0260	0.0237	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.2210	0.6900	1.4910	0.0030	0.0530	0.0482	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.4520	2.6090	3.3170	0.0050	0.2410	0.2193	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	3.766	10.117	14.071	0.03	0.676	0.61516	3132.745	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.461	2.984	7.034	0.016	0.322	0.29302	1637.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.844	4.25	8.219	0.019	0.287	0.26117	2012.951	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	9.331	43.235	115.753	0.062	0.863	0.78533	6472.218	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.032	1.459	0.129	0.003	0.011	0.01001	339.216	0.00	0.14	0.01	0.00	0.00	0.00	33.65
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.023	1.069	0.123	0.003	0.008	0.00728	307.308	0.00	0.11	0.01	0.00	0.00	0.00	30.49
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.72	lbs/acre/day	0.00	0.00	0.00	0.00	7.33	1.52	0.00	0.00	0.00	0.00	0.00	12.61	2.61	0.00
															Total	0.01	0.25	0.03	0.00	12.61	2.62	64.14

Emissions by Timeslice

			Daily Emission Rates (lbs/day)						
	Timeslice	Sub-Phase	ROG	CO	NOX	SO2	PM10	PM2.5	CO2
2009	1	2	8	26	74	0	5	3	7,919
		3	4	13	39	0	14	4	4,546
		Total	**12**	**39**	**112**	**0**	**19**	**7**	**12,465**
2010	2	3	4	13	39	0	14	4	4,546
		Total	**4**	**13**	**39**	**0**	**14**	**4**	**4,546**
	3	1	3	11	32	0	14	4	3,788
		4	3	11	32	0	14	4	3,788
		Total	**7**	**23**	**64**	**0**	**28**	**8**	**7,577**
	4	1	3	11	32	0	14	4	3,788
		4	3	11	32	0	14	4	3,788
		6	0	1	0	0	0	0	116
		Total	**7**	**23**	**64**	**0**	**28**	**8**	**7,693**
	5	1	3	11	32	0	14	4	3,788
		6	0	1	0	0	0	0	116
		Total	**3**	**12**	**32**	**0**	**14**	**4**	**3,905**
	6	5	3	11	32	0	1	1	3,737
		6	0	1	0	0	0	0	116
		Total	**3**	**12**	**32**	**0**	**1**	**1**	**3,853**
	7	6	0	1	0	0	0	0	116
		Total	**0**	**1**	**0**	**0**	**0**	**0**	**116**
	8	6	0	1	0	0	0	0	116
		28	8	23	132	0	11	7	4,598
		Total	**8**	**24**	**132**	**0**	**11**	**7**	**4,715**
	9	6	0	1	0	0	0	0	116
		28	8	23	132	0	11	7	4,598
		39	0	0	0	0	13	3	65
		Total	**8**	**24**	**132**	**0**	**23**	**9**	**4,779**
	10	6	0	1	0	0	0	0	116
		7	5	16	46	0	46	11	5,451
		8	5	16	46	0	68	15	5,451
		9	5	16	46	0	2	2	5,451
		10	3	10	28	0	2	1	3,393
		28	8	23	132	0	11	7	4,598
		39	0	0	0	0	13	3	65
		Total	**25**	**82**	**300**	**0**	**141**	**38**	**24,527**
2011	11	6	0	1	0	0	0	0	116
		8	5	16	46	0	68	15	5,451
		9	5	16	46	0	2	2	5,451
		10	3	10	28	0	2	1	3,393
		28	8	23	132	0	11	7	4,598
		39	0	0	0	0	13	3	65
		Total	**20**	**66**	**254**	**0**	**95**	**28**	**19,075**
	12	6	0	1	0	0	0	0	116
		8	5	16	46	0	68	15	5,451
		9	5	16	46	0	2	2	5,451
		10	3	10	28	0	2	1	3,393
		11	3	10	26	0	2	1	3,394
		12	3	10	26	0	2	1	3,394
		13	3	10	26	0	2	1	3,394
		14	3	9	26	0	7	2	2,970
		14b	4	14	41	0	8	3	5,560
		28	8	23	132	0	11	7	4,598
		39	0	0	0	0	13	3	65
		Total	**35**	**119**	**398**	**0**	**116**	**36**	**37,786**

Emissions by Timeslice

13	6	0	1	0	0	0	0	116
	8	5	16	46	0	68	15	5,451
	10	3	10	28	0	2	1	3,393
	11	3	10	26	0	2	1	3,394
	12	3	10	26	0	2	1	3,394
	13	3	10	26	0	2	1	3,394
	14b	4	14	41	0	8	3	5,560
	18	2	8	24	0	32	7	2,639
	28	8	23	132	0	11	7	4,598
	37	5	16	39	0	33	8	5,387
	39	0	0	0	0	13	3	65
	Total	**35**	**118**	**389**	**0**	**172**	**47**	**37,392**
14	6	0	1	0	0	0	0	116
	11	3	10	26	0	2	1	3,394
	12	3	10	26	0	2	1	3,394
	13	3	10	26	0	2	1	3,394
	14b	4	14	41	0	8	3	5,560
	18	2	8	24	0	32	7	2,639
	28	8	23	132	0	11	7	4,598
	37	5	16	39	0	33	8	5,387
	39	0	0	0	0	13	3	65
	Total	**27**	**92**	**314**	**0**	**102**	**31**	**28,547**
15	6	0	1	0	0	0	0	116
	11	3	10	26	0	2	1	3,394
	14b	4	14	41	0	8	3	5,560
	18	2	8	24	0	32	7	2,639
	23	4	12	30	0	2	1	3,562
	24	4	12	30	0	2	1	3,562
	28	8	23	132	0	11	7	4,598
	37	5	16	39	0	33	8	5,387
	39	0	0	0	0	13	3	65
	Total	**29**	**97**	**323**	**0**	**103**	**31**	**28,882**
16	6	0	1	0	0	0	0	116
	11	3	10	26	0	2	1	3,394
	18	2	8	24	0	32	7	2,639
	23	4	12	30	0	2	1	3,562
	24	4	12	30	0	2	1	3,562
	28	8	23	132	0	11	7	4,598
	37	5	16	39	0	33	8	5,387
	39	0	0	0	0	13	3	65
	Total	**25**	**82**	**282**	**0**	**95**	**29**	**23,323**
17	6	0	1	0	0	0	0	116
	18	2	8	24	0	32	7	2,639
	23	4	12	30	0	2	1	3,562
	24	4	12	30	0	2	1	3,562
	28	8	23	132	0	11	7	4,598
	37	5	16	39	0	33	8	5,387
	39	0	0	0	0	13	3	65
	Total	**22**	**73**	**256**	**0**	**93**	**28**	**19,929**
18	6	0	1	0	0	0	0	116
	15	3	11	32	0	8	2	3,917
	18	2	8	24	0	32	7	2,639
	23	4	12	30	0	2	1	3,562
	24	4	12	30	0	2	1	3,562
	28	8	23	132	0	11	7	4,598
	37	5	16	39	0	33	8	5,387
	39	0	0	0	0	13	3	65
	Total	**26**	**84**	**288**	**0**	**100**	**30**	**23,846**

Emissions by Timeslice

	19	6	0	1	0	0	0	0	116
		15	3	11	32	0	8	2	3,917
		18	2	8	24	0	32	7	2,639
		23	4	12	30	0	2	1	3,562
		24	4	12	30	0	2	1	3,562
		29	7	21	128	0	6	6	4,326
		37	5	16	39	0	33	8	5,387
		39	0	0	0	0	13	3	65
		Total	**25**	**82**	**284**	**0**	**96**	**29**	**23,574**
	20	6	0	1	0	0	0	0	116
		15	3	11	32	0	8	2	3,917
		19	5	17	43	0	33	8	5,386
		20	2	6	14	0	4	1	2,044
		29	7	21	128	0	6	6	4,326
		37	5	16	39	0	33	8	5,387
		39	0	0	0	0	13	3	65
		Total	**22**	**72**	**257**	**0**	**97**	**28**	**21,243**
	21	6	0	1	0	0	0	0	116
		16	3	11	28	0	7	2	4,107
		19	5	17	43	0	33	8	5,386
		20	2	6	14	0	4	1	2,044
		29	7	21	128	0	6	6	4,326
		37	5	16	39	0	33	8	5,387
		39	0	0	0	0	13	3	65
		Total	**21**	**72**	**253**	**0**	**97**	**28**	**21,432**
	22	6	0	1	0	0	0	0	116
		16	3	11	28	0	7	2	4,107
		19	5	17	43	0	33	8	5,386
		20	2	6	14	0	4	1	2,044
		29	7	21	128	0	6	6	4,326
		37	4	14	36	0	33	8	4,755
		39	0	0	0	0	13	3	65
		Total	**21**	**70**	**249**	**0**	**97**	**28**	**20,800**
	23	6	0	1	0	0	0	0	116
		16	3	11	28	0	7	2	4,107
		19	5	17	43	0	33	8	5,386
		20	2	6	14	0	4	1	2,044
		29	7	21	128	0	6	6	4,326
		37	3	11	30	0	33	8	3,918
		39	0	0	0	0	13	3	65
		Total	**20**	**66**	**243**	**0**	**96**	**28**	**19,963**
2012	24	6	0	1	0	0	0	0	116
		16	3	11	28	0	7	2	4,107
		19	5	17	43	0	33	8	5,386
		26	4	12	30	0	6	2	3,562
		27	4	12	30	0	6	2	3,562
		29	7	21	128	0	6	6	4,326
		37	3	11	30	0	33	8	3,918
		39	0	0	0	0	13	3	65
		Total	**25**	**84**	**289**	**0**	**104**	**31**	**25,043**
	25	6	0	1	0	0	0	0	116
		16	3	11	28	0	7	2	4,107
		19	5	17	43	0	33	8	5,386
		26	4	12	30	0	6	2	3,562
		27	4	12	30	0	6	2	3,562
		30	7	19	124	0	6	6	4,136
		37	3	11	30	0	33	8	3,918
		39	0	0	0	0	13	3	65
		Total	**25**	**82**	**285**	**0**	**104**	**31**	**24,852**

Emissions by Timeslice

26	6	0	1	0	0	0	0	116
	16	3	11	28	0	7	2	4,107
	19	5	17	43	0	33	8	5,386
	19b	6	23	59	0	34	9	7,235
	26	4	12	30	0	6	2	3,562
	27	4	12	30	0	6	2	3,562
	30	7	19	124	0	6	6	4,136
	37	3	11	30	0	33	8	3,918
	39	0	0	0	0	13	3	65
	Total	**30**	**106**	**344**	**0**	**138**	**39**	**32,087**
27	6	0	1	0	0	0	0	116
	16	3	11	28	0	7	2	4,107
	17	2	6	14	0	7	2	1,999
	26	4	12	30	0	6	2	3,562
	27	4	12	30	0	6	2	3,562
	30	7	19	124	0	6	6	4,136
	37	3	11	30	0	33	8	3,918
	39	0	0	0	0	13	3	65
	Total	**21**	**71**	**256**	**0**	**77**	**24**	**21,465**
28	17	2	6	14	0	7	2	1,999
	26	4	12	30	0	6	2	3,562
	27	4	12	30	0	6	2	3,562
	30	7	19	124	0	6	6	4,136
	37	3	11	30	0	33	8	3,918
	39	0	0	0	0	13	3	65
	Total	**19**	**60**	**228**	**0**	**70**	**22**	**17,242**
29	17	2	6	14	0	7	2	1,999
	21	2	6	15	0	32	7	2,269
	25	3	12	28	0	2	1	3,562
	30	7	19	124	0	6	6	4,136
	37	3	11	30	0	33	8	3,918
	39	0	0	0	0	13	3	65
	40	3	10	25	0	5	2	3,402
	Total	**19**	**63**	**235**	**0**	**98**	**28**	**19,352**
30	17	2	6	14	0	7	2	1,999
	21	2	6	15	0	32	7	2,269
	25	3	12	28	0	2	1	3,562
	31	2	8	20	0	8	2	2,661
	37	3	11	30	0	33	8	3,918
	37	3	11	30	0	33	8	3,918
	39	0	0	0	0	13	3	65
	40	3	10	25	0	5	2	3,402
	Total	**18**	**63**	**160**	**0**	**133**	**32**	**21,795**
31	17	2	6	14	0	7	2	1,999
	21	2	6	15	0	32	7	2,269
	25	3	12	28	0	2	1	3,562
	31	2	8	20	0	8	2	2,661
	39	0	0	0	0	13	3	65
	40	3	10	25	0	5	2	3,402
	Total	**12**	**41**	**101**	**0**	**67**	**17**	**13,958**
32	21	2	6	15	0	32	7	2,269
	25	3	12	28	0	2	1	3,562
	31	2	8	20	0	8	2	2,661
	39	0	0	0	0	13	3	65
	40	3	10	25	0	5	2	3,402
	Total	**10**	**36**	**87**	**0**	**60**	**15**	**11,959**
33	21	2	6	15	0	32	7	2,269
	25	3	12	28	0	2	1	3,562
	31	2	8	20	0	8	2	2,661
	40	3	10	25	0	5	2	3,402
	Total	**10**	**35**	**87**	**0**	**48**	**12**	**11,894**

Emissions by Timeslice

	34	22	2	6	15	0	32	7	2,269
		25	3	12	28	0	2	1	3,562
		32	0	2	4	0	2	0	582
		40	3	10	25	0	5	2	3,402
		Total	**8**	**29**	**72**	**0**	**41**	**11**	**9,815**
	35	32	0	2	4	0	2	0	582
		36	0	1	0	0	0	0	232
		40	3	10	25	0	5	2	3,402
		Total	**3**	**13**	**29**	**0**	**7**	**2**	**4,216**
2013	36	33	3	10	27	0	35	8	3,738
		36	0	1	0	0	0	0	232
		40	3	10	25	0	5	2	3,402
		Total	**6**	**21**	**52**	**0**	**40**	**10**	**7,372**
	37	33	3	10	27	0	35	8	3,738
		36	0	1	0	0	0	0	232
		40	3	10	25	0	5	2	3,402
		41	3	9	24	0	52	11	3,719
		Total	**9**	**30**	**76**	**0**	**92**	**21**	**11,091**
	38	33	3	10	27	0	35	8	3,738
		40	3	10	25	0	5	2	3,402
		41	3	9	24	0	52	11	3,719
		Total	**9**	**28**	**76**	**0**	**92**	**21**	**10,859**
	39	34	3	9	25	0	12	3	3,739
		35	3	9	25	0	1	1	3,739
		41	3	9	24	0	52	11	3,719
		Total	**8**	**27**	**73**	**0**	**65**	**15**	**11,196**
	40	34	3	9	25	0	12	3	3,739
		41	3	9	24	0	52	11	3,719
		Total	**6**	**18**	**49**	**0**	**64**	**15**	**7,457**
2014	41	38	0	1	0	0	10	2	116
		41	3	9	24	0	52	11	3,719
		Total	**3**	**10**	**24**	**0**	**62**	**13**	**3,834**
2015	42	38	0	1	0	0	10	2	116
		42	2	6	14	0	44	10	2,813
		43	2	6	14	0	23	5	2,813
		Total	**4**	**13**	**29**	**0**	**77**	**17**	**5,741**
	43	38	0	1	0	0	10	2	116
		44	2	6	14	0	1	1	2,813
		Total	**2**	**7**	**14**	**0**	**11**	**3**	**2,928**
	44	44	2	6	14	0	1	1	2,813
		Total	**2**	**6**	**14**	**0**	**1**	**1**	**2,813**
	45	45	3	11	23	0	67	15	4,052
		50	3	10	21	0	9	3	3,564
		Total	**6**	**22**	**44**	**0**	**76**	**17**	**7,615**
	46	46	3	11	23	0	67	15	4,052
		50	3	10	21	0	9	3	3,564
		Total	**6**	**22**	**44**	**0**	**76**	**17**	**7,615**
	47	47	3	9	20	0	22	5	3,740
		50	3	10	21	0	9	3	3,564
		Total	**5**	**19**	**40**	**0**	**31**	**8**	**7,303**
2016	48	47	3	9	20	0	22	5	3,740
		50	3	10	21	0	9	3	3,564
		51	2	6	13	0	16	4	2,813
		56	0	1	0	0	11	2	180
		59	0	0	0	0	13	3	64
		Total	**7**	**26**	**53**	**0**	**71**	**16**	**10,360**
	49	47	3	9	20	0	22	5	3,740
		50	3	10	21	0	9	3	3,564
		52	2	6	13	0	6	1	2,813
		56	0	1	0	0	11	2	180
		58	0	0	0	0	2	0	115
		59	0	0	0	0	13	3	64
		Total	**7**	**26**	**53**	**0**	**62**	**14**	**10,475**

Emissions by Timeslice

	50	47	3	9	20	0	22	5	3,740
		52	2	6	13	0	6	1	2,813
		56	0	1	0	0	11	2	180
		58	0	0	0	0	2	0	115
		59	0	0	0	0	13	3	64
		Total	**4**	**16**	**32**	**0**	**54**	**12**	**6,911**
	51	47	3	9	20	0	22	5	3,740
		53	2	6	13	0	16	4	2,813
		56	0	1	0	0	11	2	180
		58	0	0	0	0	2	0	115
		59	0	0	0	0	13	3	64
		Total	**4**	**16**	**32**	**0**	**64**	**14**	**6,911**
	52	48	2	8	17	0	44	10	3,740
		49	2	8	17	0	1	1	3,740
		53	2	6	13	0	16	4	2,813
		56	0	1	0	0	11	2	180
		58	0	0	0	0	2	0	115
		59	0	0	0	0	13	3	64
		Total	**7**	**24**	**48**	**0**	**88**	**19**	**10,652**
	53	48	2	8	17	0	44	10	3,740
		49	2	8	17	0	1	1	3,740
		54	3	12	24	0	31	7	5,081
		56	0	1	0	0	11	2	180
		57	0	1	0	0	11	2	180
		58	0	0	0	0	2	0	115
		59	0	0	0	0	13	3	64
		Total	**8**	**31**	**59**	**0**	**113**	**25**	**13,100**
	54	48	2	8	17	0	44	10	3,740
		54	3	12	24	0	31	7	5,081
		56	0	1	0	0	11	2	180
		57	0	1	0	0	11	2	180
		58	0	0	0	0	2	0	115
		59	0	0	0	0	13	3	64
		Total	**6**	**23**	**42**	**0**	**113**	**24**	**9,360**
	55	54	3	12	24	0	31	7	5,081
		56	0	1	0	0	11	2	180
		57	0	1	0	0	11	2	180
		58	0	0	0	0	2	0	115
		59	0	0	0	0	13	3	64
		Total	**3**	**14**	**25**	**0**	**68**	**15**	**5,620**
	56	55	2	8	17	0	8	2	3,740
		56	0	1	0	0	11	2	180
		57	0	1	0	0	11	2	180
		58	0	0	0	0	2	0	115
		59	0	0	0	0	13	3	64
		Total	**2**	**10**	**18**	**0**	**46**	**10**	**4,279**
2017	57	58	0	0	0	0	2	0	115
		59	0	0	0	0	13	3	64
		Total	**0**	**1**	**0**	**0**	**15**	**3**	**180**
	58	59	0	0	0	0	13	3	64
		Total	**0**	**0**	**0**	**0**	**13**	**3**	**64**

MAX	**35**	**119**	**398**	**0**	**172**	**47**	**37,786**
Threshold	75	550	100	150	150	55	N/A
Impact?	**No**	**No**	**Yes**	**No**	**Yes**	**No**	**No**

Onsite Emissions by Subphase and Source Type
Unmitigated Project Construction

Subphase ID	Phase	Subphase		Timeslice 12	Timeslice 13	Construction Equipment & Onsite Trucks NOx 1-hr (lb/hr)	PM10 24-hr (lb/day)	PM2.5 24-hr (lb/day)	CO 1-hr (lb/hr)	CO 8-hr (lb/hr)	Tugboats NOx 1-hr (lb/hr)	PM10 24-hr (lb/day)	PM2.5 24-hr (lb/day)	CO 1-hr (lb/hr)	CO 8-hr (lb/hr)	Fugitive Dust PM10 24-hr (lb/day)	PM2.5 24-hr (lb/day)
6	PHASE I	Avalon Boulevard Corridor - North	Red Car Museum in Bekins Building	1	1	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	PHASE I	General Site Preparation	Pavement Demolition	1	1	6.55	1.60	1.46	2.13	1.73	0.00	0.00	0.00	0.00	0.00	66.30	13.75
9	PHASE I	General Site Preparation	Utilities Demolition	1		6.55	1.60	1.46	2.13	1.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	PHASE I	Public Utilities and Infrastructure	Remove and replace ex. 32" SD w/ 48" RCP	1	1	3.71	0.97	0.88	1.24	1.06	0.00	0.00	0.00	0.00	0.00	1.21	0.25
11	PHASE I	Public Utilities and Infrastructure	Realign 12" oil line	1	1	3.40	0.87	0.79	1.16	1.00	0.00	0.00	0.00	0.00	0.00	1.08	0.22
12	PHASE I	Public Utilities and Infrastructure	Realign 12" Sewer	1	1	3.12	0.79	0.71	1.10	0.95	0.00	0.00	0.00	0.00	0.00	0.54	0.11
13	PHASE I	Public Utilities and Infrastructure	Realign 12" Water	1	1	2.86	0.71	0.64	1.06	0.91	0.00	0.00	0.00	0.00	0.00	0.54	0.11
14	PHASE I	Pedestrian Bridge	Piles (& Pile Caps)	1		3.10	1.25	1.14	1.96	1.80	0.00	0.00	0.00	0.00	0.00	6.39	1.33
14b	PHASE I	Pedestrian Bridge	Set Pile Caps	1	1	5.71	1.33	1.21	1.95	1.58	0.00	0.00	0.00	0.00	0.00	6.39	1.33
18	PHASE I	Interim Land Bridge (Rail/Street Tunnel)	Foundation Piles		1	3.83	0.85	0.78	1.28	0.98	0.00	0.00	0.00	0.00	0.00	31.51	6.53
28	PHASE I	Waterfront Promenade	Removal of existing wharf structure & Bulkhead	1	1	6.45	1.53	1.39	2.23	1.73	22.59	4.93	4.53	1.88	0.94	3.94	0.83
37	PHASE I	Observation Tower	Concrete Prep.		1	5.44	1.41	1.29	2.09	1.76	0.00	0.00	0.00	0.00	0.00	31.51	6.53
39	PHASE I	Development	Light Industrial	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.61	2.62

Onsite Emissions by AERMOD Source
Unmitigated Project Construction
Timeslice 12

AERMOD Source	Source Description	Surface Area (m2)	NOx 1-hr (g/s)	PM10 24-hr (g/s)	PM2.5 24-hr (g/s)	CO 1-hr (g/s)	CO 8-hr (g/s)	NOx 1-hr (g/s/m2)	PM10 24-hr (g/s/m2)	PM2.5 24-hr (g/s/m2)	CO 1-hr (g/s/m2)	CO 8-hr (g/s/m2)
BEKINS1	Bekins Building - Exhaust	5,362	7.50E-05	1.04E-06	9.48E-07	7.87E-04	7.87E-04	1.40E-08	1.94E-10	1.77E-10	1.47E-07	1.47E-07
WTR_BRG1	Water (pedestrian) bridge - Exhaust	7,432	1.11E+00	1.35E-02	1.23E-02	4.93E-01	4.26E-01	1.49E-04	1.82E-06	1.66E-06	6.63E-05	5.73E-05
LND_BRG1	Land Bridge (Phase I) - Exhaust	15,743						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WHARF1	Wharf Structure - Exhaust	9,765	8.13E-01	8.03E-03	7.31E-03	2.81E-01	2.18E-01	8.33E-05	8.22E-07	7.48E-07	2.88E-05	2.23E-05
OBS_TWR1	Observation Tower - Exhaust	625						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INDUSTR1	Light Industrial Development - Exhaust	80,171	4.17E-05	5.79E-07	5.27E-07	4.37E-04	4.37E-04	5.20E-10	7.22E-12	6.57E-12	5.45E-09	5.45E-09
STH_END1	South portion of project site - Exhaust	45,062	1.65E+00	1.68E-02	1.53E-02	5.37E-01	4.37E-01	3.66E-05	3.74E-07	3.40E-07	1.19E-05	9.70E-06
AVALON1	Avalon betw. H. Bridges & Water St - Exhaust	9,794	4.67E-01	5.07E-03	4.62E-03	1.56E-01	1.34E-01	4.77E-05	5.18E-07	4.71E-07	1.59E-05	1.37E-05
WATERST1	Water St betw. Fries and Avalon - Exhaust	4,671	1.18E+00	1.24E-02	1.13E-02	4.19E-01	3.60E-01	2.53E-04	2.66E-06	2.42E-06	8.97E-05	7.71E-05
BEKINS2	Bekins Building - Dust	5,362	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WTR_BRG2	Water (pedestrian) bridge - Dust	7,432	0.00E+00	6.71E-02	1.39E-02	0.00E+00	0.00E+00	0.00E+00	9.03E-06	1.87E-06	0.00E+00	0.00E+00
LND_BRG2	Land Bridge (Phase I) - Dust	15,743						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WHARF2	Wharf Structure - Dust	9,765	0.00E+00	2.07E-02	4.34E-03	0.00E+00	0.00E+00	0.00E+00	2.12E-06	4.45E-07	0.00E+00	0.00E+00
OBS_TWR2	Observation Tower - Dust	625						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INDUSTR2	Light Industrial Development - Dust	80,171	0.00E+00	6.62E-02	1.37E-02	0.00E+00	0.00E+00	0.00E+00	8.26E-07	1.71E-07	0.00E+00	0.00E+00
STH_END2	South portion of project site - Dust	45,062	0.00E+00	3.48E-01	7.22E-02	0.00E+00	0.00E+00	0.00E+00	7.72E-06	1.60E-06	0.00E+00	0.00E+00
AVALON2	Avalon betw. H. Bridges & Water St - Dust	9,794	0.00E+00	6.36E-03	1.32E-03	0.00E+00	0.00E+00	0.00E+00	6.49E-07	1.35E-07	0.00E+00	0.00E+00
WATERST2	Water St betw. Fries and Avalon - Dust	4,671	0.00E+00	1.13E-02	2.34E-03	0.00E+00	0.00E+00	0.00E+00	2.42E-06	5.02E-07	0.00E+00	0.00E+00
WHARF3	Wharf Structure - Tugs	9,765	2.85E+00	2.59E-02	2.38E-02	2.37E-01	1.19E-01	2.91E-04	2.65E-06	2.44E-06	2.43E-05	1.21E-05

Onsite Emissions by AERMOD Source
Unmitigated Project Construction
Timeslice 13

AERMOD Source	Source Description	Surface Area (m2)	NOx 1-hr (g/s)	PM10 24-hr (g/s)	PM2.5 24-hr (g/s)	CO 1-hr (g/s)	CO 8-hr (g/s)	NOx 1-hr (g/s/m2)	PM10 24-hr (g/s/m2)	PM2.5 24-hr (g/s/m2)	CO 1-hr (g/s/m2)	CO 8-hr (g/s/m2)
BEKINS1	Bekins Building - Exhaust	5,362	7.50E-05	1.04E-06	9.48E-07	7.87E-04	7.87E-04	1.40E-08	1.94E-10	1.77E-10	1.47E-07	1.47E-07
WTR_BRG1	Water (pedestrian) bridge - Exhaust	7,432	7.20E-01	6.96E-03	6.33E-03	2.46E-01	1.99E-01	9.68E-05	9.36E-07	8.52E-07	3.31E-05	2.68E-05
LND_BRG1	Land Bridge (Phase I) - Exhaust	15,743	4.83E-01	4.48E-03	4.08E-03	1.62E-01	1.24E-01	3.07E-05	2.84E-07	2.59E-07	1.03E-05	7.85E-06
WHARF1	Wharf Structure - Exhaust	9,765	8.13E-01	8.03E-03	7.31E-03	2.81E-01	2.18E-01	8.33E-05	8.22E-07	7.48E-07	2.88E-05	2.23E-05
OBS_TWR1	Observation Tower - Exhaust	625	6.86E-01	7.43E-03	6.76E-03	2.63E-01	2.22E-01	1.10E-03	1.19E-05	1.08E-05	4.21E-04	3.55E-04
INDUSTR1	Light Industrial Development - Exhaust	80,171	4.17E-05	5.79E-07	5.27E-07	4.37E-04	4.37E-04	5.20E-10	7.22E-12	6.57E-12	5.45E-09	5.45E-09
STH_END1	South portion of project site - Exhaust	45,062	8.25E-01	8.42E-03	7.67E-03	2.68E-01	2.18E-01	1.83E-05	1.87E-07	1.70E-07	5.96E-06	4.85E-06
AVALON1	Avalon betw. H. Bridges & Water St - Exhaust	9,794	4.67E-01	5.07E-03	4.62E-03	1.56E-01	1.34E-01	4.77E-05	5.18E-07	4.71E-07	1.59E-05	1.37E-05
WATERST1	Water St betw. Fries and Avalon - Exhaust	4,671	1.18E+00	1.24E-02	1.13E-02	4.19E-01	3.60E-01	2.53E-04	2.66E-06	2.42E-06	8.97E-05	7.71E-05
BEKINS2	Bekins Building - Dust	5,362	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WTR_BRG2	Water (pedestrian) bridge - Dust	7,432	0.00E+00	3.36E-02	6.96E-03	0.00E+00	0.00E+00	0.00E+00	4.52E-06	9.36E-07	0.00E+00	0.00E+00
LND_BRG2	Land Bridge (Phase I) - Dust	15,743	0.00E+00	1.65E-01	3.43E-02	0.00E+00	0.00E+00	0.00E+00	1.05E-05	2.18E-06	0.00E+00	0.00E+00
WHARF2	Wharf Structure - Dust	9,765	0.00E+00	2.07E-02	4.34E-03	0.00E+00	0.00E+00	0.00E+00	2.12E-06	4.45E-07	0.00E+00	0.00E+00
OBS_TWR2	Observation Tower - Dust	625	0.00E+00	1.65E-01	3.43E-02	0.00E+00	0.00E+00	0.00E+00	2.65E-04	5.49E-05	0.00E+00	0.00E+00
INDUSTR2	Light Industrial Development - Dust	80,171	0.00E+00	6.62E-02	1.37E-02	0.00E+00	0.00E+00	0.00E+00	8.26E-07	1.71E-07	0.00E+00	0.00E+00
STH_END2	South portion of project site - Dust	45,062	0.00E+00	3.48E-01	7.22E-02	0.00E+00	0.00E+00	0.00E+00	7.72E-06	1.60E-06	0.00E+00	0.00E+00
AVALON2	Avalon betw. H. Bridges & Water St - Dust	9,794	0.00E+00	6.36E-03	1.32E-03	0.00E+00	0.00E+00	0.00E+00	6.49E-07	1.35E-07	0.00E+00	0.00E+00
WATERST2	Water St betw. Fries and Avalon - Dust	4,671	0.00E+00	1.13E-02	2.34E-03	0.00E+00	0.00E+00	0.00E+00	2.42E-06	5.02E-07	0.00E+00	0.00E+00
WHARF3	Wharf Structure - Tugs	9,765	2.85E+00	2.59E-02	2.38E-02	2.37E-01	1.19E-01	2.91E-04	2.65E-06	2.44E-06	2.43E-05	1.21E-05

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Mitigated Construction Emission Results

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Mitigated Emission Rates

PHASE I

Avalon Boulevard Corridor - North

Railroad Green
1 (landscaping/hardscaping)

c

2010

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0805	0.8550	1.6050	0.0030	0.0081	0.0074	324.2220	0.35	3.68	6.91	0.01	0.03	0.03	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0920	0.8680	1.9392	0.0030	0.0095	0.0087	307.1580	0.12	1.12	2.49	0.00	0.01	0.01	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1527	2.2550	2.6058	0.0040	0.0313	0.0285	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2495	2.6620	3.0258	0.0040	0.0524	0.0477	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1103	1.4850	1.7346	0.0030	0.0198	0.0180	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0793	0.8700	1.6914	0.0030	0.0082	0.0075	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0887	0.7810	1.9527	0.0030	0.0089	0.0081	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0825	0.9910	1.6860	0.0030	0.0087	0.0079	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/kW-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0904	1.0040	1.9530	0.0030	0.0094	0.0086	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0648	0.7850	1.6458	0.0050	0.0071	0.0065	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1812	2.7670	3.2312	0.0050	0.0361	0.0329	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.029	6.383	15.395	0.03	0.0375	0.034125	3126.461	0.00	0.01	0.02	0.00	0.00	0.00	3.45
On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.01	0.02	0.00	0.00	0.00	4.43
On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.247	2.376	6.133	0.016	0.0513	0.046683	1632.199	0.04	0.42	1.08	0.00	0.01	0.01	287.87
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			2	5			g/mile	7.452	40.347	120.294	0.062	0.06435	0.058559	6444.365	0.00	0.01	0.04	0.00	0.00	0.00	2.37
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.729	0.058	0.003	0.005	0.00455	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.506	0.052	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.76	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	5.16	1.07	0.00
															Total	1.04	10.17	19.13	0.04	5.30	1.21	3769.80

demo approximately 55, 000 square
2 feet of existing buildings

c

2009

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0907	0.9560	1.7730	0.0030	0.0090	0.0082	324.2200	0.42	4.47	8.29	0.01	0.04	0.04	1515.60
Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0840	0.9150	1.7190	0.0030	0.0086	0.0078	324.2220	0.36	3.94	7.40	0.01	0.04	0.03	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0971	0.9140	2.0623	0.0030	0.0102	0.0093	307.1580	0.12	1.18	2.65	0.00	0.01	0.01	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1626	2.2790	2.7463	0.0040	0.0329	0.0299	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2632	2.6950	3.1728	0.0040	0.0546	0.0496	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1162	1.4930	1.8363	0.0030	0.0207	0.0189	244.5860	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0761	0.9720	1.5294	0.0020	0.0081	0.0074	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0761	0.9720	1.5294	0.0020	0.0081	0.0074	244.5890	0.14	1.85	2.91	0.00	0.02	0.01	466.05
Welding Machine	nonroad	26	0.45	1	8	93.6	1	g/hp-hr	1.2590	3.0190	2.7130	0.0030	0.2920	0.2657	255.9650	0.26	0.62	0.56	0.00	0.06	0.05	52.82
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7420	3.0340	4.9070	0.0070	0.2990	0.2721	420.9200	0.13	0.51	0.83	0.00	0.05	0.05	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0907	0.9560	1.7730	0.0030	0.0090	0.0082	324.2200	0.21	2.23	4.14	0.01	0.02	0.02	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0831	0.9520	1.7862	0.0030	0.0087	0.0079	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0938	0.8310	2.0586	0.0030	0.0095	0.0087	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	1	8	1760	1	g/hp-hr	0.0863	1.0650	1.7910	0.0030	0.0092	0.0084	307.1580	0.34	4.13	6.95	0.01	0.04	0.03	1191.79
Dump Truck	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0907	0.9560	1.7730	0.0030	0.0090	0.0082	324.2200	0.42	4.47	8.29	0.01	0.04	0.04	1515.60
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0951	1.0990	2.0622	0.0030	0.0100	0.0091	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5080	1.7100	3.2630	0.0050	0.1780	0.1620	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0678	0.7890	1.8216	0.0050	0.0074	0.0067	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0907	0.9560	1.7730	0.0030	0.0090	0.0082	324.2200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1922	2.7910	3.3874	0.0050	0.0375	0.0341	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5080	1.7100	3.2630	0.0050	0.1780	0.1620	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	1.992	6.631	17.304	0.03	0.0408	0.037128	3117.857	0.00	0.01	0.03	0.00	0.00	0.00	5.16
On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.494	2.585	9.732	0.019	0.033	0.03003	1999.414	0.00	0.01	0.03	0.00	0.00	0.00	6.61
On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.243	2.442	6.899	0.016	0.0558	0.050778	1625.544	0.06	0.65	1.83	0.00	0.01	0.01	430.04
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.494	2.585	9.732	0.019	0.033	0.03003	1999.414	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.494	2.585	9.732	0.019	0.033	0.03003	1999.414	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			3	5			g/mile	7.408	40.108	119.582	0.061	0.0738	0.067158	6406.238	0.00	0.02	0.07	0.00	0.00	0.00	3.53
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.741	0.06	0.003	0.005	0.00455	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.514	0.054	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo	6111.111111						lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	2.57	0.54	0.00
Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
															Total	2.49	24.32	44.00	0.07	2.90	0.84	7921.08

Mitigated Emission Rates

2010									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
Demolish existing sidewalks, back of 3 curb to ROW	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.41	4.20	7.74	0.01	0.04	0.04	1515.61
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0805	0.8550	1.6050	0.0030	0.0081	0.0074	324.2220	0.35	3.68	6.91	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0920	0.8680	1.9392	0.0030	0.0095	0.0087	307.1580	0.12	1.12	2.49	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1527	2.2550	2.6058	0.0040	0.0313	0.0285	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2495	2.6620	3.0258	0.0040	0.0524	0.0477	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1103	1.4850	1.7346	0.0030	0.0198	0.0180	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0793	0.8700	1.6914	0.0030	0.0082	0.0075	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0887	0.7810	1.9527	0.0030	0.0089	0.0081	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0825	0.9910	1.6860	0.0030	0.0087	0.0079	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0904	1.0040	1.9530	0.0030	0.0094	0.0086	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0648	0.7850	1.6458	0.0050	0.0071	0.0065	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1812	2.7670	3.2312	0.0050	0.0361	0.0329	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.029	6.383	15.395	0.03	0.0375	0.034125	3126.461	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.01	0.02	0.00	0.00	0.00	4.43
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.247	2.376	6.133	0.016	0.0513	0.046683	1632.199	0.04	0.42	1.08	0.00	0.01	0.01	287.87
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.452	40.347	120.294	0.062	0.06435	0.058559	6444.365	0.00	0.01	0.04	0.00	0.00	0.00	2.37
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.729	0.058	0.003	0.005	0.00455	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.506	0.052	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						1.662	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	4.87	1.01	0.00
																Total	1.25	12.26	23.00	0.04	5.04	1.16	4547.61

2010									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
Construct new sidewalk, incl. tree 4 wells	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0805	0.8550	1.6050	0.0030	0.0081	0.0074	324.2220	0.35	3.68	6.91	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0920	0.8680	1.9392	0.0030	0.0095	0.0087	307.1580	0.12	1.12	2.49	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1527	2.2550	2.6058	0.0040	0.0313	0.0285	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2495	2.6620	3.0258	0.0040	0.0524	0.0477	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1103	1.4850	1.7346	0.0030	0.0198	0.0180	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0793	0.8700	1.6914	0.0030	0.0082	0.0075	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0887	0.7810	1.9527	0.0030	0.0089	0.0081	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0825	0.9910	1.6860	0.0030	0.0087	0.0079	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0904	1.0040	1.9530	0.0030	0.0094	0.0086	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0648	0.7850	1.6458	0.0050	0.0071	0.0065	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1812	2.7670	3.2312	0.0050	0.0361	0.0329	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.029	6.383	15.395	0.03	0.0375	0.034125	3126.461	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.01	0.02	0.00	0.00	0.00	4.43
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.247	2.376	6.133	0.016	0.0513	0.046683	1632.199	0.04	0.42	1.08	0.00	0.01	0.01	287.87
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.452	40.347	120.294	0.062	0.06435	0.058559	6444.365	0.00	0.01	0.04	0.00	0.00	0.00	2.37
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.729	0.058	0.003	0.005	0.00455	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.506	0.052	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						1.719	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	5.04	1.05	0.00
																Total	1.04	10.17	19.13	0.04	5.18	1.18	3789.80

Mitigated Emission Rates

2010									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
5 Place new street trees	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
d																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0805	0.8550	1.6050	0.0030	0.0081	0.0074	324.2220	0.35	3.68	6.91	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0920	0.8680	1.9392	0.0030	0.0095	0.0087	307.1580	0.12	1.12	2.49	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1527	2.2550	2.6058	0.0040	0.0313	0.0285	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2495	2.6620	3.0258	0.0040	0.0524	0.0477	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1103	1.4850	1.7346	0.0030	0.0198	0.0180	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0793	0.8700	1.6914	0.0030	0.0082	0.0075	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0887	0.7810	1.9527	0.0030	0.0089	0.0081	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0825	0.9910	1.6860	0.0030	0.0087	0.0079	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0904	1.0040	1.9530	0.0030	0.0094	0.0086	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0648	0.7850	1.6458	0.0050	0.0071	0.0065	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1812	2.7670	3.2312	0.0050	0.0361	0.0329	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.029	6.383	15.395	0.03	0.0375	0.034125	3126.461	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.01	0.02	0.00	0.00	0.00	4.43
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.247	2.376	6.133	0.016	0.0513	0.046683	1632.199	0.04	0.42	1.08	0.00	0.01	0.01	287.87
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.452	40.347	120.294	0.062	0.06435	0.058559	6444.365	0.00	0.01	0.04	0.00	0.00	0.00	2.37
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.009	0.729	0.058	0.003	0.005	0.00455	337.147	0.00	0.07	0.01	0.00	0.00	0.00	33.45
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.007	0.506	0.052	0.003	0.004	0.00364	305.412	0.00	0.05	0.01	0.00	0.00	0.00	30.30
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	1.04	10.07	19.12	0.04	0.15	0.13	3738.81

2010									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
6 Red Car Museum in Bekins Building	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0805	0.8550	1.6050	0.0030	0.0081	0.0074	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0920	0.8680	1.9392	0.0030	0.0095	0.0087	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1527	2.2550	2.6058	0.0040	0.0313	0.0285	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2495	2.6620	3.0258	0.0040	0.0524	0.0477	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1103	1.4850	1.7346	0.0030	0.0198	0.0180	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0793	0.8700	1.6914	0.0030	0.0082	0.0075	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0887	0.7810	1.9527	0.0030	0.0089	0.0081	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0825	0.9910	1.6860	0.0030	0.0087	0.0079	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0904	1.0040	1.9530	0.0030	0.0094	0.0086	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0648	0.7850	1.6458	0.0050	0.0071	0.0065	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1812	2.7670	3.2312	0.0050	0.0361	0.0329	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	2.029	6.383	15.395	0.03	0.0375	0.034125	3126.461	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.247	2.376	6.133	0.016	0.0513	0.046683	1632.199	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	7.452	40.347	120.294	0.062	0.06435	0.058559	6444.365	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.729	0.058	0.003	0.005	0.00455	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.506	0.052	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	0.00	0.22	0.02	0.00	0.00	0.00	114.74

Mitigated Emission Rates

General Site Preparation — 2010

7 Clearing and Grubbing

c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.41	4.20	7.74	0.01	0.04	0.04	1515.61
Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0805	0.8550	1.6050	0.0030	0.0081	0.0074	324.2220	0.35	3.68	6.91	0.01	0.03	0.03	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0920	0.8680	1.9392	0.0030	0.0095	0.0087	307.1580	0.12	1.12	2.49	0.00	0.01	0.01	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1527	2.2550	2.6058	0.0040	0.0313	0.0285	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2495	2.6620	3.0258	0.0040	0.0524	0.0477	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1103	1.4850	1.7346	0.0030	0.0198	0.0180	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0793	0.8700	1.6914	0.0030	0.0082	0.0075	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0887	0.7810	1.9527	0.0030	0.0089	0.0081	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0825	0.9910	1.6860	0.0030	0.0087	0.0079	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0904	1.0040	1.9530	0.0030	0.0094	0.0086	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0648	0.7850	1.6458	0.0050	0.0071	0.0065	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1812	2.7670	3.2312	0.0050	0.0361	0.0329	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	2.029	6.383	15.395	0.03	0.0375	0.034125	3126.461	0.00	0.01	0.03	0.00	0.00	0.00	5.17
On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.01	0.03	0.00	0.00	0.00	6.64
On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.247	2.376	6.133	0.016	0.0513	0.046683	1632.199	0.07	0.63	1.62	0.00	0.01	0.01	431.80
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			3	5			g/mile	7.452	40.347	120.294	0.062	0.06435	0.058559	6444.365	0.00	0.02	0.07	0.00	0.00	0.00	3.55
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.729	0.058	0.003	0.005	0.00455	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.506	0.052	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						6	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	17.58	3.66	0.00
															Total	1.47	14.59	27.45	0.05	17.77	3.83	5454.46

2010

8 Pavement Demolition

c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							*Daily Emission Rates (lb/day)*						
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.41	4.20	7.74	0.01	0.04	0.04	1515.61
Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0805	0.8550	1.6050	0.0030	0.0081	0.0074	324.2220	0.35	3.68	6.91	0.01	0.03	0.03	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0920	0.8680	1.9392	0.0030	0.0095	0.0087	307.1580	0.12	1.12	2.49	0.00	0.01	0.01	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1527	2.2550	2.6058	0.0040	0.0313	0.0285	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2495	2.6620	3.0258	0.0040	0.0524	0.0477	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1103	1.4850	1.7346	0.0030	0.0198	0.0180	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0793	0.8700	1.6914	0.0030	0.0082	0.0075	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0887	0.7810	1.9527	0.0030	0.0089	0.0081	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0825	0.9910	1.6860	0.0030	0.0087	0.0079	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0904	1.0040	1.9530	0.0030	0.0094	0.0086	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0648	0.7850	1.6458	0.0050	0.0071	0.0065	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1812	2.7670	3.2312	0.0050	0.0361	0.0329	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	2.029	6.383	15.395	0.03	0.0375	0.034125	3126.461	0.00	0.01	0.03	0.00	0.00	0.00	5.17
On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.01	0.03	0.00	0.00	0.00	6.64
On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.247	2.376	6.133	0.016	0.0513	0.046683	1632.199	0.07	0.63	1.62	0.00	0.01	0.01	431.80
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			3	5			g/mile	7.452	40.347	120.294	0.062	0.06435	0.058559	6444.365	0.00	0.02	0.07	0.00	0.00	0.00	3.55
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.729	0.058	0.003	0.005	0.00455	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.506	0.052	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						9.045	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	26.50	5.52	0.00
															Total	1.47	14.59	27.45	0.05	26.69	5.69	5454.46

Mitigated Emission Rates

9 Utilities Demolition	2010									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.41	4.20	7.74	0.01	0.04	0.04	1515.61
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0805	0.8550	1.6050	0.0030	0.0081	0.0074	324.2220	0.35	3.68	6.91	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0920	0.8680	1.9392	0.0030	0.0095	0.0087	307.1580	0.12	1.12	2.49	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1527	2.2550	2.6058	0.0040	0.0313	0.0285	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2495	2.6620	3.0258	0.0040	0.0524	0.0477	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1103	1.4850	1.7346	0.0030	0.0198	0.0180	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0793	0.8700	1.6914	0.0030	0.0082	0.0075	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0887	0.7810	1.9527	0.0030	0.0089	0.0081	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0825	0.9910	1.6860	0.0030	0.0087	0.0079	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0904	1.0040	1.9530	0.0030	0.0094	0.0086	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0648	0.7850	1.6458	0.0050	0.0071	0.0065	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1812	2.7670	3.2312	0.0050	0.0361	0.0329	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	2.029	6.383	15.395	0.03	0.0375	0.034125	3126.461	0.00	0.01	0.03	0.00	0.00	0.00	5.17
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.01	0.03	0.00	0.00	0.00	6.64
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.247	2.376	6.133	0.016	0.0513	0.046683	1632.199	0.07	0.63	1.62	0.00	0.01	0.01	431.80
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	7.452	40.347	120.294	0.062	0.06435	0.058559	6444.365	0.00	0.02	0.07	0.00	0.00	0.00	3.55
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.729	0.058	0.003	0.005	0.00455	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.506	0.052	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	1.47	14.59	27.45	0.05	0.19	0.17	5454.46

Public Utilities and Infrastructure	2010									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
10 Remove and replace ex. 32" SD w/ 48" RCP	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0805	0.8550	1.6050	0.0030	0.0081	0.0074	324.2220	0.35	3.68	6.91	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0920	0.8680	1.9392	0.0030	0.0095	0.0087	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1527	2.2550	2.6058	0.0040	0.0313	0.0285	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2495	2.6620	3.0258	0.0040	0.0524	0.0477	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1103	1.4850	1.7346	0.0030	0.0198	0.0180	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0793	0.8700	1.6914	0.0030	0.0082	0.0075	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0887	0.7810	1.9527	0.0030	0.0089	0.0081	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0825	0.9910	1.6860	0.0030	0.0087	0.0079	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0904	1.0040	1.9530	0.0030	0.0094	0.0086	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0648	0.7850	1.6458	0.0050	0.0071	0.0065	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1812	2.7670	3.2312	0.0050	0.0361	0.0329	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.029	6.383	15.395	0.03	0.0375	0.034125	3126.461	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.01	0.02	0.00	0.00	0.00	4.43
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.247	2.376	6.133	0.016	0.0513	0.046683	1632.199	0.04	0.42	1.08	0.00	0.01	0.01	287.87
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.452	40.347	120.294	0.062	0.06435	0.058559	6444.365	0.00	0.01	0.04	0.00	0.00	0.00	2.37
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.729	0.058	0.003	0.005	0.00455	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.506	0.052	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.165289256	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.48	0.10	0.00
																Total	0.92	9.05	16.63	0.03	0.62	0.22	3394.88

Mitigated Emission Rates

11 Realign 12" oil line	2011								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.33	3.46	6.31	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.02	0.00	0.00	0.00	4.44
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.04	0.41	0.97	0.00	0.01	0.01	288.64
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.01	0.04	0.00	0.00	0.00	2.38
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.146923783	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.43	0.09	0.00
																Total	0.88	8.53	15.24	0.03	0.55	0.20	3395.68

12 Realign 12" Sewer	2011								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.33	3.46	6.31	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.02	0.00	0.00	0.00	4.44
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.04	0.41	0.97	0.00	0.01	0.01	288.64
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.01	0.04	0.00	0.00	0.00	2.38
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.073461892	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.22	0.04	0.00
																Total	0.88	8.53	15.24	0.03	0.34	0.16	3395.68

Mitigated Emission Rates

2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
13 Realign 12" Water	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.33	3.46	6.31	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.02	0.00	0.00	0.00	4.44
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.04	0.41	0.97	0.00	0.01	0.01	288.64
	Dredge Materials Haul Truck - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.01	0.04	0.00	0.00	0.00	2.38
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.073461892	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.22	0.04	0.00
																Total	0.88	8.53	15.24	0.03	0.34	0.16	3395.68

2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
Pedestrian Bridge																						
14 Piles (& Pile Caps)	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
b																							
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.13	1.59	2.56	0.00	0.01	0.01	466.05
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	1	6	903	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.15	1.57	3.12	0.01	0.01	0.01	577.50
	Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.16	1.37	3.42	0.01	0.02	0.01	546.80
	Front End Loader	nonroad	400	0.55	1	8	1760	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.30	3.60	6.05	0.01	0.03	0.03	1191.79
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.872	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	2.55	0.53	0.00
																Total	0.85	8.85	15.93	0.03	2.68	0.64	2968.30

Mitigated Emission Rates

Set Pile Caps	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
a	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.39	3.93	7.09	0.01	0.04	0.03	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.13	1.59	2.56	0.00	0.01	0.01	466.05
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.16	1.37	3.42	0.01	0.02	0.01	546.80
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	1	8	1746	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.23	3.01	5.42	0.02	0.02	0.02	1642.10
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	5.18
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.03	0.00	0.00	0.00	6.65
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.07	0.61	1.46	0.00	0.01	0.01	432.96
	Dredge Materials Haul Truck - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.02	0.07	0.00	0.00	0.00	3.57
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.872	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	2.55	0.53	0.00
																Total	1.29	13.22	24.39	0.06	2.72	0.68	5562.88

15 80' Steel masts	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
a	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.39	3.93	7.09	0.01	0.04	0.03	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.13	1.59	2.56	0.00	0.01	0.01	466.05
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.16	1.37	3.42	0.01	0.02	0.01	546.80
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	5.18
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.03	0.00	0.00	0.00	6.65
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.07	0.61	1.46	0.00	0.01	0.01	432.96
	Dredge Materials Haul Truck - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.02	0.07	0.00	0.00	0.00	3.57
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.872	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	2.55	0.53	0.00
																Total	1.06	10.22	18.98	0.04	2.70	0.66	3920.78

Mitigated Emission Rates

2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
16 Bridge Deck	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
a																							
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.39	3.93	7.09	0.01	0.04	0.03	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.13	1.59	2.56	0.00	0.01	0.01	466.05
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	1	8	1746	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.23	3.01	5.42	0.02	0.02	0.02	1642.10
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.02	0.00	0.00	0.00	4.44
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.04	0.41	0.97	0.00	0.01	0.01	288.64
	Dredge Materials Haul Truck - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.01	0.04	0.00	0.00	0.00	2.38
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.872	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	2.55	0.53	0.00
																Total	0.92	9.67	16.91	0.04	2.68	0.65	4108.82

2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
17 Water Feature	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.23	3.71	4.06	0.01	0.03	0.03	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.472	3.85	8.313	0.03	0.0102	0.009282	3149.003	0.00	0.00	0.01	0.00	0.00	0.00	3.47
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.363	1.478	4.663	0.019	0.00825	0.007508	2027.734	0.00	0.00	0.01	0.00	0.00	0.00	4.47
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.18	1.492	3.294	0.016	0.01395	0.012695	1649.634	0.03	0.26	0.58	0.00	0.00	0.00	290.94
	Dredge Materials Haul Truck - Composite	nonroad							g/mile	0.363	1.478	4.663	0.019	0.00825	0.007508	2027.734	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.363	1.478	4.663	0.019	0.00825	0.007508	2027.734	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.568	40.972	122.159	0.062	0.01635	0.014879	6544.263	0.00	0.02	0.04	0.00	0.00	0.00	2.40
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.447	0.035	0.003	0.005	0.00455	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.004	0.31	0.032	0.003	0.004	0.00364	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.872	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	2.55	0.53	0.00
																Total	0.38	4.61	5.46	0.02	2.63	0.60	2003.05

Mitigated Emission Rates

Interim Land Bridge (Rail/Street Tunnel) 2011

18 Foundation Piles

b

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.11	1.06	2.31	0.00	0.01	0.01	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.13	1.59	2.56	0.00	0.01	0.01	466.05
Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.13	1.59	2.56	0.00	0.01	0.01	466.05
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	1	6	903	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.15	1.57	3.12	0.01	0.01	0.01	577.50
Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.16	1.37	3.42	0.01	0.02	0.01	546.80
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	12.59	2.62	0.00
															Total	0.79	7.90	14.75	0.03	12.71	2.73	2637.47

2011

19 Set Up for Concrete Pour

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.39	3.93	7.09	0.01	0.04	0.03	1515.61
Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.33	3.46	6.31	0.01	0.03	0.03	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.11	1.06	2.31	0.00	0.01	0.01	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	1	6	392.16	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.09	1.28	1.41	0.00	0.02	0.01	211.46
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	1	8	93.6	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.23	0.59	0.54	0.00	0.06	0.05	52.82
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	4	8	233.6	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.26	0.88	1.64	0.00	0.07	0.07	213.84
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	4	8	233.6	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.26	0.88	1.64	0.00	0.07	0.07	213.84
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	5.18
On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.03	0.00	0.00	0.00	6.65
On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.07	0.61	1.46	0.00	0.01	0.01	432.96
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			3	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.02	0.07	0.00	0.00	0.00	3.57
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	12.59	2.62	0.00
															Total	2.05	15.41	26.87	0.05	12.97	2.96	5389.82

Mitigated Emission Rates

Concrete Pour	2011								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
f																						
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.39	3.93	7.09	0.01	0.04	0.03	1515.61
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.11	1.06	2.31	0.00	0.01	0.01	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	1	6	392.16	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.09	1.28	1.41	0.00	0.02	0.01	211.46
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	2	4	2184.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.40	4.04	7.31	0.01	0.04	0.03	1561.24
Concrete Pump	nonroad	53	0.74	2	4	313.76	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.12	1.90	2.12	0.00	0.02	0.02	291.15
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	20		5		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.02	0.07	0.15	0.00	0.00	0.00	34.53
On-road Truck - 25 mph	nonroad		0.5	20		10		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.01	0.05	0.17	0.00	0.00	0.00	44.36
On-road Truck - 55 mph	nonroad		40	20		800		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.44	4.09	9.71	0.03	0.08	0.08	2886.39
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			20	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.03	0.15	0.44	0.00	0.00	0.00	23.77
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	18		162		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.26	0.02	0.00	0.00	0.00	120.41
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	18		162		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.18	0.02	0.00	0.00	0.00	109.08
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	12.59	2.62	0.00
															Total	1.72	17.50	31.53	0.07	12.85	2.86	7264.34

20 Retaining Walls	2011								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
f																						
General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.39	3.93	7.09	0.01	0.04	0.03	1515.61
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	3.45
On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.02	0.00	0.00	0.00	4.44
On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.04	0.41	0.97	0.00	0.01	0.01	288.64
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			2	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.01	0.04	0.00	0.00	0.00	2.38
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	18		162		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.26	0.02	0.00	0.00	0.00	120.41
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	18		162		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.18	0.02	0.00	0.00	0.00	109.08
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						0.478	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	1.40	0.29	0.00
															Total	0.44	4.80	8.18	0.02	1.45	0.34	2044.00

Mitigated Emission Rates

21 Rough Fill/Grading	2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.20	3.28	3.61	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	1.472	3.85	8.313	0.03	0.0102	0.009282	3149.003	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.363	1.478	4.663	0.019	0.00825	0.007508	2027.734	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.18	1.492	3.294	0.016	0.01395	0.012695	1649.634	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.363	1.478	4.663	0.019	0.00825	0.007508	2027.734	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.363	1.478	4.663	0.019	0.00825	0.007508	2027.734	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	7.568	40.972	122.159	0.062	0.01635	0.014879	6544.263	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.447	0.035	0.003	0.005	0.00455	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.004	0.31	0.032	0.003	0.004	0.00364	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	12.59	2.62	0.00
																Total	0.31	5.27	5.65	0.02	12.64	2.66	2267.56

22 Surface Fill/Grading	2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.20	3.28	3.61	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	12.59	2.62	0.00
																Total	0.31	5.27	5.65	0.02	12.64	2.66	2267.56

Mitigated Emission Rates

Circulation Improvements — 2011

23 Realign and reconstruct Avalon Blvd	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c										Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.11	1.06	2.31	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.10	1.57	1.74	0.00	0.02	0.02	224.15
	Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.17	1.92	2.10	0.00	0.04	0.03	257.13
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.02	0.00	0.00	0.00	4.44
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.04	0.41	0.97	0.00	0.01	0.01	288.64
	Dredge Materials Haul Truck - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.01	0.04	0.00	0.00	0.00	2.38
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.091827365	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.27	0.06	0.00
																Total	1.02	11.10	17.86	0.03	0.40	0.18	3563.26

2011

24 Realign and Reconstruct Broad Avenue	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c										Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.11	1.06	2.31	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.10	1.57	1.74	0.00	0.02	0.02	224.15
	Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.17	1.92	2.10	0.00	0.04	0.03	257.13
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.02	0.00	0.00	0.00	4.44
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.04	0.41	0.97	0.00	0.01	0.01	288.64
	Dredge Materials Haul Truck - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.01	0.04	0.00	0.00	0.00	2.38
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.110192837	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.32	0.07	0.00
																Total	1.02	11.10	17.86	0.03	0.46	0.19	3563.26

Mitigated Emission Rates

2012										Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
25 Realign and Reconstruct Water Street	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.06	1.02	1.31	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.06	1.56	1.03	0.00	0.02	0.02	224.15
	Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.10	1.90	1.22	0.00	0.03	0.03	257.13
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.00	0.01	0.00	0.00	0.00	3.47
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.01	0.00	0.00	0.00	4.47
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.03	0.26	0.58	0.00	0.00	0.00	290.94
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.00	0.02	0.04	0.00	0.00	0.00	2.40
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.146923783	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.43	0.09	0.00
																Total	0.61	10.45	10.31	0.03	0.55	0.20	3565.64

Off Street Parking Lots	2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
1st parking lot south of Water Street at 26 Fries Avenue	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.11	1.06	2.31	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.10	1.57	1.74	0.00	0.02	0.02	224.15
	Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.17	1.92	2.10	0.00	0.04	0.03	257.13
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.02	0.00	0.00	0.00	4.44
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.04	0.41	0.97	0.00	0.01	0.01	288.64
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.01	0.04	0.00	0.00	0.00	2.38
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.574	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	1.68	0.35	0.00
																Total	1.02	11.10	17.86	0.03	1.81	0.47	3563.26

Mitigated Emission Rates

2nd parking lot south of Water Street at Avalon	2011								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
27 c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.11	1.06	2.31	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.10	1.57	1.74	0.00	0.02	0.02	224.15
	Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.17	1.92	2.10	0.00	0.04	0.03	257.13
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.01	0.02	0.00	0.00	0.00	4.44
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.04	0.41	0.97	0.00	0.01	0.01	288.64
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.01	0.04	0.00	0.00	0.00	2.38
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.62	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	1.82	0.38	0.00
																Total	1.02	11.10	17.86	0.03	1.95	0.50	3563.26

Waterfront Promenade: Removal of existing wharf structure & Bulkhead Demolition & installation of rock slope protection	2010								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
28 a	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0805	0.8550	1.6050	0.0030	0.0081	0.0074	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0920	0.8680	1.9392	0.0030	0.0095	0.0087	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1527	2.2550	2.6058	0.0040	0.0313	0.0285	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2495	2.6620	3.0258	0.0040	0.0524	0.0477	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1103	1.4850	1.7346	0.0030	0.0198	0.0180	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.14	1.71	2.75	0.00	0.01	0.01	466.05
	Welding Machine	nonroad	26	0.45	2	8	187.2	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.49	1.22	1.10	0.00	0.12	0.11	105.64
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.12	0.51	0.80	0.00	0.05	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.20	2.10	3.87	0.01	0.02	0.02	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	1	6	903	1	g/hp-hr	0.0793	0.8700	1.6914	0.0030	0.0082	0.0075	290.0930	0.16	1.73	3.37	0.01	0.02	0.01	577.50
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0887	0.7810	1.9527	0.0030	0.0089	0.0081	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0825	0.9910	1.6860	0.0030	0.0087	0.0079	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	1	4	4162.4	1	g/hp-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	3.42	34.23	67.09	0.04	4.93	4.53	0.00
	Derrick Barge	nonroad	380	0.43	2	6	1960.8	1	g/hp-hr	0.0904	1.0040	1.9530	0.0030	0.0094	0.0086	335.5980	0.39	4.34	8.44	0.01	0.04	0.04	1450.71
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0648	0.7850	1.6458	0.0050	0.0071	0.0065	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1812	2.7670	3.2312	0.0050	0.0361	0.0329	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	4	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	2.029	6.383	15.395	0.03	0.0375	0.034125	3126.461	0.00	0.01	0.02	0.00	0.00	0.00	3.45
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.01	0.02	0.00	0.00	0.00	4.43
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.247	2.376	6.133	0.016	0.0513	0.046683	1632.199	0.04	0.42	1.08	0.00	0.01	0.01	287.87
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.452	40.347	120.294	0.062	0.06435	0.058559	6444.365	0.00	0.01	0.04	0.00	0.00	0.00	2.37
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.729	0.058	0.003	0.005	0.00455	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.506	0.052	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo	9375						lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	3.94	0.83	0.00
	Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	5.18	48.61	92.48	0.08	9.15	5.62	4599.76

Mitigated Emission Rates

Installation of perimeter sheet pile
29 bulkheads within US waters

b

2011									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.19	1.96	3.55	0.01	0.02	0.02	757.80
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0767	0.8030	1.4664	0.0030	0.0073	0.0067	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0866	0.8270	1.7946	0.0030	0.0086	0.0078	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1431	2.2330	2.4718	0.0040	0.0299	0.0272	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2363	2.6310	2.8849	0.0040	0.0502	0.0457	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1046	1.4790	1.6366	0.0030	0.0189	0.0172	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0685	0.8330	1.3440	0.0020	0.0070	0.0064	244.5890	0.13	1.59	2.56	0.00	0.01	0.01	466.05
Welding Machine	nonroad	26	0.45	2	8	187.2	1	g/hp-hr	1.1210	2.8790	2.6350	0.0030	0.2670	0.2430	255.9650	0.46	1.19	1.09	0.00	0.11	0.10	105.64
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6730	2.9280	4.5440	0.0070	0.2660	0.2421	420.9200	0.11	0.50	0.77	0.00	0.05	0.04	71.42
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	1	6	903	1	g/hp-hr	0.0743	0.7900	1.5648	0.0030	0.0074	0.0067	290.0930	0.15	1.57	3.12	0.01	0.01	0.01	577.50
Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.0825	0.7290	1.8118	0.0030	0.0080	0.0072	290.0930	0.16	1.37	3.42	0.01	0.02	0.01	546.80
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0781	0.9290	1.5600	0.0030	0.0080	0.0072	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	1	4	4162.4	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.48	34.23	40.87	0.04	0.75	0.69	0.00
Derrick Barge	nonroad	380	0.43	2	6	1960.8	1	g/hp-hr	0.0849	0.9110	1.8072	0.0030	0.0085	0.0077	355.5980	0.37	3.94	7.81	0.01	0.04	0.03	1537.16
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0604	0.7810	1.4069	0.0050	0.0060	0.0055	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0825	0.8400	1.5174	0.0030	0.0077	0.0070	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1689	2.7400	3.0606	0.0050	0.0345	0.0314	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5030	1.7100	3.1940	0.0050	0.1410	0.1283	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	4	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	2.04	6.177	13.832	0.03	0.03465	0.031532	3132.132	0.00	0.00	0.01	0.00	0.00	0.00	1.73
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.01	0.00	0.00	0.00	2.22
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.249	2.318	5.508	0.016	0.0474	0.043134	1636.585	0.02	0.20	0.49	0.00	0.00	0.00	144.32
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.505	2.395	7.775	0.019	0.02805	0.025526	2012.393	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	7.481	40.504	120.763	0.062	0.0573	0.052143	6469.497	0.00	0.01	0.02	0.00	0.00	0.00	1.19
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.009	0.716	0.055	0.003	0.006	0.00546	337.147	0.00	0.13	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.007	0.496	0.05	0.003	0.004	0.00364	305.412	0.00	0.09	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
															Total	2.08	46.78	63.72	0.08	1.01	0.93	4326.56

30 Piles in water

b

2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.08	1.47	1.49	0.00	0.01	0.01	466.05
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	1	6	903	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.09	1.46	1.80	0.01	0.01	0.01	579.17
Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.09	1.31	1.94	0.01	0.01	0.01	546.80
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	1	4	4162.4	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.48	34.23	40.87	0.04	0.75	0.69	0.00
Derrick Barge	nonroad	380	0.43	2	6	1960.8	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.22	3.66	4.51	0.01	0.03	0.03	1450.71
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	4	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.00	0.00	0.00	0.00	0.00	1.74
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.01	0.00	0.00	0.00	2.24
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.02	0.13	0.29	0.00	0.00	0.00	145.47
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.00	0.01	0.02	0.00	0.00	0.00	1.20
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.08	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.06	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
															Total	1.20	44.75	53.71	0.08	0.89	0.81	4137.33

Mitigated Emission Rates

31 Waterfront Boardwalk over water	2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
a	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.06	1.02	1.31	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	1	8	93.6	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.21	0.57	0.53	0.00	0.05	0.05	52.82
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	4	8	233.6	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.26	0.88	1.64	0.00	0.07	0.06	213.84
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.00	0.01	0.00	0.00	0.00	3.47
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.01	0.00	0.00	0.00	4.47
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.03	0.26	0.58	0.00	0.00	0.00	290.94
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.00	0.02	0.04	0.00	0.00	0.00	2.40
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						1.033	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	3.03	0.63	0.00
																Total	0.91	7.09	8.93	0.03	3.23	0.82	2664.63

32 Public dock	2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
a	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.08	1.47	1.49	0.00	0.01	0.01	466.05
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.184	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.54	0.11	0.00
																Total	0.08	1.61	1.50	0.00	0.55	0.12	580.79

Mitigated Emission Rates

2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
33 Hardscaping	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
d																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.20	3.28	3.61	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.06	1.02	1.31	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.00	0.01	0.00	0.00	0.00	3.47
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.01	0.00	0.00	0.00	4.47
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.03	0.26	0.58	0.00	0.00	0.00	290.94
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.00	0.02	0.04	0.00	0.00	0.00	2.40
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.04	0.00	0.00	0.00	0.00	33.45
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.03	0.00	0.00	0.00	0.00	30.30
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.626	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	13.55	2.82	0.00
																Total	0.64	8.85	10.36	0.04	13.67	2.93	3741.99

2013									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
34 Landscaping	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
d																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.11	1.77	1.86	0.01	0.01	0.01	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0441	0.7310	0.7680	0.0030	0.0059	0.0054	324.2220	0.19	3.15	3.30	0.01	0.03	0.02	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0474	0.7600	0.9375	0.0030	0.0071	0.0064	307.1580	0.06	0.98	1.21	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0784	2.1940	1.3794	0.0040	0.0272	0.0247	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1293	2.5770	1.5971	0.0040	0.0448	0.0408	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0574	1.4680	0.8869	0.0030	0.0164	0.0149	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0386	0.7190	0.7249	0.0020	0.0057	0.0052	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0386	0.7190	0.7249	0.0020	0.0057	0.0052	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.9460	2.6880	2.4890	0.0030	0.2330	0.2120	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6100	2.8120	4.1600	0.0070	0.2360	0.2148	420.9200	0.10	0.48	0.71	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.11	1.77	1.86	0.01	0.01	0.01	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0423	0.6920	0.8340	0.0030	0.0062	0.0056	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0454	0.6750	0.9503	0.0030	0.0066	0.0060	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0443	0.8290	0.8340	0.0030	0.0065	0.0059	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0481	0.7980	0.9634	0.0030	0.0071	0.0064	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0329	0.7780	0.6491	0.0050	0.0041	0.0037	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0897	2.6840	1.6829	0.0050	0.0297	0.0270	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.49	3.891	7.732	0.03	0.0108	0.009828	3149.479	0.00	0.00	0.01	0.00	0.00	0.00	3.47
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.01	0.00	0.00	0.00	4.47
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.182	1.508	3.066	0.016	0.0147	0.013377	1650.002	0.03	0.27	0.54	0.00	0.00	0.00	291.01
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.57	40.986	122.198	0.062	0.01635	0.014879	6546.376	0.00	0.02	0.04	0.00	0.00	0.00	2.41
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.006	0.454	0.035	0.003	0.005	0.00455	337.147	0.00	0.05	0.00	0.00	0.00	0.00	33.45
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.004	0.315	0.032	0.003	0.004	0.00364	305.412	0.00	0.03	0.00	0.00	0.00	0.00	30.30
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						1.524	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	4.47	0.93	0.00
																Total	0.61	8.50	9.55	0.04	4.57	1.03	3742.05

Mitigated Emission Rates

2013									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
35 Trees	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
d																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.11	1.77	1.86	0.01	0.01	0.01	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0441	0.7310	0.7680	0.0030	0.0059	0.0054	324.2220	0.19	3.15	3.30	0.01	0.03	0.02	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0474	0.7600	0.9375	0.0030	0.0071	0.0064	307.1580	0.06	0.98	1.21	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0784	2.1940	1.3794	0.0040	0.0272	0.0247	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1293	2.5770	1.5971	0.0040	0.0448	0.0408	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0574	1.4680	0.8869	0.0030	0.0164	0.0149	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0386	0.7190	0.7249	0.0020	0.0057	0.0052	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0386	0.7190	0.7249	0.0020	0.0057	0.0052	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.9460	2.6880	2.4890	0.0030	0.2330	0.2120	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6100	2.8120	4.1600	0.0070	0.2360	0.2148	420.9200	0.10	0.48	0.71	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.11	1.77	1.86	0.01	0.01	0.01	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0423	0.6920	0.8340	0.0030	0.0062	0.0056	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0454	0.6750	0.9503	0.0030	0.0066	0.0060	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0443	0.8290	0.8340	0.0030	0.0065	0.0059	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0481	0.7980	0.9634	0.0030	0.0071	0.0064	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0329	0.7780	0.6491	0.0050	0.0041	0.0037	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0897	2.6840	1.6829	0.0050	0.0297	0.0270	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.49	3.891	7.732	0.03	0.0108	0.009828	3149.479	0.00	0.00	0.01	0.00	0.00	0.00	3.47
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.01	0.00	0.00	0.00	4.47
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.182	1.508	3.066	0.016	0.0147	0.013377	1650.002	0.03	0.27	0.54	0.00	0.00	0.00	291.01
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.57	40.986	122.198	0.062	0.01635	0.014879	6546.376	0.00	0.02	0.04	0.00	0.00	0.00	2.41
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.006	0.454	0.035	0.003	0.005	0.00455	337.147	0.00	0.05	0.00	0.00	0.00	0.00	33.45
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.004	0.315	0.032	0.003	0.004	0.00364	305.412	0.00	0.03	0.00	0.00	0.00	0.00	30.30
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	0.61	8.50	9.55	0.04	0.11	0.10	3742.05

2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
36 Water Feature on tunnel	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
f																							
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	18		162		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.16	0.01	0.00	0.00	0.00	120.41
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	18		162		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.11	0.01	0.00	0.00	0.00	109.08
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	0.00	0.27	0.02	0.00	0.00	0.00	229.49

Mitigated Emission Rates

Observation Tower 2012

37 Concrete Prep.	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.23	3.71	4.06	0.01	0.03	0.03	1515.61
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.20	3.28	3.61	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.06	1.02	1.31	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	1	6	392.16	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.05	1.27	0.82	0.00	0.02	0.01	211.46
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	1	8	93.6	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.21	0.57	0.53	0.00	0.05	0.05	52.82
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	4	8	233.6	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.26	0.88	1.64	0.00	0.07	0.06	213.84
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	4	8	233.6	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.26	0.88	1.64	0.00	0.07	0.06	213.84
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.01	0.01	0.00	0.00	0.00	5.21
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.02	0.00	0.00	0.00	6.71
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.05	0.39	0.87	0.00	0.00	0.00	436.41
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.00	0.02	0.07	0.00	0.00	0.00	3.61
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	12.59	2.62	0.00
																Total	1.56	14.52	17.34	0.05	12.93	2.92	5393.39

2012

37.1 Concrete Pour	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.23	3.71	4.06	0.01	0.03	0.03	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.06	1.02	1.31	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	1	6	392.16	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.05	1.27	0.82	0.00	0.02	0.01	211.46
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	2	4	2184.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.24	3.82	4.18	0.01	0.03	0.03	1561.24
	Concrete Pump	nonroad	53	0.74	2	4	313.76	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.07	1.88	1.24	0.00	0.02	0.02	291.15
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	4		1		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.01	0.02	0.00	0.00	0.00	6.94
	On-road Truck - 25 mph	nonroad		0.5	4		2		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.01	0.02	0.00	0.00	0.00	8.94
	On-road Truck - 55 mph	nonroad		40	4		160		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.06	0.53	1.16	0.01	0.00	0.00	581.88
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			4	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.01	0.03	0.09	0.00	0.00	0.00	4.81
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	12.59	2.62	0.00
																Total	0.84	12.88	13.65	0.05	12.76	2.77	4763.11

Mitigated Emission Rates

37.2 Steel Work	2012								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.23	3.71	4.06	0.01	0.03	0.03	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.08	1.47	1.49	0.00	0.01	0.01	466.05
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.09	1.31	1.94	0.01	0.01	0.01	546.80
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.01	0.01	0.00	0.00	0.00	5.21
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.02	0.00	0.00	0.00	6.71
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.05	0.39	0.87	0.00	0.00	0.00	436.41
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.00	0.02	0.07	0.00	0.00	0.00	3.61
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	12.59	2.62	0.00
																Total	0.68	9.40	11.24	0.04	12.72	2.73	3924.35

37.3 Miscellaneous	2012								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	2	6	2120.4	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.23	3.71	4.06	0.01	0.03	0.03	1515.61
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.08	1.47	1.49	0.00	0.01	0.01	466.05
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	1	6	855	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.09	1.31	1.94	0.01	0.01	0.01	546.80
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.01	0.01	0.00	0.00	0.00	5.21
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.02	0.00	0.00	0.00	6.71
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.05	0.39	0.87	0.00	0.00	0.00	436.41
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.00	0.02	0.07	0.00	0.00	0.00	3.61
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.298209366	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	12.59	2.62	0.00
																Total	0.68	9.40	11.24	0.04	12.72	2.73	3924.35

Mitigated Emission Rates

Development 2013

Mercado on SW corner of Harry
38 Bridges and Avalon
c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0441	0.7310	0.7680	0.0030	0.0059	0.0054	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0474	0.7600	0.9375	0.0030	0.0071	0.0064	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0784	2.1940	1.3794	0.0040	0.0272	0.0247	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1293	2.5770	1.5971	0.0040	0.0448	0.0408	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0574	1.4680	0.8869	0.0030	0.0164	0.0149	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0386	0.7190	0.7249	0.0020	0.0057	0.0052	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0386	0.7190	0.7249	0.0020	0.0057	0.0052	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.9460	2.6880	2.4890	0.0030	0.2330	0.2120	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6100	2.8120	4.1600	0.0070	0.2360	0.2148	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0423	0.6920	0.8340	0.0030	0.0062	0.0056	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0454	0.6750	0.9503	0.0030	0.0066	0.0060	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0443	0.8290	0.8340	0.0030	0.0065	0.0059	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0481	0.7980	0.9634	0.0030	0.0071	0.0064	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0329	0.7780	0.6491	0.0050	0.0041	0.0037	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0897	2.6840	1.6829	0.0050	0.0297	0.0270	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	1.49	3.891	7.732	0.03	0.0108	0.009828	3149.479	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.182	1.508	3.066	0.016	0.0147	0.013377	1650.002	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	7.57	40.986	122.198	0.062	0.01635	0.014879	6546.376	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.454	0.035	0.003	0.005	0.00455	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.004	0.315	0.032	0.003	0.004	0.00364	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.331	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	3.90	0.81	0.00
															Total	0.00	0.14	0.01	0.00	3.90	0.81	114.74

2010

39 Light Industrial
e

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0805	0.8550	1.6050	0.0030	0.0081	0.0074	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0920	0.8680	1.9392	0.0030	0.0095	0.0087	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.1527	2.2550	2.6058	0.0040	0.0313	0.0285	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.2495	2.6620	3.0258	0.0040	0.0524	0.0477	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.1103	1.4850	1.7346	0.0030	0.0198	0.0180	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0723	0.9000	1.4442	0.0020	0.0076	0.0069	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	1.1970	2.9600	2.6770	0.0030	0.2810	0.2557	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.7060	2.9830	4.7310	0.0070	0.2820	0.2566	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0793	0.8700	1.6914	0.0030	0.0082	0.0075	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0887	0.7810	1.9527	0.0030	0.0089	0.0081	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0825	0.9910	1.6860	0.0030	0.0087	0.0079	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.5000	5.0000	9.8000	0.0060	0.7200	0.6624	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0904	1.0040	1.9530	0.0030	0.0094	0.0086	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0648	0.7850	1.6458	0.0050	0.0071	0.0065	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0869	0.8980	1.6566	0.0030	0.0085	0.0078	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.1812	2.7670	3.2312	0.0050	0.0361	0.0329	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5050	1.7100	3.2230	0.0050	0.1580	0.1438	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	2.029	6.383	15.395	0.03	0.0375	0.034125	3126.461	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.247	2.376	6.133	0.016	0.0513	0.046683	1632.199	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.502	2.48	8.655	0.019	0.0303	0.027573	2007.237	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	7.452	40.347	120.294	0.062	0.06435	0.058559	6444.365	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.009	0.729	0.058	0.003	0.005	0.00455	337.147	0.00	0.07	0.01	0.00	0.00	0.00	33.45
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.007	0.506	0.052	0.003	0.004	0.00364	305.412	0.00	0.05	0.01	0.00	0.00	0.00	30.30
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.721	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	5.04	1.05	0.00
															Total	0.00	0.12	0.01	0.00	5.04	1.05	63.75

Mitigated Emission Rates

PHASE II

LADWP Oil Tanks

2012									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
40 Demolition of 2 tanks	**Equipment**	**Type**	**Hp**	**Load Factor**	**Number Active**	**Equipment Hrs/Day**	**Daily Hp-hr**	**Daily Roudtrip**	**E.F. Units**	**ROG**	**CO**	**NO_X**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**	**ROG**	**CO**	**NO_X**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.12	1.85	2.03	0.01	0.02	0.01	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0457	0.7620	0.8381	0.0030	0.0066	0.0060	324.2220	0.20	3.28	3.61	0.01	0.03	0.03	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0501	0.7910	1.0151	0.0030	0.0078	0.0071	307.1580	0.06	1.02	1.31	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0837	2.2130	1.4599	0.0040	0.0281	0.0255	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1368	2.6030	1.6796	0.0040	0.0476	0.0433	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0605	1.4730	0.9428	0.0030	0.0176	0.0160	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	1	6	864.3	1	g/hp-hr	0.0406	0.7730	0.7808	0.0020	0.0064	0.0058	244.5890	0.08	1.47	1.49	0.00	0.01	0.01	466.05
	Welding Machine	nonroad	26	0.45	1	8	93.6	1	g/hp-hr	1.0360	2.7860	2.5900	0.0030	0.2530	0.2302	255.9650	0.21	0.57	0.53	0.00	0.05	0.05	52.82
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.6410	2.8700	4.3510	0.0070	0.2510	0.2284	420.9200	0.11	0.49	0.74	0.00	0.04	0.04	71.42
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0441	0.7340	0.9045	0.0030	0.0067	0.0061	290.9300	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0477	0.6970	1.0283	0.0030	0.0072	0.0066	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0465	0.8750	0.9019	0.0030	0.0072	0.0066	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0503	0.8460	1.0444	0.0030	0.0077	0.0070	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0348	0.7790	0.7418	0.0050	0.0050	0.0046	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0492	0.7930	0.8689	0.0030	0.0069	0.0063	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0976	2.7110	1.7969	0.0050	0.0323	0.0294	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5020	1.7100	3.1770	0.0050	0.1270	0.1156	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	8	0	1		g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	**Miles / Trip**	**Daily Trips**	**Idling Time**	**Miles/ Day**	**Acres Disturbed**															
	On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	1.4720	3.8500	8.3130	0.0300	0.0102	0.0093	3149.0030	0.00	0.00	0.00	0.00	0.00	0.00	1.74
	On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.01	0.00	0.00	0.00	2.24
	On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.1800	1.4920	3.2940	0.0160	0.0140	0.0127	1649.6340	0.02	0.13	0.29	0.00	0.00	0.00	145.47
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.3630	1.4780	4.6630	0.0190	0.0083	0.0075	2027.7340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			1	5			g/mile	7.5680	40.9720	122.1590	0.0620	0.0164	0.0149	6544.2630	0.00	0.01	0.02	0.00	0.00	0.00	1.20
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.0060	0.4470	0.0350	0.0030	0.0050	0.0046	337.1470	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.0040	0.3100	0.0320	0.0030	0.0040	0.0036	305.4120	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo	9833.333333						lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	4.13	0.87	0.00
	Fugitive Dust	dust						2.709	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	7.94	1.65	0.00
																Total	**0.80**	**8.96**	**10.04**	**0.03**	**12.23**	**2.67**	**3403.40**

2013									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
41 Remediation of soil under tanks	**Equipment**	**Type**	**Hp**	**Load Factor**	**Number Active**	**Equipment Hrs/Day**	**Daily Hp-hr**	**Daily Roudtrip**	**E.F. Units**	**ROG**	**CO**	**NO_X**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**	**ROG**	**CO**	**NO_X**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.11	1.77	1.86	0.01	0.01	0.01	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0441	0.7310	0.7680	0.0030	0.0059	0.0054	324.2220	0.19	3.15	3.30	0.01	0.03	0.02	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0474	0.7600	0.9375	0.0030	0.0071	0.0064	307.1580	0.06	0.98	1.21	0.00	0.01	0.01	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0784	2.1940	1.3794	0.0040	0.0272	0.0247	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1293	2.5770	1.5971	0.0040	0.0448	0.0408	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0574	1.4680	0.8869	0.0030	0.0164	0.0149	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0386	0.7190	0.7249	0.0020	0.0057	0.0052	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0386	0.7190	0.7249	0.0020	0.0057	0.0052	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.9460	2.6880	2.4890	0.0030	0.2330	0.2120	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.6100	2.8120	4.1600	0.0070	0.2360	0.2148	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.11	1.77	1.86	0.01	0.01	0.01	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0423	0.6920	0.8340	0.0030	0.0062	0.0056	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0454	0.6750	0.9503	0.0030	0.0066	0.0060	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0443	0.8290	0.8340	0.0030	0.0065	0.0059	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0481	0.7980	0.9634	0.0030	0.0071	0.0064	335.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0329	0.7780	0.6491	0.0050	0.0041	0.0037	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0472	0.7570	0.7976	0.0030	0.0062	0.0056	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0897	2.6840	1.6829	0.0050	0.0297	0.0270	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1680	0.0050	0.1230	0.1119	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	**Miles / Trip**	**Daily Trips**	**Idling Time**	**Miles/ Day**	**Acres Disturbed**															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.49	3.891	7.732	0.03	0.0108	0.009828	3149.479	0.00	0.00	0.01	0.00	0.00	0.00	3.47
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.01	0.00	0.00	0.00	4.47
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.182	1.508	3.066	0.016	0.0147	0.013377	1650.002	0.03	0.27	0.54	0.00	0.00	0.00	291.01
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.367	1.494	4.339	0.019	0.0087	0.007917	2028.167	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.57	40.986	122.198	0.062	0.01635	0.014879	6546.376	0.00	0.02	0.04	0.00	0.00	0.00	2.41
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.454	0.035	0.003	0.005	0.00455	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.004	0.315	0.032	0.003	0.004	0.00364	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						7	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	20.51	4.27	0.00
																Total	**0.51**	**8.09**	**8.85**	**0.03**	**20.58**	**4.33**	**3721.64**

Mitigated Emission Rates

General Site Preparation — 2015

42 Clearing and Grubbing	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0374	0.6890	0.3182	0.0030	0.0005	0.0004	324.2220	0.16	2.96	1.37	0.01	0.00	0.00	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0394	0.7100	0.4024	0.0030	0.0006	0.0005	307.1580	0.05	0.91	0.52	0.00	0.00	0.00	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0545	2.1600	0.9119	0.0040	0.0011	0.0010	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1076	2.5320	1.2536	0.0040	0.0027	0.0024	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0478	1.4590	0.6694	0.0030	0.0009	0.0009	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0357	0.6310	0.3545	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0379	0.6420	0.4078	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0370	0.7540	0.3576	0.0030	0.0005	0.0005	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0406	0.7280	0.4095	0.0030	0.0006	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0263	0.7770	0.2193	0.0050	0.0003	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0592	2.6320	1.1017	0.0050	0.0012	0.0011	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	1.489	3.896	6.911	0.03	0.0114	0.010374	3150.079	0.00	0.00	0.00	0.00	0.00	0.00	1.74
	On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	2.24
	On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.182	1.51	2.743	0.016	0.0156	0.014196	1650.466	0.02	0.13	0.24	0.00	0.00	0.00	145.54
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			1	5			g/mile	7.573	41.002	122.248	0.063	0.01635	0.014879	6549.034	0.00	0.01	0.02	0.00	0.00	0.00	1.20
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.465	0.036	0.003	0.006	0.00546	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.005	0.322	0.032	0.003	0.005	0.00455	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						6	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	17.58	3.66	0.00
																Total	0.33	5.82	2.95	0.03	17.59	3.67	2813.20

2015

43 Pavement Demolition	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0374	0.6890	0.3182	0.0030	0.0005	0.0004	324.2220	0.16	2.96	1.37	0.01	0.00	0.00	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0394	0.7100	0.4024	0.0030	0.0006	0.0005	307.1580	0.05	0.91	0.52	0.00	0.00	0.00	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0545	2.1600	0.9119	0.0040	0.0011	0.0010	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1076	2.5320	1.2536	0.0040	0.0027	0.0024	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0478	1.4590	0.6694	0.0030	0.0009	0.0009	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0357	0.6310	0.3545	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0379	0.6420	0.4078	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0370	0.7540	0.3576	0.0030	0.0005	0.0005	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0406	0.7280	0.4095	0.0030	0.0006	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0263	0.7770	0.2193	0.0050	0.0003	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0592	2.6320	1.1017	0.0050	0.0012	0.0011	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	1.489	3.896	6.911	0.03	0.0114	0.010374	3150.079	0.00	0.00	0.00	0.00	0.00	0.00	1.74
	On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	2.24
	On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.182	1.51	2.743	0.016	0.0156	0.014196	1650.466	0.02	0.13	0.24	0.00	0.00	0.00	145.54
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			1	5			g/mile	7.573	41.002	122.248	0.063	0.01635	0.014879	6549.034	0.00	0.01	0.02	0.00	0.00	0.00	1.20
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.465	0.036	0.003	0.006	0.00546	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.005	0.322	0.032	0.003	0.005	0.00455	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						3	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	8.79	1.83	0.00
																Total	0.33	5.82	2.95	0.03	8.80	1.84	2813.20

Mitigated Emission Rates

2015									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
44 Utilities Demolition	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0374	0.6890	0.3182	0.0030	0.0005	0.0004	324.2220	0.16	2.96	1.37	0.01	0.00	0.00	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0394	0.7100	0.4024	0.0030	0.0006	0.0005	307.1580	0.05	0.91	0.52	0.00	0.00	0.00	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0545	2.1600	0.9119	0.0040	0.0011	0.0010	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1076	2.5320	1.2536	0.0040	0.0027	0.0024	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0478	1.4590	0.6694	0.0030	0.0009	0.0009	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0357	0.6310	0.3545	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0379	0.6420	0.4078	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0370	0.7540	0.3576	0.0030	0.0005	0.0005	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0406	0.7280	0.4095	0.0030	0.0006	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0263	0.7770	0.2193	0.0050	0.0003	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0592	2.6320	1.1017	0.0050	0.0012	0.0011	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	1.489	3.896	6.911	0.03	0.0114	0.010374	3150.079	0.00	0.00	0.00	0.00	0.00	0.00	1.74
	On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	2.24
	On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.182	1.51	2.743	0.016	0.0156	0.014196	1650.466	0.02	0.13	0.24	0.00	0.00	0.00	145.54
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			1	5			g/mile	7.573	41.002	122.248	0.063	0.01635	0.014879	6549.034	0.00	0.01	0.02	0.00	0.00	0.00	1.20
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.465	0.036	0.003	0.006	0.00546	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.005	0.322	0.032	0.003	0.005	0.00455	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.059687787	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.17	0.04	0.00
																Total	0.33	5.82	2.95	0.03	0.18	0.04	2813.20

2015									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
45 Rough Fill/Grading	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0374	0.6890	0.3182	0.0030	0.0005	0.0004	324.2220	0.16	2.96	1.37	0.01	0.00	0.00	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0394	0.7100	0.4024	0.0030	0.0006	0.0005	307.1580	0.05	0.91	0.52	0.00	0.00	0.00	394.92
	Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.0545	2.1600	0.9119	0.0040	0.0011	0.0010	318.5340	0.04	1.52	0.64	0.00	0.00	0.00	224.15
	Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.1076	2.5320	1.2536	0.0040	0.0027	0.0024	352.6630	0.08	1.85	0.91	0.00	0.00	0.00	257.13
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0478	1.4590	0.6694	0.0030	0.0009	0.0009	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0357	0.6310	0.3545	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0379	0.6420	0.4078	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0370	0.7540	0.3576	0.0030	0.0005	0.0005	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0406	0.7280	0.4095	0.0030	0.0006	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0263	0.7770	0.2193	0.0050	0.0003	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0592	2.6320	1.1017	0.0050	0.0012	0.0011	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	1.489	3.896	6.911	0.03	0.0114	0.010374	3150.079	0.00	0.00	0.00	0.00	0.00	0.00	1.74
	On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	2.24
	On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.182	1.51	2.743	0.016	0.0156	0.014196	1650.466	0.02	0.13	0.24	0.00	0.00	0.00	145.54
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			1	5			g/mile	7.573	41.002	122.248	0.063	0.01635	0.014879	6549.034	0.00	0.01	0.02	0.00	0.00	0.00	1.20
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.465	0.036	0.003	0.006	0.00546	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.005	0.322	0.032	0.003	0.005	0.00455	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						9	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	26.37	5.49	0.00
																Total	0.53	10.84	5.28	0.04	26.38	5.50	4052.28

Mitigated Emission Rates

46 Surface Fill/Grading	2015								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
c	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0374	0.6890	0.3182	0.0030	0.0005	0.0004	324.2220	0.16	2.96	1.37	0.01	0.00	0.00	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0394	0.7100	0.4024	0.0030	0.0006	0.0005	307.1580	0.05	0.91	0.52	0.00	0.00	0.00	394.92
	Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.0545	2.1600	0.9119	0.0040	0.0011	0.0010	318.5340	0.04	1.52	0.64	0.00	0.00	0.00	224.15
	Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.1076	2.5320	1.2536	0.0040	0.0027	0.0024	352.6630	0.08	1.85	0.91	0.00	0.00	0.00	257.13
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0478	1.4590	0.6694	0.0030	0.0009	0.0009	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0357	0.6310	0.3545	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0379	0.6420	0.4078	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0370	0.7540	0.3576	0.0030	0.0005	0.0005	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0406	0.7280	0.4095	0.0030	0.0006	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0263	0.7770	0.2193	0.0050	0.0003	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0592	2.6320	1.1017	0.0050	0.0012	0.0011	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	1.489	3.896	6.911	0.03	0.0114	0.010374	3150.079	0.00	0.00	0.00	0.00	0.00	0.00	1.74
	On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	2.24
	On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.182	1.51	2.743	0.016	0.0156	0.014196	1650.466	0.02	0.13	0.24	0.00	0.00	0.00	145.54
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			1	5			g/mile	7.573	41.002	122.248	0.063	0.01635	0.014879	6549.034	0.00	0.01	0.02	0.00	0.00	0.00	1.20
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.465	0.036	0.003	0.006	0.00546	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.005	0.322	0.032	0.003	0.005	0.00455	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						9	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	26.37	5.49	0.00
																Total	0.53	10.84	5.28	0.04	26.38	5.50	4052.28

Complete Land Bridge	2015								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
47 Hardscaping	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
d	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0374	0.6890	0.3182	0.0030	0.0005	0.0004	324.2220	0.16	2.96	1.37	0.01	0.00	0.00	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0394	0.7100	0.4024	0.0030	0.0006	0.0005	307.1580	0.05	0.91	0.52	0.00	0.00	0.00	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0545	2.1600	0.9119	0.0040	0.0011	0.0010	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1076	2.5320	1.2536	0.0040	0.0027	0.0024	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0478	1.4590	0.6694	0.0030	0.0009	0.0009	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.09	0.46	0.65	0.00	0.04	0.03	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0357	0.6310	0.3545	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0379	0.6420	0.4078	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0370	0.7540	0.3576	0.0030	0.0005	0.0005	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0406	0.7280	0.4095	0.0030	0.0006	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0263	0.7770	0.2193	0.0050	0.0003	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0592	2.6320	1.1017	0.0050	0.0012	0.0011	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.489	3.896	6.911	0.03	0.0114	0.010374	3150.079	0.00	0.00	0.01	0.00	0.00	0.00	3.47
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.01	0.00	0.00	0.00	4.47
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.182	1.51	2.743	0.016	0.0156	0.014196	1650.466	0.03	0.27	0.48	0.00	0.00	0.00	291.09
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.573	41.002	122.248	0.063	0.01635	0.014879	6549.034	0.00	0.02	0.04	0.00	0.00	0.00	2.41
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.006	0.465	0.036	0.003	0.006	0.00546	337.147	0.00	0.05	0.00	0.00	0.00	0.00	33.45
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.005	0.322	0.032	0.003	0.005	0.00455	305.412	0.00	0.03	0.00	0.00	0.00	0.00	30.30
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						2.893	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	8.48	1.76	0.00
																Total	0.53	8.01	4.64	0.03	8.52	1.80	3742.14

Mitigated Emission Rates

2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
48 Landscaping	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
d																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.61	0.69	0.01	0.00	0.00	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0353	0.6730	0.2803	0.0030	0.0004	0.0004	324.2220	0.15	2.90	1.21	0.01	0.00	0.00	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0372	0.6920	0.3622	0.0030	0.0005	0.0005	307.1580	0.05	0.89	0.47	0.00	0.00	0.00	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0506	2.1440	0.8480	0.0040	0.0010	0.0009	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1012	2.5130	1.1786	0.0040	0.0025	0.0022	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0449	1.4560	0.6109	0.0030	0.0009	0.0008	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.09	0.46	0.63	0.00	0.03	0.03	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.61	0.69	0.01	0.00	0.00	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0338	0.6090	0.3154	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0359	0.6290	0.3639	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0352	0.7250	0.3217	0.0030	0.0005	0.0004	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0386	0.7020	0.3643	0.0030	0.0005	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0242	0.7770	0.1741	0.0050	0.0002	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0532	2.6090	1.0187	0.0050	0.0011	0.0010	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.493	3.911	6.71	0.03	0.01185	0.010784	3150.427	0.00	0.00	0.01	0.00	0.00	0.00	3.47
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.01	0.00	0.00	0.00	4.47
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.182	1.515	2.664	0.016	0.01605	0.014606	1650.736	0.03	0.27	0.47	0.00	0.00	0.00	291.14
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.575	41.012	122.277	0.063	0.01635	0.014879	6550.578	0.00	0.02	0.04	0.00	0.00	0.00	2.41
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.006	0.469	0.036	0.003	0.007	0.00637	337.147	0.00	0.05	0.00	0.00	0.00	0.00	33.45
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.005	0.325	0.032	0.003	0.005	0.00455	305.412	0.00	0.03	0.00	0.00	0.00	0.00	30.30
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						5.978	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	17.52	3.65	0.00
																Total	0.51	7.83	4.21	0.04	17.56	3.68	3742.19

2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
49 Trees	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
d																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.61	0.69	0.01	0.00	0.00	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0353	0.6730	0.2803	0.0030	0.0004	0.0004	324.2220	0.15	2.90	1.21	0.01	0.00	0.00	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0372	0.6920	0.3622	0.0030	0.0005	0.0005	307.1580	0.05	0.89	0.47	0.00	0.00	0.00	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0506	2.1440	0.8480	0.0040	0.0010	0.0009	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1012	2.5130	1.1786	0.0040	0.0025	0.0022	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0449	1.4560	0.6109	0.0030	0.0009	0.0008	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.09	0.46	0.63	0.00	0.03	0.03	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.61	0.69	0.01	0.00	0.00	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0338	0.6090	0.3154	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0359	0.6290	0.3639	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0352	0.7250	0.3217	0.0030	0.0005	0.0004	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0386	0.7020	0.3643	0.0030	0.0005	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0242	0.7770	0.1741	0.0050	0.0002	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0532	2.6090	1.0187	0.0050	0.0011	0.0010	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.493	3.911	6.71	0.03	0.01185	0.010784	3150.427	0.00	0.00	0.01	0.00	0.00	0.00	3.47
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.01	0.00	0.00	0.00	4.47
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.182	1.515	2.664	0.016	0.01605	0.014606	1650.736	0.03	0.27	0.47	0.00	0.00	0.00	291.14
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.575	41.012	122.277	0.063	0.01635	0.014879	6550.578	0.00	0.02	0.04	0.00	0.00	0.00	2.41
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.006	0.469	0.036	0.003	0.007	0.00637	337.147	0.00	0.05	0.00	0.00	0.00	0.00	33.45
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.005	0.325	0.032	0.003	0.005	0.00455	305.412	0.00	0.03	0.00	0.00	0.00	0.00	30.30
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust							lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																Total	0.51	7.83	4.21	0.04	0.04	0.04	3742.19

Mitigated Emission Rates

Off Street Parking Lots — 2015

50 Parking Lot West of Land Bridge and South of A Street

c

Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0374	0.6890	0.3182	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0394	0.7100	0.4024	0.0030	0.0006	0.0005	307.1580	0.05	0.91	0.52	0.00	0.00	0.00	394.92
Vibratory Roller	nonroad	95	0.56	1	6	319.2	1	g/hp-hr	0.0545	2.1600	0.9119	0.0040	0.0011	0.0010	318.5340	0.04	1.52	0.64	0.00	0.00	0.00	224.15
Paving Machine	nonroad	104	0.53	1	6	330.72	1	g/hp-hr	0.1076	2.5320	1.2536	0.0040	0.0027	0.0024	352.6630	0.08	1.85	0.91	0.00	0.00	0.00	257.13
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0478	1.4590	0.6694	0.0030	0.0009	0.0009	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0323	0.6330	0.3166	0.0020	0.0005	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.7730	2.5050	2.3030	0.0030	0.1940	0.1765	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5540	2.7090	3.8080	0.0030	0.2080	0.1893	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0357	0.6310	0.3545	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0379	0.6420	0.4078	0.0030	0.0005	0.0005	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0370	0.7540	0.3576	0.0030	0.0005	0.0005	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.09	1.65	0.78	0.01	0.00	0.00	757.80
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0406	0.7280	0.4095	0.0030	0.0006	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0263	0.7770	0.2193	0.0050	0.0003	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0398	0.7080	0.3328	0.0030	0.0005	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0592	2.6320	1.1017	0.0050	0.0012	0.0011	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.4650	0.0050	0.1190	0.1083	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.489	3.896	6.911	0.03	0.0114	0.010374	3150.079	0.00	0.00	0.01	0.00	0.00	0.00	3.47
On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.01	0.00	0.00	0.00	4.47
On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.182	1.51	2.743	0.016	0.0156	0.014196	1650.466	0.03	0.27	0.48	0.00	0.00	0.00	291.09
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.367	1.496	3.879	0.019	0.0093	0.008463	2028.712	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			2	5			g/mile	7.573	41.002	122.248	0.063	0.01635	0.014879	6549.034	0.00	0.02	0.04	0.00	0.00	0.00	2.41
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.465	0.036	0.003	0.006	0.00546	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.005	0.322	0.032	0.003	0.005	0.00455	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.056	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	3.09	0.64	0.00
															Total	0.49	9.67	4.96	0.03	3.11	0.65	3565.79

Pedestrian Corridor — 2016

51 Demolish concrete pavement

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.61	0.69	0.01	0.00	0.00	757.80
Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0353	0.6730	0.2803	0.0030	0.0004	0.0004	324.2220	0.15	2.90	1.21	0.01	0.00	0.00	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0372	0.6920	0.3622	0.0030	0.0005	0.0005	307.1580	0.05	0.89	0.47	0.00	0.00	0.00	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0506	2.1440	0.8480	0.0040	0.0010	0.0009	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1012	2.5130	1.1786	0.0040	0.0025	0.0022	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0449	1.4560	0.6109	0.0030	0.0009	0.0008	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0338	0.6090	0.3154	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0359	0.6290	0.3639	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0352	0.7250	0.3217	0.0030	0.0005	0.0004	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0386	0.7020	0.3643	0.0030	0.0005	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0242	0.7770	0.1741	0.0050	0.0002	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0532	2.6090	1.0187	0.0050	0.0011	0.0010	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	1.493	3.911	6.71	0.03	0.01185	0.010784	3150.427	0.00	0.00	0.00	0.00	0.00	0.00	1.74
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	2.24
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.182	1.515	2.664	0.016	0.01605	0.014606	1650.736	0.02	0.13	0.23	0.00	0.00	0.00	145.57
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	7.575	41.012	122.277	0.063	0.01635	0.014879	6550.578	0.00	0.01	0.02	0.00	0.00	0.00	1.20
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.469	0.036	0.003	0.007	0.00637	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.005	0.325	0.032	0.003	0.005	0.00455	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						2.176	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	6.38	1.33	0.00
															Total	0.31	5.68	2.64	0.03	6.38	1.33	2813.22

Mitigated Emission Rates

52 Demolish AC pavement	2016								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																						
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.61	0.69	0.01	0.00	0.00	757.80
Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0353	0.6730	0.2803	0.0030	0.0004	0.0004	324.2220	0.15	2.90	1.21	0.01	0.00	0.00	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0372	0.6920	0.3622	0.0030	0.0005	0.0005	307.1580	0.05	0.89	0.47	0.00	0.00	0.00	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0506	2.1440	0.8480	0.0040	0.0010	0.0009	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1012	2.5130	1.1786	0.0040	0.0025	0.0022	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0449	1.4560	0.6109	0.0030	0.0009	0.0008	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0338	0.6090	0.3154	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0359	0.6290	0.3639	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0352	0.7250	0.3217	0.0030	0.0005	0.0004	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0386	0.7020	0.3643	0.0030	0.0005	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0242	0.7770	0.1741	0.0050	0.0002	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0532	2.6090	1.0187	0.0050	0.0011	0.0010	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	1.493	3.911	6.71	0.03	0.01185	0.010784	3150.427	0.00	0.00	0.00	0.00	0.00	0.00	1.74
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	2.24
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.182	1.515	2.664	0.016	0.01605	0.014606	1650.736	0.02	0.13	0.23	0.00	0.00	0.00	145.57
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	7.575	41.012	122.277	0.063	0.01635	0.014879	6550.578	0.00	0.01	0.02	0.00	0.00	0.00	1.20
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.469	0.036	0.003	0.007	0.00637	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.005	0.325	0.032	0.003	0.005	0.00455	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						0.698	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	2.05	0.43	0.00
															Total	0.31	5.68	2.64	0.03	2.05	0.43	2813.22

53 Clear and Grub	2016								Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																						
General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.61	0.69	0.01	0.00	0.00	757.80
Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0353	0.6730	0.2803	0.0030	0.0004	0.0004	324.2220	0.15	2.90	1.21	0.01	0.00	0.00	1395.01
Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0372	0.6920	0.3622	0.0030	0.0005	0.0005	307.1580	0.05	0.89	0.47	0.00	0.00	0.00	394.92
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0506	2.1440	0.8480	0.0040	0.0010	0.0009	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1012	2.5130	1.1786	0.0040	0.0025	0.0022	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0449	1.4560	0.6109	0.0030	0.0009	0.0008	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0338	0.6090	0.3154	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0359	0.6290	0.3639	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0352	0.7250	0.3217	0.0030	0.0005	0.0004	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0386	0.7020	0.3643	0.0030	0.0005	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0242	0.7770	0.1741	0.0050	0.0002	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0532	2.6090	1.0187	0.0050	0.0011	0.0010	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	1		0.25		g/mile	1.493	3.911	6.71	0.03	0.01185	0.010784	3150.427	0.00	0.00	0.00	0.00	0.00	0.00	1.74
On-road Truck - 25 mph	nonroad		0.5	1		0.5		g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	2.24
On-road Truck - 55 mph	nonroad		40	1		40		g/mile	0.182	1.515	2.664	0.016	0.01605	0.014606	1650.736	0.02	0.13	0.23	0.00	0.00	0.00	145.57
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			1	5			g/mile	7.575	41.012	122.277	0.063	0.01635	0.014879	6550.578	0.00	0.01	0.02	0.00	0.00	0.00	1.20
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.469	0.036	0.003	0.007	0.00637	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.005	0.325	0.032	0.003	0.005	0.00455	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						2.176	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	6.38	1.33	0.00
															Total	0.31	5.68	2.64	0.03	6.38	1.33	2813.22

Mitigated Emission Rates

2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
54 New Concrete Pathway	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
c																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.61	0.69	0.01	0.00	0.00	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0353	0.6730	0.2803	0.0030	0.0004	0.0004	324.2220	0.15	2.90	1.21	0.01	0.00	0.00	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0372	0.6920	0.3622	0.0030	0.0005	0.0005	307.1580	0.05	0.89	0.47	0.00	0.00	0.00	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0506	2.1440	0.8480	0.0040	0.0010	0.0009	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1012	2.5130	1.1786	0.0040	0.0025	0.0022	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0449	1.4560	0.6109	0.0030	0.0009	0.0008	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.09	0.46	0.63	0.00	0.03	0.03	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.61	0.69	0.01	0.00	0.00	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0338	0.6090	0.3154	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0359	0.6290	0.3639	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0352	0.7250	0.3217	0.0030	0.0005	0.0004	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0386	0.7020	0.3643	0.0030	0.0005	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	2	8	116.8	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.13	0.44	0.81	0.00	0.03	0.03	106.92
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0242	0.7770	0.1741	0.0050	0.0002	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	1	4	1092.1	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.66	0.71	0.01	0.00	0.00	780.62
	Concrete Pump	nonroad	53	0.74	1	4	156.88	1	g/hp-hr	0.0532	2.6090	1.0187	0.0050	0.0011	0.0010	420.9200	0.02	0.90	0.35	0.00	0.00	0.00	145.58
	Wood Saw	nonroad	10	0.73	2	8	116.8	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.13	0.44	0.81	0.00	0.03	0.03	106.92
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	3		0.75		g/mile	1.493	3.911	6.71	0.03	0.01185	0.010784	3150.427	0.00	0.01	0.01	0.00	0.00	0.00	5.21
	On-road Truck - 25 mph	nonroad		0.5	3		1.5		g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.01	0.00	0.00	0.00	6.71
	On-road Truck - 55 mph	nonroad		40	3		120		g/mile	0.182	1.515	2.664	0.016	0.01605	0.014606	1650.736	0.05	0.40	0.70	0.00	0.00	0.00	436.70
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			3	5			g/mile	7.575	41.012	122.277	0.063	0.01635	0.014879	6550.578	0.00	0.02	0.07	0.00	0.00	0.00	3.61
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.469	0.036	0.003	0.007	0.00637	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.005	0.325	0.032	0.003	0.005	0.00455	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						4.04	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	11.84	2.46	0.00
																Total	0.89	11.49	7.17	0.05	11.94	2.56	5083.97

2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
55 Landscaping	Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
d																							
	General Construction Trucks	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.61	0.69	0.01	0.00	0.00	757.80
	Excavator	nonroad	428	0.57	1	8	1951.7	1	g/hp-hr	0.0353	0.6730	0.2803	0.0030	0.0004	0.0004	324.2220	0.15	2.90	1.21	0.01	0.00	0.00	1395.01
	Loader - Wheel	nonroad	180	0.54	1	6	583.2	1	g/hp-hr	0.0372	0.6920	0.3622	0.0030	0.0005	0.0005	307.1580	0.05	0.89	0.47	0.00	0.00	0.00	394.92
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0506	2.1440	0.8480	0.0040	0.0010	0.0009	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1012	2.5130	1.1786	0.0040	0.0025	0.0022	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0449	1.4560	0.6109	0.0030	0.0009	0.0008	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	1	8	76.96	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.09	0.46	0.63	0.00	0.03	0.03	71.42
	Flatbed Truck	nonroad	310	0.57	1	6	1060.2	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.09	1.61	0.69	0.01	0.00	0.00	757.80
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0338	0.6090	0.3154	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0359	0.6290	0.3639	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0352	0.7250	0.3217	0.0030	0.0005	0.0004	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0386	0.7020	0.3643	0.0030	0.0005	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0242	0.7770	0.1741	0.0050	0.0002	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0532	2.6090	1.0187	0.0050	0.0011	0.0010	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
	On-road Truck - 10 mph	nonroad		0.25	2		0.5		g/mile	1.493	3.911	6.71	0.03	0.01185	0.010784	3150.427	0.00	0.00	0.01	0.00	0.00	0.00	3.47
	On-road Truck - 25 mph	nonroad		0.5	2		1		g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.01	0.00	0.00	0.00	4.47
	On-road Truck - 55 mph	nonroad		40	2		80		g/mile	0.182	1.515	2.664	0.016	0.01605	0.014606	1650.736	0.03	0.27	0.47	0.00	0.00	0.00	291.14
	Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			2	5			g/mile	7.575	41.012	122.277	0.063	0.01635	0.014879	6550.578	0.00	0.02	0.04	0.00	0.00	0.00	2.41
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.006	0.469	0.036	0.003	0.007	0.00637	337.147	0.00	0.05	0.00	0.00	0.00	0.00	33.45
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.005	0.325	0.032	0.003	0.005	0.00455	305.412	0.00	0.03	0.00	0.00	0.00	0.00	30.30
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						1.01	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	2.96	0.62	0.00
																Total	0.51	7.83	4.21	0.04	3.00	0.65	3742.19

Mitigated Emission Rates

Red Car Corridor 2016

56 Construct track and Catenary Wires

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0353	0.6730	0.2803	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0372	0.6920	0.3622	0.0030	0.0005	0.0005	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0506	2.1440	0.8480	0.0040	0.0010	0.0009	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1012	2.5130	1.1786	0.0040	0.0025	0.0022	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0449	1.4560	0.6109	0.0030	0.0009	0.0008	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0338	0.6090	0.3154	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0359	0.6290	0.3639	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0352	0.7250	0.3217	0.0030	0.0005	0.0004	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0386	0.7020	0.3643	0.0030	0.0005	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0242	0.7770	0.1741	0.0050	0.0002	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0532	2.6090	1.0187	0.0050	0.0011	0.0010	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	1.493	3.911	6.71	0.03	0.01185	0.010784	3150.427	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.182	1.515	2.664	0.016	0.01605	0.014606	1650.736	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	7.575	41.012	122.277	0.063	0.01635	0.014879	6550.578	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	14		126		g/mile	0.006	0.469	0.036	0.003	0.007	0.00637	337.147	0.00	0.13	0.01	0.00	0.00	0.00	93.65
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	14		126		g/mile	0.005	0.325	0.032	0.003	0.005	0.00455	305.412	0.00	0.09	0.01	0.00	0.00	0.00	84.84
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.561065197	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	4.57	0.95	0.00
															Total	0.00	0.22	0.02	0.00	4.58	0.96	178.49

2016

57 Construct Stations

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Equipment	Type	Hp	Load Factor	Number Active	Equipment Hrs/Day	Daily Hp-hr	Daily Roudtrip	E.F. Units	Emission Factor (g/hp-hr) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2	Daily Emission Rates (lb/day) ROG	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$	CO_2
General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0353	0.6730	0.2803	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0372	0.6920	0.3622	0.0030	0.0005	0.0005	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0506	2.1440	0.8480	0.0040	0.0010	0.0009	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1012	2.5130	1.1786	0.0040	0.0025	0.0022	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0449	1.4560	0.6109	0.0030	0.0009	0.0008	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0338	0.6090	0.3154	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0359	0.6290	0.3639	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0352	0.7250	0.3217	0.0030	0.0005	0.0004	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0386	0.7020	0.3643	0.0030	0.0005	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0242	0.7770	0.1741	0.0050	0.0002	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0532	2.6090	1.0187	0.0050	0.0011	0.0010	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bldg CuFt / Day	Miles / Trip	Daily Trips	Idling Time	Miles/ Day	Acres Disturbed															
On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	1.493	3.911	6.71	0.03	0.01185	0.010784	3150.427	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.182	1.515	2.664	0.016	0.01605	0.014606	1650.736	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dredge Materials Haul Truck - Composit	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other On-Road Trucks - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Truck - Idle	nonroad			0	5			g/mile	7.575	41.012	122.277	0.063	0.01635	0.014879	6550.578	0.00	0.00	0.00	0.00	0.00	0.00	0.00
On-road Crew Vehicle - 30 mph - Compo	nonroad		9	14		126		g/mile	0.006	0.469	0.036	0.003	0.007	0.00637	337.147	0.00	0.13	0.01	0.00	0.00	0.00	93.65
On-road Crew Vehicle - 55 mph - Compo	nonroad		9	14		126		g/mile	0.005	0.325	0.032	0.003	0.005	0.00455	305.412	0.00	0.09	0.01	0.00	0.00	0.00	84.84
Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Dust	dust						1.561065197	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	4.57	0.95	0.00
															Total	0.00	0.22	0.02	0.00	4.58	0.96	178.49

Mitigated Emission Rates

Development

2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
58 Restaurant space at the waterfront	**Equipment**	**Type**	**Hp**	**Load Factor**	**Number Active**	**Equipment Hrs/Day**	**Daily Hp-hr**	**Daily Roudtrip**	**E.F. Units**	**ROG**	**CO**	**NO_X**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**	**ROG**	**CO**	**NO_X**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
c																							
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0353	0.6730	0.2803	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0372	0.6920	0.3622	0.0030	0.0005	0.0005	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0506	2.1440	0.8480	0.0040	0.0010	0.0009	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1012	2.5130	1.1786	0.0040	0.0025	0.0022	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0449	1.4560	0.6109	0.0030	0.0009	0.0008	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0338	0.6090	0.3154	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0359	0.6290	0.3639	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0352	0.7250	0.3217	0.0030	0.0005	0.0004	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0386	0.7020	0.3643	0.0030	0.0005	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0242	0.7770	0.1741	0.0050	0.0002	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0532	2.6090	1.0187	0.0050	0.0011	0.0010	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	**Miles / Trip**	**Daily Trips**	**Idling Time**	**Miles/ Day**	**Acres Disturbed**															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	1.493	3.911	6.71	0.03	0.01185	0.010784	3150.427	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.182	1.515	2.664	0.016	0.01605	0.014606	1650.736	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	7.575	41.012	122.277	0.063	0.01635	0.014879	6550.578	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	9		81		g/mile	0.006	0.469	0.036	0.003	0.007	0.00637	337.147	0.00	0.08	0.01	0.00	0.00	0.00	60.20
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	9		81		g/mile	0.005	0.325	0.032	0.003	0.005	0.00455	305.412	0.00	0.06	0.01	0.00	0.00	0.00	54.54
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						0.275	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	0.81	0.17	0.00
																Total	**0.00**	**0.14**	**0.01**	**0.00**	**0.81**	**0.17**	**114.74**

2016									Emission Factor (g/hp-hr)							Daily Emission Rates (lb/day)						
59 Light Industrial	**Equipment**	**Type**	**Hp**	**Load Factor**	**Number Active**	**Equipment Hrs/Day**	**Daily Hp-hr**	**Daily Roudtrip**	**E.F. Units**	**ROG**	**CO**	**NO_X**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**	**ROG**	**CO**	**NO_X**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
e																							
	General Construction Trucks	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Excavator	nonroad	428	0.57	0	8	0	1	g/hp-hr	0.0353	0.6730	0.2803	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Loader - Wheel	nonroad	180	0.54	0	6	0	1	g/hp-hr	0.0372	0.6920	0.3622	0.0030	0.0005	0.0005	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Roller	nonroad	95	0.56	0	6	0	1	g/hp-hr	0.0506	2.1440	0.8480	0.0040	0.0010	0.0009	318.5340	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Machine	nonroad	104	0.53	0	6	0	1	g/hp-hr	0.1012	2.5130	1.1786	0.0040	0.0025	0.0022	352.6630	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Hydraulic Crane	nonroad	152	0.43	0	6	0	1	g/hp-hr	0.0449	1.4560	0.6109	0.0030	0.0009	0.0008	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 150 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Crane - 100 ton	nonroad	335	0.43	0	6	0	1	g/hp-hr	0.0307	0.6020	0.2874	0.0020	0.0004	0.0004	244.5890	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Welding Machine	nonroad	26	0.45	0	8	0	1	g/hp-hr	0.6940	2.4300	2.2230	0.0030	0.1750	0.1593	255.9650	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Generator	nonroad	13	0.74	0	8	0	1	g/hp-hr	0.5340	2.6830	3.6880	0.0070	0.1960	0.1784	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Flatbed Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Vibratory Hammer & Power Pack	nonroad	350	0.43	0	6	0	1	g/hp-hr	0.0338	0.6090	0.3154	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Impact Hammer	nonroad	190	0.75	0	6	0	1	g/hp-hr	0.0359	0.6290	0.3639	0.0030	0.0005	0.0004	290.0930	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Front End Loader	nonroad	400	0.55	0	8	0	1	g/hp-hr	0.0352	0.7250	0.3217	0.0030	0.0005	0.0004	307.1580	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dump Truck	nonroad	310	0.57	0	6	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Tug Boat	nonroad	2420	0.43	0	4	0	1	g/hp-hr	0.0700	5.0000	5.9700	0.0060	0.1100	0.1012	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Derrick Barge	nonroad	380	0.43	0	6	0	1	g/hp-hr	0.0386	0.7020	0.3643	0.0030	0.0005	0.0005	355.5980	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Chain Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Drill Hammer	nonroad	291	0.75	0	8	0	1	g/hp-hr	0.0242	0.7770	0.1741	0.0050	0.0002	0.0002	426.6080	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Truck	onroad	479	0.57	0	4	0	1	g/hp-hr	0.0377	0.6900	0.2943	0.0030	0.0004	0.0004	324.2220	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Concrete Pump	nonroad	53	0.74	0	4	0	1	g/hp-hr	0.0532	2.6090	1.0187	0.0050	0.0011	0.0010	420.9200	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Wood Saw	nonroad	10	0.73	0	8	0	1	g/hp-hr	0.5010	1.7100	3.1650	0.0050	0.1180	0.1074	415.2320	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Float Stages	nonroad	0	0	0	8	0	1	g/hp-hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			Bldg CuFt / Day	**Miles / Trip**	**Daily Trips**	**Idling Time**	**Miles/ Day**	**Acres Disturbed**															
	On-road Truck - 10 mph	nonroad		0.25	0		0		g/mile	1.493	3.911	6.71	0.03	0.01185	0.010784	3150.427	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 25 mph	nonroad		0.5	0		0		g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - 55 mph	nonroad		40	0		0		g/mile	0.182	1.515	2.664	0.016	0.01605	0.014606	1650.736	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Dredge Materials Haul Truck - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other On-Road Trucks - Composite	nonroad							g/mile	0.368	1.502	3.768	0.019	0.00945	0.0086	2029.029	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Truck - Idle	nonroad			0	5			g/mile	7.575	41.012	122.277	0.063	0.01635	0.014879	6550.578	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	On-road Crew Vehicle - 30 mph - Compo	nonroad		9	5		45		g/mile	0.006	0.469	0.036	0.003	0.007	0.00637	337.147	0.00	0.05	0.00	0.00	0.00	0.00	33.45
	On-road Crew Vehicle - 55 mph - Compo	nonroad		9	5		45		g/mile	0.005	0.325	0.032	0.003	0.005	0.00455	305.412	0.00	0.03	0.00	0.00	0.00	0.00	30.30
	Building Demolition	demo							lb/Kcf					0.42	0.09		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Fugitive Dust	dust						1.72	lbs/acre/day	0.00	0.00	0.00	0.00	2.93	0.61	0.00	0.00	0.00	0.00	0.00	5.04	1.05	0.00
																Total	**0.00**	**0.08**	**0.01**	**0.00**	**5.04**	**1.05**	**63.75**

Mitigated Emissions by Timeslice

			Daily Emission Rates (lbs/day)						
	Timeslice	Sub-Phase	ROG	CO	NOX	SO2	PM10	PM2.5	CO2
2009	1	2	2	24	44	0	3	1	7,921
		3	1	12	23	0	5	1	4,548
		Total	**4**	**37**	**67**	**0**	**8**	**2**	**12,469**
2010	2	3	1	12	23	0	5	1	4,548
		Total	**1**	**12**	**23**	**0**	**5**	**1**	**4,548**
	3	1	1	10	19	0	5	1	3,790
		4	1	10	19	0	5	1	3,790
		Total	**2**	**20**	**38**	**0**	**10**	**2**	**7,580**
	4	1	1	10	19	0	5	1	3,790
		4	1	10	19	0	5	1	3,790
		6	0	0	0	0	0	0	115
		Total	**2**	**21**	**38**	**0**	**10**	**2**	**7,694**
	5	1	1	10	19	0	5	1	3,790
		6	0	0	0	0	0	0	115
		Total	**1**	**10**	**19**	**0**	**5**	**1**	**3,905**
	6	5	1	10	19	0	0	0	3,739
		6	0	0	0	0	0	0	115
		Total	**1**	**10**	**19**	**0**	**0**	**0**	**3,854**
	7	6	0	0	0	0	0	0	115
		Total	**0**	**0**	**0**	**0**	**0**	**0**	**115**
	8	6	0	0	0	0	0	0	115
		28	5	49	92	0	9	6	4,600
		Total	**5**	**49**	**93**	**0**	**9**	**6**	**4,715**
	9	6	0	0	0	0	0	0	115
		28	5	49	92	0	9	6	4,600
		39	0	0	0	0	5	1	64
		Total	**5**	**49**	**93**	**0**	**14**	**7**	**4,778**
	10	6	0	0	0	0	0	0	115
		7	1	15	27	0	18	4	5,454
		8	1	15	27	0	27	6	5,454
		9	1	15	27	0	0	0	5,454
		10	1	9	17	0	1	0	3,395
		28	5	49	92	0	9	6	4,600
		39	0	0	0	0	5	1	64
		Total	**11**	**102**	**192**	**0**	**59**	**17**	**24,537**
	11	6	0	0	0	0	0	0	115
		8	1	15	27	0	27	6	5,454
		9	1	15	27	0	0	0	5,454
		10	1	9	17	0	1	0	3,395
		28	5	49	92	0	9	6	4,600
		39	0	0	0	0	5	1	64
		Total	**9**	**87**	**164**	**0**	**42**	**13**	**19,082**
2011	12	6	0	0	0	0	0	0	115
		8	1	15	27	0	27	6	5,454
		9	1	15	27	0	0	0	5,454
		10	1	9	17	0	1	0	3,395
		11	1	9	15	0	1	0	3,396
		12	1	9	15	0	0	0	3,396
		13	1	9	15	0	0	0	3,396
		14	1	9	16	0	3	1	2,968
		14b	1	13	24	0	3	1	5,563
		28	5	49	92	0	9	6	4,600
		39	0	0	0	0	5	1	64
		Total	**14**	**135**	**250**	**0**	**48**	**15**	**37,800**

Mitigated Emissions by Timeslice

13	6	0	0	0	0	0	0	115
	8	1	15	27	0	27	6	5,454
	10	1	9	17	0	1	0	3,395
	11	1	9	15	0	1	0	3,396
	12	1	9	15	0	0	0	3,396
	13	1	9	15	0	0	0	3,396
	14b	1	13	24	0	3	1	5,563
	18	1	8	15	0	13	3	2,637
	28	5	49	92	0	9	6	4,600
	37	2	15	17	0	13	3	5,393
	39	0	0	0	0	5	1	64
	Total	**14**	**134**	**239**	**0**	**71**	**19**	**37,408**
14	6	0	0	0	0	0	0	115
	11	1	9	15	0	1	0	3,396
	12	1	9	15	0	0	0	3,396
	13	1	9	15	0	0	0	3,396
	14b	1	13	24	0	3	1	5,563
	18	1	8	15	0	13	3	2,637
	28	5	49	92	0	9	6	4,600
	37	2	15	17	0	13	3	5,393
	39	0	0	0	0	5	1	64
	Total	**11**	**110**	**195**	**0**	**44**	**14**	**28,559**
15	6	0	0	0	0	0	0	115
	11	1	9	15	0	1	0	3,396
	14b	1	13	24	0	3	1	5,563
	18	1	8	15	0	13	3	2,637
	23	1	11	18	0	0	0	3,563
	24	1	11	18	0	0	0	3,563
	28	5	49	92	0	9	6	4,600
	37	2	15	17	0	13	3	5,393
	39	0	0	0	0	5	1	64
	Total	**12**	**115**	**200**	**0**	**44**	**14**	**28,894**
16	6	0	0	0	0	0	0	115
	11	1	9	15	0	1	0	3,396
	18	1	8	15	0	13	3	2,637
	23	1	11	18	0	0	0	3,563
	24	1	11	18	0	0	0	3,563
	28	5	49	92	0	9	6	4,600
	37	2	15	17	0	13	3	5,393
	39	0	0	0	0	5	1	64
	Total	**10**	**102**	**176**	**0**	**41**	**13**	**23,331**
17	6	0	0	0	0	0	0	115
	18	1	8	15	0	13	3	2,637
	23	1	11	18	0	0	0	3,563
	24	1	11	18	0	0	0	3,563
	28	5	49	92	0	9	6	4,600
	37	2	15	17	0	13	3	5,393
	39	0	0	0	0	5	1	64
	Total	**10**	**94**	**160**	**0**	**41**	**13**	**19,936**
18	6	0	0	0	0	0	0	115
	15	1	10	19	0	3	1	3,921
	18	1	8	15	0	13	3	2,637
	23	1	11	18	0	0	0	3,563
	24	1	11	18	0	0	0	3,563
	28	5	49	92	0	9	6	4,600
	37	2	15	17	0	13	3	5,393
	39	0	0	0	0	5	1	64
	Total	**11**	**104**	**179**	**0**	**43**	**13**	**23,856**

Mitigated Emissions by Timeslice

	19	6	0	0	0	0	0	0	115
		15	1	10	19	0	3	1	3,921
		18	1	8	15	0	13	3	2,637
		23	1	11	18	0	0	0	3,563
		24	1	11	18	0	0	0	3,563
		29	2	47	64	0	1	1	4,327
		37	2	15	17	0	13	3	5,393
		39	0	0	0	0	5	1	64
		Total	**8**	**102**	**151**	**0**	**35**	**9**	**23,583**
	20	6	0	0	0	0	0	0	115
		15	1	10	19	0	3	1	3,921
		19	2	15	27	0	13	3	5,390
		20	0	5	8	0	1	0	2,044
		29	2	47	64	0	1	1	4,327
		37	2	15	17	0	13	3	5,393
		39	0	0	0	0	5	1	64
		Total	**7**	**92**	**135**	**0**	**36**	**9**	**21,253**
	21	6	0	0	0	0	0	0	115
		16	1	10	17	0	3	1	4,109
		19	2	15	27	0	13	3	5,390
		20	0	5	8	0	1	0	2,044
		29	2	47	64	0	1	1	4,327
		37	2	15	17	0	13	3	5,393
		39	0	0	0	0	5	1	64
		Total	**7**	**92**	**133**	**0**	**36**	**9**	**21,441**
	22	6	0	0	0	0	0	0	115
		16	1	10	17	0	3	1	4,109
		19	2	15	27	0	13	3	5,390
		20	0	5	8	0	1	0	2,044
		29	2	47	64	0	1	1	4,327
		37	1	13	14	0	13	3	4,763
		39	0	0	0	0	5	1	64
		Total	**6**	**90**	**129**	**0**	**36**	**9**	**20,811**
	23	6	0	0	0	0	0	0	115
		16	1	10	17	0	3	1	4,109
		19	2	15	27	0	13	3	5,390
		20	0	5	8	0	1	0	2,044
		29	2	47	64	0	1	1	4,327
		37	1	9	11	0	13	3	3,924
		39	0	0	0	0	5	1	64
		Total	**6**	**86**	**127**	**0**	**36**	**9**	**19,972**
2012	24	6	0	0	0	0	0	0	115
		16	1	10	17	0	3	1	4,109
		19	2	15	27	0	13	3	5,390
		26	1	11	18	0	2	0	3,563
		27	1	11	18	0	2	0	3,563
		29	2	47	64	0	1	1	4,327
		37	1	9	11	0	13	3	3,924
		39	0	0	0	0	5	1	64
		Total	**8**	**104**	**154**	**0**	**38**	**9**	**25,055**
	25	6	0	0	0	0	0	0	115
		16	1	10	17	0	3	1	4,109
		19	2	15	27	0	13	3	5,390
		26	1	11	18	0	2	0	3,563
		27	1	11	18	0	2	0	3,563
		30	1	45	54	0	1	1	4,137
		37	1	9	11	0	13	3	3,924
		39	0	0	0	0	5	1	64
		Total	**7**	**102**	**144**	**0**	**38**	**9**	**24,865**

Mitigated Emissions by Timeslice

26	6	0	0	0	0	0	0	115
	16	1	10	17	0	3	1	4,109
	19	2	15	27	0	13	3	5,390
	19b	2	17	32	0	13	3	7,264
	26	1	11	18	0	2	0	3,563
	27	1	11	18	0	2	0	3,563
	30	1	45	54	0	1	1	4,137
	37	1	9	11	0	13	3	3,924
	39	0	0	0	0	5	1	64
	Total	**9**	**119**	**176**	**0**	**51**	**12**	**32,130**
27	6	0	0	0	0	0	0	115
	16	1	10	17	0	3	1	4,109
	17	0	5	5	0	3	1	2,003
	26	1	11	18	0	2	0	3,563
	27	1	11	18	0	2	0	3,563
	30	1	45	54	0	1	1	4,137
	37	1	9	11	0	13	3	3,924
	39	0	0	0	0	5	1	64
	Total	**5**	**91**	**123**	**0**	**28**	**7**	**21,479**
28	17	0	5	5	0	3	1	2,003
	26	1	11	18	0	2	0	3,563
	27	1	11	18	0	2	0	3,563
	30	1	45	54	0	1	1	4,137
	37	1	9	11	0	13	3	3,924
	39	0	0	0	0	5	1	64
	Total	**4**	**81**	**106**	**0**	**25**	**6**	**17,255**
29	17	0	5	5	0	3	1	2,003
	21	0	5	6	0	13	3	2,268
	25	1	10	10	0	1	0	3,566
	30	1	45	54	0	1	1	4,137
	37	1	9	11	0	13	3	3,924
	39	0	0	0	0	5	1	64
	40	1	9	10	0	12	3	3,403
	Total	**4**	**84**	**96**	**0**	**47**	**11**	**19,365**
30	17	0	5	5	0	3	1	2,003
	21	0	5	6	0	13	3	2,268
	25	1	10	10	0	1	0	3,566
	31	1	7	9	0	3	1	2,665
	37	1	9	11	0	13	3	3,924
	37	1	9	11	0	13	3	3,924
	39	0	0	0	0	5	1	64
	40	1	9	10	0	12	3	3,403
	Total	**4**	**55**	**63**	**0**	**62**	**13**	**21,817**
31	17	0	5	5	0	3	1	2,003
	21	0	5	6	0	13	3	2,268
	25	1	10	10	0	1	0	3,566
	31	1	7	9	0	3	1	2,665
	39	0	0	0	0	5	1	64
	40	1	9	10	0	12	3	3,403
	Total	**3**	**37**	**40**	**0**	**36**	**8**	**13,968**
32	21	0	5	6	0	13	3	2,268
	25	1	10	10	0	1	0	3,566
	31	1	7	9	0	3	1	2,665
	39	0	0	0	0	5	1	64
	40	1	9	10	0	12	3	3,403
	Total	**3**	**32**	**35**	**0**	**34**	**7**	**11,965**
33	21	0	5	6	0	13	3	2,268
	25	1	10	10	0	1	0	3,566
	31	1	7	9	0	3	1	2,665
	40	1	9	10	0	12	3	3,403
	Total	**3**	**32**	**35**	**0**	**29**	**6**	**11,901**

Mitigated Emissions by Timeslice

	34	22	0	5	6	0	13	3	2,268
		25	1	10	10	0	1	0	3,566
		32	0	2	1	0	1	0	581
		40	1	9	10	0	12	3	3,403
		Total	**2**	**26**	**27**	**0**	**26**	**6**	**9,817**
	35	32	0	2	1	0	1	0	581
		36	0	0	0	0	0	0	229
		40	1	9	10	0	12	3	3,403
		Total	**1**	**11**	**12**	**0**	**13**	**3**	**4,214**
2013	36	33	1	9	10	0	14	3	3,742
		36	0	0	0	0	0	0	229
		40	1	9	10	0	12	3	3,403
		Total	**1**	**18**	**20**	**0**	**26**	**6**	**7,375**
	37	33	1	9	10	0	14	3	3,742
		36	0	0	0	0	0	0	229
		40	1	9	10	0	12	3	3,403
		41	1	8	9	0	21	4	3,722
		Total	**2**	**26**	**29**	**0**	**46**	**10**	**11,097**
	38	33	1	9	10	0	14	3	3,742
		40	1	9	10	0	12	3	3,403
		41	1	8	9	0	21	4	3,722
		Total	**2**	**26**	**29**	**0**	**46**	**10**	**10,867**
	39	34	1	9	10	0	5	1	3,742
		35	1	9	10	0	0	0	3,742
		41	1	8	9	0	21	4	3,722
		Total	**2**	**25**	**28**	**0**	**25**	**5**	**11,206**
	40	34	1	9	10	0	5	1	3,742
		41	1	8	9	0	21	4	3,722
		Total	**1**	**17**	**18**	**0**	**25**	**5**	**7,464**
2014	41	38	0	0	0	0	4	1	115
		41	1	8	9	0	21	4	3,722
		Total	**1**	**8**	**9**	**0**	**24**	**5**	**3,836**
2015	42	38	0	0	0	0	4	1	115
		42	0	6	3	0	18	4	2,813
		43	0	6	3	0	9	2	2,813
		Total	**1**	**12**	**6**	**0**	**30**	**6**	**5,741**
	43	38	0	0	0	0	4	1	115
		44	0	6	3	0	0	0	2,813
		Total	**0**	**6**	**3**	**0**	**4**	**1**	**2,928**
	44	44	0	6	3	0	0	0	2,813
		Total	**0**	**6**	**3**	**0**	**0**	**0**	**2,813**
	45	45	1	11	5	0	26	6	4,052
		50	0	10	5	0	3	1	3,566
		Total	**1**	**21**	**10**	**0**	**29**	**6**	**7,618**
	46	46	1	11	5	0	26	6	4,052
		50	0	10	5	0	3	1	3,566
		Total	**1**	**21**	**10**	**0**	**29**	**6**	**7,618**
	47	47	1	8	5	0	9	2	3,742
		50	0	10	5	0	3	1	3,566
		Total	**1**	**18**	**10**	**0**	**12**	**2**	**7,308**
2016	48	47	1	8	5	0	9	2	3,742
		50	0	10	5	0	3	1	3,566
		51	0	6	3	0	6	1	2,813
		56	0	0	0	0	5	1	178
		59	0	0	0	0	5	1	64
		Total	**1**	**24**	**12**	**0**	**28**	**6**	**10,363**
	49	47	1	8	5	0	9	2	3,742
		50	0	10	5	0	3	1	3,566
		52	0	6	3	0	2	0	2,813
		56	0	0	0	0	5	1	178
		58	0	0	0	0	1	0	115
		59	0	0	0	0	5	1	64
		Total	**1**	**24**	**12**	**0**	**24**	**5**	**10,478**

Mitigated Emissions by Timeslice

	50	47	1	8	5	0	9	2	3,742
		52	0	6	3	0	2	0	2,813
		56	0	0	0	0	5	1	178
		58	0	0	0	0	1	0	115
		59	0	0	0	0	5	1	64
		Total	**1**	**14**	**7**	**0**	**21**	**4**	**6,912**
	51	47	1	8	5	0	9	2	3,742
		53	0	6	3	0	6	1	2,813
		56	0	0	0	0	5	1	178
		58	0	0	0	0	1	0	115
		59	0	0	0	0	5	1	64
		Total	**1**	**14**	**7**	**0**	**25**	**5**	**6,912**
	52	48	1	8	4	0	18	4	3,742
		49	1	8	4	0	0	0	3,742
		53	0	6	3	0	6	1	2,813
		56	0	0	0	0	5	1	178
		58	0	0	0	0	1	0	115
		59	0	0	0	0	5	1	64
		Total	**1**	**22**	**11**	**0**	**34**	**7**	**10,655**
	53	48	1	8	4	0	18	4	3,742
		49	1	8	4	0	0	0	3,742
		54	1	11	7	0	12	3	5,084
		56	0	0	0	0	5	1	178
		57	0	0	0	0	5	1	178
		58	0	0	0	0	1	0	115
		59	0	0	0	0	5	1	64
		Total	**2**	**28**	**16**	**0**	**45**	**9**	**13,104**
	54	48	1	8	4	0	18	4	3,742
		54	1	11	7	0	12	3	5,084
		56	0	0	0	0	5	1	178
		57	0	0	0	0	5	1	178
		58	0	0	0	0	1	0	115
		59	0	0	0	0	5	1	64
		Total	**1**	**20**	**11**	**0**	**45**	**9**	**9,362**
	55	54	1	11	7	0	12	3	5,084
		56	0	0	0	0	5	1	178
		57	0	0	0	0	5	1	178
		58	0	0	0	0	1	0	115
		59	0	0	0	0	5	1	64
		Total	**1**	**12**	**7**	**0**	**27**	**6**	**5,619**
	56	55	1	8	4	0	3	1	3,742
		56	0	0	0	0	5	1	178
		57	0	0	0	0	5	1	178
		58	0	0	0	0	1	0	115
		59	0	0	0	0	5	1	64
		Total	**1**	**8**	**4**	**0**	**18**	**4**	**4,278**
2017	57	58	0	0	0	0	1	0	115
		59	0	0	0	0	5	1	64
		Total	**0**	**0**	**0**	**0**	**6**	**1**	**178**
	58	59	0	0	0	0	5	1	64
		Total	**0**	**0**	**0**	**0**	**5**	**1**	**64**

MAX	**14**	**135**	**250**	**0**	**71**	**19**	**37,800**
Threshold	75	550	100	150	150	55	N/A
Impact?	**No**	**No**	**Yes**	**No**	**No**	**No**	**No**

Onsite Emissions by Subphase and Source Type
Mitigated Project Construction

Subphase ID	Phase	Subphase		Timeslice 12	Timeslice 13	Construction Equipment & Onsite Trucks NOx 1-hr (lb/hr)	PM10 24-hr (lb/day)	PM2.5 24-hr (lb/day)	CO 1-hr (lb/hr)	CO 8-hr (lb/hr)	Tugboats NOx 1-hr (lb/hr)	PM10 24-hr (lb/day)	PM2.5 24-hr (lb/day)	CO 1-hr (lb/hr)	CO 8-hr (lb/hr)	Fugitive Dust PM10 24-hr (lb/day)	PM2.5 24-hr (lb/day)
6	PHASE I	Avalon Boulevard Corridor - North	Red Car Museum in Bekins Building	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	PHASE I	General Site Preparation	Pavement Demolition	1	1	3.98	0.18	0.16	2.12	1.72	0.00	0.00	0.00	0.00	0.00	26.50	5.52
9	PHASE I	General Site Preparation	Utilities Demolition	1		3.98	0.18	0.16	2.12	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	PHASE I	Public Utilities and Infrastructure	Remove and replace ex. 32" SD w/ 48" RCP	1	1	2.27	0.12	0.11	1.23	1.05	0.00	0.00	0.00	0.00	0.00	0.48	0.10
11	PHASE I	Public Utilities and Infrastructure	Realign 12" oil line	1	1	2.19	0.09	0.08	1.09	0.93	0.00	0.00	0.00	0.00	0.00	0.43	0.09
12	PHASE I	Public Utilities and Infrastructure	Realign 12" Sewer	1	1	2.19	0.09	0.08	1.09	0.93	0.00	0.00	0.00	0.00	0.00	0.22	0.04
13	PHASE I	Public Utilities and Infrastructure	Realign 12" Water	1	1	2.19	0.09	0.08	1.09	0.93	0.00	0.00	0.00	0.00	0.00	0.22	0.04
14	PHASE I	Pedestrian Bridge	Piles (& Pile Caps)	1		2.38	0.12	0.11	1.88	1.51	0.00	0.00	0.00	0.00	0.00	2.55	0.53
14b	PHASE I	Pedestrian Bridge	Set Pile Caps	1	1	3.50	0.13	0.11	1.92	1.55	0.00	0.00	0.00	0.00	0.00	2.55	0.53
18	PHASE I	Interim Land Bridge (Rail/Street Tunnel)	Foundation Piles		1	2.57	0.14	0.12	2.21	1.66	0.00	0.00	0.00	0.00	0.00	12.59	2.62
28	PHASE I	Waterfront Promenade	Removal of existing wharf structure & Bulkhead	1	1	3.97	0.28	0.25	2.22	1.72	16.77	4.93	4.53	8.56	4.28	3.94	0.83
37	PHASE I	Observation Tower	Concrete Prep.		1	3.44	0.22	0.20	2.04	1.67	0.00	0.00	0.00	0.00	0.00	12.59	2.62
39	PHASE I	Development	Light Industrial	1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.04	1.05

Onsite Emissions by AERMOD Source
Mitigated Project Construction
Timeslice 12

AERMOD Source	Source Description	Surface Area (m2)	NOx 1-hr (g/s)	PM10 24-hr (g/s)	PM2.5 24-hr (g/s)	CO 1-hr (g/s)	CO 8-hr (g/s)	NOx 1-hr (g/s/m2)	PM10 24-hr (g/s/m2)	PM2.5 24-hr (g/s/m2)	CO 1-hr (g/s/m2)	CO 8-hr (g/s/m2)
BEKINS1	Bekins Building - Exhaust	5,362	1.81E-05	5.21E-07	4.74E-07	2.28E-04	2.28E-04	3.38E-09	9.71E-11	8.84E-11	4.25E-08	4.25E-08
WTR_BRG1	Water (pedestrian) bridge - Exhaust	7,432	7.40E-01	1.28E-03	1.17E-03	4.78E-01	3.86E-01	9.96E-05	1.73E-07	1.57E-07	6.43E-05	5.19E-05
LND_BRG1	Land Bridge (Phase I) - Exhaust	15,743						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WHARF1	Wharf Structure - Exhaust	9,765	5.00E-01	1.45E-03	1.32E-03	2.80E-01	2.17E-01	5.12E-05	1.48E-07	1.35E-07	2.86E-05	2.22E-05
OBS_TWR1	Observation Tower - Exhaust	625						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INDUSTR1	Light Industrial Development - Exhaust	80,171	1.01E-05	2.89E-07	2.63E-07	1.27E-04	1.27E-04	1.26E-10	3.61E-12	3.28E-12	1.58E-09	1.58E-09
STH_END1	South portion of project site - Exhaust	45,062	1.00E+00	1.84E-03	1.67E-03	5.33E-01	4.34E-01	2.23E-05	4.08E-08	3.72E-08	1.18E-05	9.62E-06
AVALON1	Avalon betw. H. Bridges & Water St - Exhaust	9,794	2.86E-01	6.46E-04	5.88E-04	1.55E-01	1.33E-01	2.92E-05	6.59E-08	6.00E-08	1.58E-05	1.36E-05
WATERST1	Water St betw. Fries and Avalon - Exhaust	4,671	8.28E-01	1.38E-03	1.26E-03	4.12E-01	3.53E-01	1.77E-04	2.96E-07	2.69E-07	8.81E-05	7.56E-05
BEKINS2	Bekins Building - Dust	5,362	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WTR_BRG2	Water (pedestrian) bridge - Dust	7,432	0.00E+00	2.68E-02	5.59E-03	0.00E+00	0.00E+00	0.00E+00	3.61E-06	7.51E-07	0.00E+00	0.00E+00
LND_BRG2	Land Bridge (Phase I) - Dust	15,743						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WHARF2	Wharf Structure - Dust	9,765	0.00E+00	2.07E-02	4.34E-03	0.00E+00	0.00E+00	0.00E+00	2.12E-06	4.45E-07	0.00E+00	0.00E+00
OBS_TWR2	Observation Tower - Dust	625						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INDUSTR2	Light Industrial Development - Dust	80,171	0.00E+00	2.65E-02	5.51E-03	0.00E+00	0.00E+00	0.00E+00	3.30E-07	6.87E-08	0.00E+00	0.00E+00
STH_END2	South portion of project site - Dust	45,062	0.00E+00	1.39E-01	2.90E-02	0.00E+00	0.00E+00	0.00E+00	3.09E-06	6.43E-07	0.00E+00	0.00E+00
AVALON2	Avalon betw. H. Bridges & Water St - Dust	9,794	0.00E+00	2.54E-03	5.29E-04	0.00E+00	0.00E+00	0.00E+00	2.60E-07	5.40E-08	0.00E+00	0.00E+00
WATERST2	Water St betw. Fries and Avalon - Dust	4,671	0.00E+00	4.52E-03	9.41E-04	0.00E+00	0.00E+00	0.00E+00	9.68E-07	2.01E-07	0.00E+00	0.00E+00
WHARF3	Wharf Structure - Tugs	9,765	2.11E+00	2.59E-02	2.38E-02	1.08E+00	5.39E-01	2.16E-04	2.65E-06	2.44E-06	1.10E-04	5.52E-05

Onsite Emissions by AERMOD Source
Mitigated Project Construction
Timeslice 13

AERMOD Source	Source Description	Surface Area (m2)	NOx 1-hr (g/s)	PM10 24-hr (g/s)	PM2.5 24-hr (g/s)	CO 1-hr (g/s)	CO 8-hr (g/s)	NOx 1-hr (g/s/m2)	PM10 24-hr (g/s/m2)	PM2.5 24-hr (g/s/m2)	CO 1-hr (g/s/m2)	CO 8-hr (g/s/m2)
BEKINS1	Bekins Building - Exhaust	5,362	1.81E-05	5.21E-07	4.74E-07	2.28E-04	2.28E-04	3.38E-09	9.71E-11	8.84E-11	4.25E-08	4.25E-08
WTR_BRG1	Water (pedestrian) bridge - Exhaust	7,432	4.40E-01	6.60E-04	6.01E-04	2.42E-01	1.95E-01	5.93E-05	8.88E-08	8.08E-08	3.25E-05	2.62E-05
LND_BRG1	Land Bridge (Phase I) - Exhaust	15,743	3.24E-01	7.18E-04	6.54E-04	2.79E-01	2.10E-01	2.06E-05	4.56E-08	4.15E-08	1.77E-05	1.33E-05
WHARF1	Wharf Structure - Exhaust	9,765	5.00E-01	1.45E-03	1.32E-03	2.80E-01	2.17E-01	5.12E-05	1.48E-07	1.35E-07	2.86E-05	2.22E-05
OBS_TWR1	Observation Tower - Exhaust	625	4.33E-01	1.15E-03	1.04E-03	2.57E-01	2.11E-01	6.93E-04	1.84E-06	1.67E-06	4.11E-04	3.37E-04
INDUSTR1	Light Industrial Development - Exhaust	80,171	1.01E-05	2.89E-07	2.63E-07	1.27E-04	1.27E-04	1.26E-10	3.61E-12	3.28E-12	1.58E-09	1.58E-09
STH_END1	South portion of project site - Exhaust	45,062	5.01E-01	9.20E-04	8.37E-04	2.67E-01	2.17E-01	1.11E-05	2.04E-08	1.86E-08	5.92E-06	4.81E-06
AVALON1	Avalon betw. H. Bridges & Water St - Exhaust	9,794	2.86E-01	6.46E-04	5.88E-04	1.55E-01	1.33E-01	2.92E-05	6.59E-08	6.00E-08	1.58E-05	1.36E-05
WATERST1	Water St betw. Fries and Avalon - Exhaust	4,671	8.28E-01	1.38E-03	1.26E-03	4.12E-01	3.53E-01	1.77E-04	2.96E-07	2.69E-07	8.81E-05	7.56E-05
BEKINS2	Bekins Building - Dust	5,362	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WTR_BRG2	Water (pedestrian) bridge - Dust	7,432	0.00E+00	1.34E-02	2.79E-03	0.00E+00	0.00E+00	0.00E+00	1.80E-06	3.76E-07	0.00E+00	0.00E+00
LND_BRG2	Land Bridge (Phase I) - Dust	15,743	0.00E+00	6.61E-02	1.38E-02	0.00E+00	0.00E+00	0.00E+00	4.20E-06	8.74E-07	0.00E+00	0.00E+00
WHARF2	Wharf Structure - Dust	9,765	0.00E+00	2.07E-02	4.34E-03	0.00E+00	0.00E+00	0.00E+00	2.12E-06	4.45E-07	0.00E+00	0.00E+00
OBS_TWR2	Observation Tower - Dust	625	0.00E+00	6.61E-02	1.38E-02	0.00E+00	0.00E+00	0.00E+00	1.06E-04	2.20E-05	0.00E+00	0.00E+00
INDUSTR2	Light Industrial Development - Dust	80,171	0.00E+00	2.65E-02	5.51E-03	0.00E+00	0.00E+00	0.00E+00	3.30E-07	6.87E-08	0.00E+00	0.00E+00
STH_END2	South portion of project site - Dust	45,062	0.00E+00	1.39E-01	2.90E-02	0.00E+00	0.00E+00	0.00E+00	3.09E-06	6.43E-07	0.00E+00	0.00E+00
AVALON2	Avalon betw. H. Bridges & Water St - Dust	9,794	0.00E+00	2.54E-03	5.29E-04	0.00E+00	0.00E+00	0.00E+00	2.60E-07	5.40E-08	0.00E+00	0.00E+00
WATERST2	Water St betw. Fries and Avalon - Dust	4,671	0.00E+00	4.52E-03	9.41E-04	0.00E+00	0.00E+00	0.00E+00	9.68E-07	2.01E-07	0.00E+00	0.00E+00
WHARF3	Wharf Structure - Tugs	9,765	2.11E+00	2.59E-02	2.38E-02	1.08E+00	5.39E-01	2.16E-04	2.65E-06	2.44E-06	1.10E-04	5.52E-05

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Operation Emission Results

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Wilmington Waterfront Existing

Regional Emission Calculations (lbs/day)

	ROC	NOx	CO	SOx	PM10	PM2.5
Existing Condition						
Mobile	9.5	13.3	98.7	0.1	11.6	2.3
Area	1.6	1.7	6.1	0.0	0.0	0.0
Stationary	0.0	1.6	0.3	0.1	0.0	0.0
Total Existing	**11.1**	**16.7**	**105.0**	**0.2**	**11.7**	**2.3**
Project Condition						
Mobile	0.0	0.0	0.0	0.0	0.0	0.0
Area	0.0	0.0	0.0	0.0	0.0	0.0
Stationary	0.0	0.0	0.0	0.0	0.0	0.0
Total Project	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Net Project Emissions						
Net Mobile	-10	-13	-99	0	-12	-2
Net Area	-2	-2	-6	0	0	0
Net Stationary	0	-2	0	0	0	0
Total Net	-11	-17	-105	0	-12	-2
SCAQMD Significance Threshold	55	55	550	150	150	55
Difference	**(66)**	**(72)**	**(655)**	**(150)**	**(162)**	**(57)**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\Day)	CO 0.2	ROC 0.01	NOx 1.15	PM10 0.04	SOx 0.12
					Emissions from Electricity Consumption (lbs/day)				
Existing									
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Retail	0.0	13.55	0	0.000	0.000	0.000	0.000	0.000	0.000
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.30	0	0.000	0.000	0.000	0.000	0.000	0.000
Warehouse	55.0	4.35	239,250	0.655	0.131	0.007	0.754	0.026	0.079
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.50	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.90	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.70	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	10.0	10.50	105,000	0.288	0.058	0.003	0.331	0.012	0.035
Residential (DU)	0.0	5,627	0	0.000	0.000	0.000	0.000	0.000	0.000
Total Existing			**344,250**	**0.943**	**0.19**	**0.01**	**1.09**	**0.04**	**0.11**
Project									
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Retail	0.0	13.55	0	0.000	0.000	0.000	0.000	0.000	0.000
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.3	0	0.000	0.000	0.000	0.000	0.000	0.000
Warehouse	0.0	4.35	0	0.000	0.000	0.000	0.000	0.000	0.000
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.9	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.7	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Residential (DU)	0.0	5,627	0	0.000	0.000	0.000	0.000	0.000	0.000
Total Project			**0**	**0.000**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Net Emissions From Electricity Usage					**-0.19**	**-0.01**	**-1.09**	**-0.04**	**-0.11**

Natural Gas Usage

Land Use	1,000 Sqft	Natural Gas Usage Rate [c] (cu.ft\sq.ft\mo)	Total Natural Gas Usage (cu.ft\mo)	Total Natural Gas Usage (cu.ft\DAY)	CO 20	ROC 5.3	NOx 120/80 [e]	PM10 0.2	SOx 0
					Emissions from Natural Gas Consumption (lbs/day)				
Existing									
Office	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Retail	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Hotel/Motel	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Restaurant	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Food Store	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Warehouse	55.0	2.0	**110,000**	**3,667**	0.073	0.019	0.440	0.001	--
College/University	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
High School	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Elementary School	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Hospital	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Miscellaneous	10.0	2.9	**29,000**	**967**	0.019	0.005	0.116	0.000	--
Residential (Single Family DU)	0.0	6,665	**0**	**0**	0.000	0.000	0.000	0.000	
Residential (Multi-Family DU)	0.0	4,012	**0**	**0**	0.000	0.000	0.000	0.000	--
Total Existing			**139,000**	**4,633**	**0.09**	**0.02**	**0.56**	**0.00**	--
Project									
Office	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Retail	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Hotel/Motel	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Restaurant	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Food Store	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Warehouse	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
College/University	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
High School	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Elementary School	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Hospital	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Miscellaneous	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Residential (Single Family DU)	0.0	6,665	**0**	**0**	0.000	0.000	0.000	0.000	
Residential (Multi-Family DU)	0.0	4,012	**0**	**0**	0.000	0.000	0.000	0.000	--
Total Project			**0**	**0**	**0.00**	**0.00**	**0.00**	**0.00**	--
Net Emissions From Natural Gas Usage					**-0.09**	**-0.02**	**-0.56**	**0.00**	**--**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Existing Emissions (lbs/day)	0.28	0.03	1.64	0.04	0.11
Total Project Emissions (lbs/day)	0.00	0.00	0.00	0.00	0.00
Total Net Emissions (lbs/day)	**-0.28**	**-0.03**	**-1.64**	**-0.04**	**-0.11**

[a] Electricity Usage Rates from Table A9-11-A,CEQA Air Quality Handbook SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B,CEQA Air Quality Handbook SCAQMD, 1993.

[c] Natural Gas Usage Rates from Table A9-12-A,CEQA Air Quality Handbook SCAQMD, 1993.

[d] Emission Factors from Table A9-12-B,CEQA Air Quality Handbook SCAQMD, 1993.

[e] The emission factors for NOx in lbs per million cuft of natural gas are 120 for nonresidential uses and 80 for residential uses.

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\day)	Emission Factors (lbs/MWh) [b] CO_2 878.71	CH_4 0.0067	N_2O 0.0037	CO_2e 21/310[c]
Existing					Emissions from Electricity (lbs/day)			
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000
Retail	0.0	13.55	0	0.000	0.000	0.000	0.000	0.000
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.30	0	0.000	0.000	0.000	0.000	0.000
Warehouse	55.0	4.35	239,250	0.655	575.976	0.004	0.002	576.680
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.50	0	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.90	0	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.70	0	0.000	0.000	0.000	0.000	0.000
Miscellaneous	10.0	10.50	105,000	0.288	252.780	0.002	0.001	253.132
Residential (DU)	0.0	5,627	0	0.000	0.000	0.000	0.000	0.000
Total Existing			**344,250**	**0.943**	**828.76**	**0.01**	**0.00**	**829.81**
Project								
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000
Retail	0.0	13.55	0	0.000	0.000	0.000	0.000	0.000
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.3	0	0.000	0.000	0.000	0.000	0.000
Warehouse	0.0	4.35	0	0.000	0.000	0.000	0.000	0.000
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.9	0	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.7	0	0.000	0.000	0.000	0.000	0.000
Miscellaneous	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000
Residential (DU)	0.0	5,627	0	0.000	0.000	0.000	0.000	0.000
Total Project			**0**	**0.000**	**0.00**	**0.00**	**0.00**	**0.00**
Net Emissions From Electricity Usage					**-828.76**	**-0.01**	**0.00**	**-829.81**

Natural Gas Usage

Land Use	1,000 Sqft	Natural Gas Usage Rate [d] (cu.ft\sq.ft\mo)	Total Natural Gas Usage (cu.ft\mo)	Total Natural Gas Usage (Btu/day)[f]	Emission Factors (kg/MMBtu) [e] CO_2 66.88	CH_4 0.0059	N_2O 0.0001	CO_2e 21/310[c]
Existing					Emissions from Natural Gas (lbs/day)			
Office	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000
Retail	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000
Hotel/Motel	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000
Restaurant	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000
Food Store	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000
Warehouse	55.0	2.0	**110,000**	**3,762,000**	554.688	0.049	0.001	555.973
College/University	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000
High School	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000
Elementary School	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000
Hospital	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000
Miscellaneous	10.0	2.9	**29,000**	**991,800**	146.236	0.013	0.000	146.575
Residential (Single Family DU)	0.0	6,665	**0**	**0**	0.000	0.000	0.000	0.000
Residential (Multi-Family DU)	0.0	4,012	**0**	**0**	0.000	0.000	0.000	0.000
Total Existing			**139,000**	**4,753,800**	**700.92**	**0.06**	**0.00**	**702.55**
Project								
Office	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000
Retail	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000
Hotel/Motel	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000
Restaurant	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000
Food Store	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000
Warehouse	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000
College/University	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000
High School	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000
Elementary School	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000
Hospital	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000
Miscellaneous	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000
Residential (Single Family DU)	0.0	6,665	**0**	**0**	0.000	0.000	0.000	0.000
Residential (Multi-Family DU)	0.0	4,012	**0**	**0**	0.000	0.000	0.000	0.000
Total Project			**0**	**0**	**0.00**	**0.00**	**0.00**	**0.00**
Net Emissions From Natural Gas Usage					**-700.92**	**-0.06**	**0.00**	**-702.55**

Summary of Stationary Emissions

	CO_2	CH_4	N_2O	CO_2e
Total Existing Emissions (lbs/day)	1529.68	0.07	0.00	1532.36
Total Project Emissions (lbs/day)	0.00	0.00	0.00	0.00
Total Net Emissions (lbs/day)	**-1529.68**	**-0.07**	**0.00**	**-1532.36**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table C.2 and Table C.3, General Reporting Protocol, California Climate Action Registry, April 2008.

[c] Global Warming Potential is 21 for CH_4 and 310 for N_2O, General Reporting Protocol, California Climate Action Registry, April 2008.

[d] Natural Gas Usage Rates from Table A9-12-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[e] Emission Factors from Table C.6 and Table C.7, General Reporting Protocol, California Climate Action Registry, March 2007.

[f] 1 Cubic Foot of natural gas = 1,026 Btu. Energy Information Administration. Available http://www.eia.doe.gov/basics/conversion_basics.html

Wilmington Waterfront Existing

Regional Emission Calculations (lbs/day)

	CO_2	CH_4	N_2O	CO_2e
Existing Condition				
Mobile	6,956	1	1	7,434
Area	2,013	-	-	2,013
Stationary	1,530	0	0	1,532
Total Existing	**10,498**	**2**	**1**	**10,979**
Project Condition				
Mobile	-	-	-	-
Area	-	-	-	-
Stationary	-	-	-	-
Total Project	**-**	**-**	**-**	**-**
Net Project Emissions				
Net Mobile	(6,956)	(1)	(1)	(7,434)
Net Area	(2,013)	-	-	(2,013)
Net Stationary	(1,530)	(0)	(0)	(1,532)
Total Net	(10,498)	(2)	(1)	(10,979)
SCAQMD Significance Threshold	--	--	--	--
Difference	**--**	**--**	**--**	**--**
Significant?	**No**	**No**	**No**	**No**

Mobile Sources

Vehicle Type	Percent Type	VMT by Type	Emission Factors [a] CH_4	Emission Factors [a] N_2O	CH_4	N_2O	CO_2e 21/310[b]
	100	6713.31					
Existing					Emissions from Mobile Sources (lbs/day)		
Light Auto	52.0	3490.92	0.06	0.08	0.462	0.616	200.562
Light Truck < 3750 lbs	7.4	496.78	0.11	0.14	0.120	0.153	50.063
Light Truck 3751-5750 lbs	22.6	1517.21	0.11	0.14	0.368	0.468	152.894
Med Truck 5751-8500 lbs	10.5	704.90	0.18	0.09	0.280	0.140	49.232
Lite-Heavy Truck 8501-10,000 lbs	1.7	114.13	0.18	0.09	0.045	0.023	7.971
Lite-Heavy Truck 10,001-14,000 lbs	0.5	33.57	0.18	0.09	0.013	0.007	2.344
Med-Heavy Truck 14,001-33,000 lbs	0.9	60.42	0.08	0.05	0.011	0.007	2.288
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	40.28	0.08	0.05	0.007	0.004	1.526
Other Bus	0.1	6.71	0.08	0.05	0.001	0.001	0.254
Urban Bus	0.1	6.71	0.08	0.05	0.001	0.001	0.254
Motorcycle	2.7	181.26	0.42	0.01	0.168	0.004	4.763
School Bus	0.1	6.71	0.08	0.05	0.001	0.001	0.254
Motor Home	0.8	53.71	0.11	0.14	0.013	0.017	5.412
Total Existing			**1.75**	**1.03**	**1.49**	**1.44**	**477.82**

Vehicle Type	Percent Type	VMT by Type	Emission Factors [a] CH_4	Emission Factors [a] N_2O	CH_4	N_2O	CO_2e 21/310[b]
	0	0					
Project							
Light Auto	0.0	0	0.06	0.08	0.000	0.000	0.000
Light Truck < 3750 lbs	0.0	0	0.11	0.14	0.000	0.000	0.000
Light Truck 3751-5750 lbs	0.0	0	0.11	0.14	0.000	0.000	0.000
Med Truck 5751-8500 lbs	0.0	0	0.18	0.09	0.000	0.000	0.000
Lite-Heavy Truck 8501-10,000 lbs	0.0	0	0.18	0.09	0.000	0.000	0.000
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0	0.18	0.09	0.000	0.000	0.000
Med-Heavy Truck 14,001-33,000 lbs	0.0	0	0.08	0.05	0.000	0.000	0.000
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	0	0.08	0.05	0.000	0.000	0.000
Other Bus	0.0	0	0.08	0.05	0.000	0.000	0.000
Urban Bus	0.0	0	0.08	0.05	0.000	0.000	0.000
Motorcycle	0.0	0	0.42	0.01	0.000	0.000	0.000
School Bus	0.0	0	0.08	0.05	0.000	0.000	0.000
Motor Home	0.0	0	0.11	0.14	0.000	0.000	0.000
Total Project			**1.75**	**1.03**	**0.00**	**0.00**	**0.00**
Net Emissions From Mobile Sources					**-1.49**	**-1.44**	**-477.82**

[a] Emission factors from Table C.5, General Reporting Protocol, California Climate Action Registry, April 2008.

[b] Global Warming Potential is 21 for CH_4 and 310 for N_2O, General Reporting Protocol, California Climate Action Registry, April 2008.

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Wilmington Waterfront (2011)

Regional Emission Calculations (lbs/day)

	ROC	NOx	CO	SOx	PM10	PM2.5
Existing Condition						
Mobile	0.0	0.0	0.0	0.0	0.0	0.0
Area	0.0	0.0	0.0	0.0	0.0	0.0
Stationary	0.0	0.0	0.0	0.0	0.0	0.0
Total Existing	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Project Condition						
Mobile	2.4	3.6	27.3	0.0	4.9	1.0
Area	0.5	0.9	3.9	0.0	0.0	0.0
Stationary	0.0	0.9	0.2	0.1	0.0	0.0
Total Project	**3.0**	**5.4**	**31.4**	**0.1**	**4.9**	**1.0**
Net Project Emissions						
Net Mobile	2.4	3.6	27.3	0.0	4.9	1.0
Net Area	0.5	0.9	3.9	0.0	0.0	0.0
Net Stationary	0.0	0.9	0.2	0.1	0.0	0.0
Total Net	3.0	5.4	31.4	0.1	4.9	1.0
SCAQMD Significance Threshold	55	55	550	150	150	55
Difference	**(52)**	**(50)**	**(519)**	**(150)**	**(145)**	**(54)**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\Day)	CO 0.2	ROC 0.01	NOx 1.15	PM10 0.04	SOx 0.12
					Emissions from Electricity Consumption (lbs/day)				
Existing									
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Retail	0.0	13.55	0	0.000	0.000	0.000	0.000	0.000	0.000
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.30	0	0.000	0.000	0.000	0.000	0.000	0.000
Warehouse	0.0	4.35	0	0.000	0.000	0.000	0.000	0.000	0.000
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.50	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.90	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.70	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	0.0	10.50	0	0.000	0.000	0.000	0.000	0.000	0.000
Residential (DU)	0.0	5,627	0	0.000	0.000	0.000	0.000	0.000	0.000
Total Existing			**0**	**0.000**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Project									
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Retail	0.0	13.55	0	0.000	0.000	0.000	0.000	0.000	0.000
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.3	0	0.000	0.000	0.000	0.000	0.000	0.000
Warehouse	37.5	4.35	163,125	0.447	0.089	0.004	0.514	0.018	0.054
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.9	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.7	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	3.0	10.5	31,500	0.086	0.017	0.001	0.099	0.003	0.010
Residential (DU)	0.0	5,627	0	0.000	0.000	0.000	0.000	0.000	0.000
Total Project			**194,625**	**0.533**	**0.11**	**0.01**	**0.61**	**0.02**	**0.06**
Net Emissions From Electricity Usage					**0.11**	**0.01**	**0.61**	**0.02**	**0.06**

Natural Gas Usage

Land Use	1,000 Sqft	Natural Gas Usage Rate [c] (cu.ft\sq.ft\mo)	Total Natural Gas Usage (cu.ft\mo)	Total Natural Gas Usage (cu.ft\DAY)	CO 20	ROC 5.3	NOx 120/80 [e]	PM10 0.2	SOx 0
					Emissions from Natural Gas Consumption (lbs/day)				
Existing									
Office	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Retail	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Hotel/Motel	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Restaurant	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Food Store	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Warehouse	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
College/University	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
High School	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Elementary School	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Hospital	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Miscellaneous	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Residential (Single Family DU)	0.0	6,665	**0**	**0**	0.000	0.000	0.000	0.000	
Residential (Multi-Family DU)	0.0	4,012	**0**	**0**	0.000	0.000	0.000	0.000	--
Total Existing			**0**	**0**	**0.00**	**0.00**	**0.00**	**0.00**	--
Project									
Office	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Retail	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Hotel/Motel	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Restaurant	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Food Store	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Warehouse	37.5	2.0	**75,000**	**2,500**	0.050	0.013	0.300	0.001	--
College/University	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
High School	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Elementary School	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Hospital	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Miscellaneous	3.0	2.9	**8,700**	**290**	0.006	0.002	0.035	0.000	--
Residential (Single Family DU)	0.0	6,665	**0**	**0**	0.000	0.000	0.000	0.000	
Residential (Multi-Family DU)	0.0	4,012	**0**	**0**	0.000	0.000	0.000	0.000	--
Total Project			**83,700**	**2,790**	**0.06**	**0.01**	**0.33**	**0.00**	--
Net Emissions From Natural Gas Usage					**0.06**	**0.01**	**0.33**	**0.00**	**--**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Existing Emissions (lbs/day)	0.00	0.00	0.00	0.00	0.00
Total Project Emissions (lbs/day)	0.16	0.02	0.95	0.02	0.06
Total Net Emissions (lbs/day)	**0.16**	**0.02**	**0.95**	**0.02**	**0.06**

[a] Electricity Usage Rates from Table A9-11-A,CEQA Air Quality Handbook SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B,CEQA Air Quality Handbook SCAQMD, 1993.

[c] Natural Gas Usage Rates from Table A9-12-A,CEQA Air Quality Handbook SCAQMD, 1993.

[d] Emission Factors from Table A9-12-B,CEQA Air Quality Handbook SCAQMD, 1993.

[e] The emission factors for NOx in lbs per million cuft of natural gas are 120 for nonresidential uses and 80 for residential uses.

Wilmington Waterfront (2011)

Regional Greenhouse Gas Emission Calculations (lbs/day)

	CO_2	CH_4	N_2O	CO_2e
Existing Condition				
Mobile	-	-	-	-
Area	-	-	-	-
Stationary	-	-	-	-
Total Existing	**-**	**-**	**-**	**-**
Project Condition				
Mobile	2,939.77	0.63	0.61	3,142.67
Area	971.94	-	-	971.94
Stationary	890.61	0.04	0.00	892.29
Total Project	**4,802.32**	**0.67**	**0.61**	**5,006.90**
Net Project Emissions				
Net Mobile	2,939.77	0.63	0.61	3,142.67
Net Area	971.94	-	-	971.94
Net Stationary	890.61	0.04	0.00	892.29
Total Net	4,802.32	0.67	0.61	5,006.90
SCAQMD Significance Threshold	--	--	--	--
Difference	**--**	**--**	**--**	**--**
Significant?	**No**	**No**	**No**	**No**

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\day)	Emission Factors (lbs/MWh) [b] CO_2 878.71	CH_4 0.0067	N_2O 0.0037	CO_2e 21/310[c]
Existing					Emissions from Electricity (lbs/day)			
Office	0.0	12.95	-	-	-	-	-	-
Retail	0.0	13.55	-	-	-	-	-	-
Hotel/Motel	0.0	9.95	-	-	-	-	-	-
Restaurant	0.0	47.45	-	-	-	-	-	-
Food Store	0.0	53.30	-	-	-	-	-	-
Warehouse	0.0	4.35	-	-	-	-	-	-
College/University	0.0	11.55	-	-	-	-	-	-
High School	0.0	10.50	-	-	-	-	-	-
Elementary School	0.0	5.90	-	-	-	-	-	-
Hospital	0.0	21.70	-	-	-	-	-	-
Miscellaneous	0.0	10.50	-	-	-	-	-	-
Residential (DU)	0.0	5,627	-	-	-	-	-	-
Total Existing			**-**	**-**	**-**	**-**	**-**	**-**
Project								
Office	0.0	12.95	-	-	-	-	-	-
Retail	0.0	13.55	-	-	-	-	-	-
Hotel/Motel	0.0	9.95	-	-	-	-	-	-
Restaurant	0.0	47.45	-	-	-	-	-	-
Food Store	0.0	53.3	-	-	-	-	-	-
Warehouse	37.5	4.35	163,125.00	0.45	392.71	0.00	0.00	393.39
College/University	0.0	11.55	-	-	-	-	-	-
High School	0.0	10.5	-	-	-	-	-	-
Elementary School	0.0	5.9	-	-	-	-	-	-
Hospital	0.0	21.7	-	-	-	-	-	-
Miscellaneous	3.0	10.5	31,500.00	0.09	75.83	0.00	-	75.86
Residential (DU)	0.0	5,627	-	-	-	-	-	-
Total Project			**194,625.00**	**0.53**	**468.55**	**0.00**	**0.00**	**469.25**
Net Emissions From Electricity Usage					**468.55**	**0.00**	**0.00**	**469.25**

Natural Gas Usage

Land Use	1,000 Sqft	Natural Gas Usage Rate [d] (cu.ft\sq.ft\mo)	Total Natural Gas Usage (cu.ft\mo)	Total Natural Gas Usage (Btu/day)[f]	Emission Factors (kg/MMBtu) [e] CO_2 66.88	CH_4 0.0059	N_2O 0.0001	CO_2e 21/310[c]
Existing					Emissions from Natural Gas (lbs/day)			
Office	0.0	2.0	-	-	-	-	-	-
Retail	0.0	2.9	-	-	-	-	-	-
Hotel/Motel	0.0	4.8	-	-	-	-	-	-
Restaurant	0.0	4.8	-	-	-	-	-	-
Food Store	0.0	2.9	-	-	-	-	-	-
Warehouse	0.0	2.0	-	-	-	-	-	-
College/University	0.0	4.8	-	-	-	-	-	-
High School	0.0	2.9	-	-	-	-	-	-
Elementary School	0.0	2.0	-	-	-	-	-	-
Hospital	0.0	4.8	-	-	-	-	-	-
Miscellaneous	0.0	2.9	-	-	-	-	-	-
Residential (Single Family DU)	0.0	6,665	-	-	-	-	-	-
Residential (Multi-Family DU)	0.0	4,012	-	-	-	-	-	-
Total Existing			**-**	**-**	**-**	**-**	**-**	**-**
Project								
Office	0.0	2.0	-	-	-	-	-	-
Retail	0.0	2.9	-	-	-	-	-	-
Hotel/Motel	0.0	4.8	-	-	-	-	-	-
Restaurant	0.0	4.8	-	-	-	-	-	-
Food Store	0.0	2.9	-	-	-	-	-	-
Warehouse	37.5	2.0	**75,000.00**	**2,565,000.00**	378.20	0.03	0.00	379.07
College/University	0.0	4.8	-	-	-	-	-	-
High School	0.0	2.9	-	-	-	-	-	-
Elementary School	0.0	2.0	-	-	-	-	-	-
Hospital	0.0	4.8	-	-	-	-	-	-
Miscellaneous	3.0	2.9	**8,700.00**	**297,540.00**	43.87	0.00	0.00	43.97
Residential (Single Family DU)	0.0	6,665	-	-	-	-	-	-
Residential (Multi-Family DU)	0.0	4,012	-	-	-	-	-	-
Total Project			**83,700.00**	**2,862,540.00**	**422.07**	**0.04**	**0.00**	**423.04**
Net Emissions From Natural Gas Usage					**422.07**	**0.04**	**0.00**	**423.04**

Summary of Stationary Emissions

	CO_2	CH_4	N_2O	CO_2e
Total Existing Emissions (lbs/day)	-	-	-	-
Total Project Emissions (lbs/day)	890.61	0.04	0.00	892.29
Total Net Emissions (lbs/day)	**890.61**	**0.04**	**0.00**	**892.29**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table C.2 and Table C.3, General Reporting Protocol, California Climate Action Registry, April 2008.

[c] Global Warming Potential is 21 for CH_4 and 310 for N_2O, General Reporting Protocol, California Climate Action Registry, April 2008.

[d] Natural Gas Usage Rates from Table A9-12-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[e] Emission Factors from Table C.6 and Table C.7, General Reporting Protocol, California Climate Action Registry, March 2007.

[f] 1 Cubic Foot of natural gas = 1,026 Btu. Energy Information Administration. Available http://www.eia.doe.gov/basics/conversion_basics.html

Mobile Sources

Vehicle Type	Percent Type 0	VMT by Type 0	Emission Factors [a] CH_4	Emission Factors [a] N_2O	CH_4	N_2O	CO_2e 21/310[b]
Existing					Emissions from Mobile Sources (lbs/day)		
Light Auto	0.0	-	0.06	0.08	-	-	-
Light Truck < 3750 lbs	0.0	-	0.11	0.14	-	-	-
Light Truck 3751-5750 lbs	0.0	-	0.11	0.14	-	-	-
Med Truck 5751-8500 lbs	0.0	-	0.17	0.09	-	-	-
Lite-Heavy Truck 8501-10,000 lbs	0.0	-	0.17	0.09	-	-	-
Lite-Heavy Truck 10,001-14,000 lbs	0.0	-	0.17	0.09	-	-	-
Med-Heavy Truck 14,001-33,000 lbs	0.0	-	0.08	0.05	-	-	-
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	-	0.08	0.05	-	-	-
Other Bus	0.0	-	0.08	0.05	-	-	-
Urban Bus	0.0	-	0.08	0.05	-	-	-
Motorcycle	0.0	-	0.42	0.01	-	-	-
School Bus	0.0	-	0.08	0.05	-	-	-
Motor Home	0.0	-	0.11	0.14	-	-	-
Total Existing			**1.72**	**1.03**	**-**	**-**	**-**

Vehicle Type	Percent Type 100	VMT by Type 2846.57	Emission Factors [a] CH_4	Emission Factors [a] N_2O	CH_4	N_2O	CO_2e 21/310[b]
Project							
Light Auto	51.6	1,468.83	0.06	0.08	0.19	0.26	84.39
Light Truck < 3750 lbs	7.3	207.80	0.11	0.14	0.05	0.06	20.94
Light Truck 3751-5750 lbs	23.0	654.71	0.11	0.14	0.16	0.20	65.98
Med Truck 5751-8500 lbs	10.6	301.74	0.17	0.09	0.11	0.06	20.93
Lite-Heavy Truck 8501-10,000 lbs	1.6	45.55	0.17	0.09	0.02	0.01	3.16
Lite-Heavy Truck 10,001-14,000 lbs	0.5	14.23	0.17	0.09	0.01	0.00	0.99
Med-Heavy Truck 14,001-33,000 lbs	0.9	25.62	0.08	0.05	0.00	0.00	0.97
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	14.23	0.08	0.05	0.00	0.00	0.54
Other Bus	0.1	2.85	0.08	0.05	0.00	0.00	0.11
Urban Bus	0.1	2.85	0.08	0.05	0.00	0.00	0.11
Motorcycle	2.8	79.70	0.42	0.01	0.07	0.00	2.09
School Bus	0.1	2.85	0.08	0.05	0.00	0.00	0.11
Motor Home	0.9	25.62	0.11	0.14	0.01	0.01	2.58
Total Project			**1.72**	**1.03**	**0.63**	**0.61**	**202.90**
Net Emissions From Mobile Sources					**0.63**	**0.61**	**202.90**

[a] Emission factors from Table C.5, General Reporting Protocol, California Climate Action Registry, April 2008.

[b] Global Warming Potential is 21 for CH_4 and 310 for N_2O, General Reporting Protocol, California Climate Action Registry, April 2008.

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Wilmington Waterfront (2015)

Regional Emission Calculations (lbs/day)

	ROC	NOx	CO	SOx	PM10	PM2.5
Existing Condition						
Mobile	0.0	0.0	0.0	0.0	0.0	0.0
Area	0.0	0.0	0.0	0.0	0.0	0.0
Stationary	0.0	0.0	0.0	0.0	0.0	0.0
Total Existing	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Project Condition						
Mobile	16.7	25.9	193.0	0.3	49.1	9.6
Area	1.3	1.4	6.0	0.0	0.0	0.0
Stationary	0.1	4.5	0.8	0.4	0.1	0.1
Total Project	**18.0**	**31.9**	**199.8**	**0.7**	**49.2**	**9.7**
Net Project Emissions						
Net Mobile	16.7	25.9	193.0	0.3	49.1	9.6
Net Area	1.3	1.4	6.0	0.0	0.0	0.0
Net Stationary	0.1	4.5	0.8	0.4	0.1	0.1
Total Net	18.0	31.9	199.8	0.7	49.2	9.7
SCAQMD Significance Threshold	55	55	550	150	150	55
Difference	**(37)**	**(23)**	**(350)**	**(149)**	**(101)**	**(45)**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\Day)	CO 0.2	ROC 0.01	NOx 1.15	PM10 0.04	SOx 0.12
					Emissions from Electricity Consumption (lbs/day)				
Existing									
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Retail	0.0	13.55	0	0.000	0.000	0.000	0.000	0.000	0.000
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.30	0	0.000	0.000	0.000	0.000	0.000	0.000
Warehouse	0.0	4.35	0	0.000	0.000	0.000	0.000	0.000	0.000
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.50	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.90	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.70	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	0.0	10.50	0	0.000	0.000	0.000	0.000	0.000	0.000
Residential (DU)	0.0	5,627	0	0.000	0.000	0.000	0.000	0.000	0.000
Total Existing			**0**	**0.000**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Project									
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Retail	58.0	13.55	785,900	2.153	0.431	0.022	2.476	0.086	0.258
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.3	0	0.000	0.000	0.000	0.000	0.000	0.000
Warehouse	75.0	4.35	326,250	0.894	0.179	0.009	1.028	0.036	0.107
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.9	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.7	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	9.8	10.5	102,375	0.280	0.056	0.003	0.323	0.011	0.034
Residential (DU)	0.0	5,627	0	0.000	0.000	0.000	0.000	0.000	0.000
Total Project			**1,214,525**	**3.327**	**0.67**	**0.03**	**3.83**	**0.13**	**0.40**
Net Emissions From Electricity Usage					**0.67**	**0.03**	**3.83**	**0.13**	**0.40**

Natural Gas Usage

Land Use	1,000 Sqft	Natural Gas Usage Rate [c] (cu.ft\sq.ft\mo)	Total Natural Gas Usage (cu.ft\mo)	Total Natural Gas Usage (cu.ft\DAY)	CO 20	ROC 5.3	NOx 120/80 [e]	PM10 0.2	SOx 0
					Emissions from Natural Gas Consumption (lbs/day)				
Existing									
Office	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Retail	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Hotel/Motel	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Restaurant	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Food Store	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Warehouse	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
College/University	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
High School	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Elementary School	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Hospital	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Miscellaneous	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Residential (Single Family DU)	0.0	6,665	**0**	**0**	0.000	0.000	0.000	0.000	
Residential (Multi-Family DU)	0.0	4,012	**0**	**0**	0.000	0.000	0.000	0.000	--
Total Existing			**0**	**0**	**0.00**	**0.00**	**0.00**	**0.00**	--
Project									
Office	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Retail	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Hotel/Motel	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Restaurant	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Food Store	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Warehouse	75.0	2.0	**150,000**	**5,000**	0.100	0.027	0.600	0.001	--
College/University	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
High School	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Elementary School	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Hospital	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Miscellaneous	9.8	2.9	**28,275**	**943**	0.019	0.005	0.113	0.000	--
Residential (Single Family DU)	0.0	6,665	**0**	**0**	0.000	0.000	0.000	0.000	
Residential (Multi-Family DU)	0.0	4,012	**0**	**0**	0.000	0.000	0.000	0.000	--
Total Project			**178,275**	**5,943**	**0.12**	**0.03**	**0.71**	**0.00**	--
Net Emissions From Natural Gas Usage					**0.12**	**0.03**	**0.71**	**0.00**	--

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Existing Emissions (lbs/day)	0.00	0.00	0.00	0.00	0.00
Total Project Emissions (lbs/day)	0.78	0.07	4.54	0.13	0.40
Total Net Emissions (lbs/day)	**0.78**	**0.07**	**4.54**	**0.13**	**0.40**

[a] Electricity Usage Rates from Table A9-11-A,CEQA Air Quality Handbook SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B,CEQA Air Quality Handbook SCAQMD, 1993.

[c] Natural Gas Usage Rates from Table A9-12-A,CEQA Air Quality Handbook SCAQMD, 1993.

[d] Emission Factors from Table A9-12-B,CEQA Air Quality Handbook SCAQMD, 1993.

[e] The emission factors for NOx in lbs per million cuft of natural gas are 120 for nonresidential uses and 80 for residential uses.

Wilmington Waterfront (2015)

Regional Greenhouse Gas Emission Calculations (lbs/day)

	CO_2	CH_4	N_2O	CO_2e
Existing Condition				
Mobile	-	-	-	-
Area	-	-	-	-
Stationary	-	-	-	-
Total Existing	**-**	**-**	**-**	**-**
Project Condition				
Mobile	29,286.77	4.80	4.87	30,896.75
Area	1,647.48	-	-	1,647.48
Stationary	3,822.85	0.10	0.01	3,829.11
Total Project	**34,757.10**	**4.90**	**4.88**	**36,373.34**
Net Project Emissions				
Net Mobile	29,286.77	4.80	4.87	30,896.75
Net Area	1,647.48	-	-	1,647.48
Net Stationary	3,822.85	0.10	0.01	3,829.11
Total Net	34,757.10	4.90	4.88	36,373.34
SCAQMD Significance Threshold	--	--	--	--
Difference	**--**	**--**	**--**	**--**
Significant?	**No**	**No**	**No**	**No**

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\day)	Emission Factors (lbs/MWh) [b] CO_2 878.71	CH_4 0.0067	N_2O 0.0037	CO_2e 21/310[c]
Existing					Emissions from Electricity (lbs/day)			
Office	0.0	12.95	-	-	-	-	-	-
Retail	0.0	13.55	-	-	-	-	-	-
Hotel/Motel	0.0	9.95	-	-	-	-	-	-
Restaurant	0.0	47.45	-	-	-	-	-	-
Food Store	0.0	53.30	-	-	-	-	-	-
Warehouse	0.0	4.35	-	-	-	-	-	-
College/University	0.0	11.55	-	-	-	-	-	-
High School	0.0	10.50	-	-	-	-	-	-
Elementary School	0.0	5.90	-	-	-	-	-	-
Hospital	0.0	21.70	-	-	-	-	-	-
Miscellaneous	0.0	10.50	-	-	-	-	-	-
Residential (DU)	0.0	5,627	-	-	-	-	-	-
Total Existing			**-**	**-**	**-**	**-**	**-**	**-**
Project								
Office	0.0	12.95	-	-	-	-	-	-
Retail	58.0	13.55	785,900.00	2.15	1,892.00	0.01	0.01	1,894.77
Hotel/Motel	0.0	9.95	-	-	-	-	-	-
Restaurant	0.0	47.45	-	-	-	-	-	-
Food Store	0.0	53.3	-	-	-	-	-	-
Warehouse	75.0	4.35	326,250.00	0.89	785.42	0.01	0.00	786.48
College/University	0.0	11.55	-	-	-	-	-	-
High School	0.0	10.5	-	-	-	-	-	-
Elementary School	0.0	5.9	-	-	-	-	-	-
Hospital	0.0	21.7	-	-	-	-	-	-
Miscellaneous	9.8	10.5	102,375.00	0.28	246.46	0.00	0.00	246.81
Residential (DU)	0.0	5,627	-	-	-	-	-	-
Total Project			**1,214,525.00**	**3.33**	**2,923.88**	**0.02**	**0.01**	**2,928.06**
Net Emissions From Electricity Usage					**2,923.88**	**0.02**	**0.01**	**2,928.06**

Natural Gas Usage

Land Use	1,000 Sqft	Natural Gas Usage Rate [d] (cu.ft\sq.ft\mo)	Total Natural Gas Usage (cu.ft\mo)	Total Natural Gas Usage (Btu/day)[f]	Emission Factors (kg/MMBtu) [e] CO_2 66.88	CH_4 0.0059	N_2O 0.0001	CO_2e 21/310[c]
Existing					Emissions from Natural Gas (lbs/day)			
Office	0.0	2.0	-	-	-	-	-	-
Retail	0.0	2.9	-	-	-	-	-	-
Hotel/Motel	0.0	4.8	-	-	-	-	-	-
Restaurant	0.0	4.8	-	-	-	-	-	-
Food Store	0.0	2.9	-	-	-	-	-	-
Warehouse	0.0	2.0	-	-	-	-	-	-
College/University	0.0	4.8	-	-	-	-	-	-
High School	0.0	2.9	-	-	-	-	-	-
Elementary School	0.0	2.0	-	-	-	-	-	-
Hospital	0.0	4.8	-	-	-	-	-	-
Miscellaneous	0.0	2.9	-	-	-	-	-	-
Residential (Single Family DU)	0.0	6,665	-	-	-	-	-	-
Residential (Multi-Family DU)	0.0	4,012	-	-	-	-	-	-
Total Existing			**-**	**-**	**-**	**-**	**-**	**-**
Project								
Office	0.0	2.0	-	-	-	-	-	-
Retail	0.0	2.9	-	-	-	-	-	-
Hotel/Motel	0.0	4.8	-	-	-	-	-	-
Restaurant	0.0	4.8	-	-	-	-	-	-
Food Store	0.0	2.9	-	-	-	-	-	-
Warehouse	75.0	2.0	**150,000.00**	**5,130,000.00**	756.39	0.07	0.00	758.14
College/University	0.0	4.8	-	-	-	-	-	-
High School	0.0	2.9	-	-	-	-	-	-
Elementary School	0.0	2.0	-	-	-	-	-	-
Hospital	0.0	4.8	-	-	-	-	-	-
Miscellaneous	9.8	2.9	**28,275.00**	**967,005.00**	142.58	0.01	0.00	142.91
Residential (Single Family DU)	0.0	6,665	-	-	-	-	-	-
Residential (Multi-Family DU)	0.0	4,012	-	-	-	-	-	-
Total Project			**178,275.00**	**6,097,005.00**	**898.97**	**0.08**	**0.00**	**901.05**
Net Emissions From Natural Gas Usage					**898.97**	**0.08**	**0.00**	**901.05**

Summary of Stationary Emissions

	CO_2	CH_4	N_2O	CO_2e
Total Existing Emissions (lbs/day)	-	-	-	-
Total Project Emissions (lbs/day)	3,822.85	0.10	0.01	3,829.11
Total Net Emissions (lbs/day)	**3,822.85**	**0.10**	**0.01**	**3,829.11**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table C.2 and Table C.3, General Reporting Protocol, California Climate Action Registry, April 2008.

[c] Global Warming Potential is 21 for CH_4 and 310 for N_2O, General Reporting Protocol, California Climate Action Registry, April 2008.

[d] Natural Gas Usage Rates from Table A9-12-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[e] Emission Factors from Table C.6 and Table C.7, General Reporting Protocol, California Climate Action Registry, March 2007.

[f] 1 Cubic Foot of natural gas = 1,026 Btu. Energy Information Administration. Available http://www.eia.doe.gov/basics/conversion_basics.html

Mobile Sources

Vehicle Type	Percent Type 0	VMT by Type 0	Emission Factors [a] CH_4	Emission Factors [a] N_2O	CH_4	N_2O	CO_2e 21/310[b]
Existing					**Emissions from Mobile Sources (lbs/day)**		
Light Auto	0.0	-	0.05	0.05	-	-	-
Light Truck < 3750 lbs	0.0	-	0.07	0.08	-	-	-
Light Truck 3751-5750 lbs	0.0	-	0.07	0.08	-	-	-
Med Truck 5751-8500 lbs	0.0	-	0.12	0.20	-	-	-
Lite-Heavy Truck 8501-10,000 lbs	0.0	-	0.12	0.20	-	-	-
Lite-Heavy Truck 10,001-14,000 lbs	0.0	-	0.12	0.20	-	-	-
Med-Heavy Truck 14,001-33,000 lbs	0.0	-	0.08	0.05	-	-	-
Heavy-Heavy Truck 33,001-60,000 lbs	0.0	-	0.08	0.05	-	-	-
Other Bus	0.0	-	0.08	0.05	-	-	-
Urban Bus	0.0	-	0.08	0.05	-	-	-
Motorcycle	0.0	-	0.42	0.01	-	-	-
School Bus	0.0	-	0.08	0.05	-	-	-
Motor Home	0.0	-	0.07	0.08	-	-	-
Total Existing			**1.44**	**1.15**	**-**	**-**	**-**

Vehicle Type	Percent Type 100	VMT by Type 28398.46	Emission Factors [a] CH_4	Emission Factors [a] N_2O	CH_4	N_2O	CO_2e 21/310[b]
Project							
Light Auto	50.9	14,454.82	0.05	0.05	1.59	1.59	527.41
Light Truck < 3750 lbs	7.3	2,073.09	0.07	0.08	0.32	0.37	120.06
Light Truck 3751-5750 lbs	23.2	6,588.44	0.07	0.08	1.02	1.16	381.57
Med Truck 5751-8500 lbs	10.8	3,067.03	0.12	0.20	0.81	1.35	436.26
Lite-Heavy Truck 8501-10,000 lbs	1.7	482.77	0.12	0.20	0.13	0.21	68.67
Lite-Heavy Truck 10,001-14,000 lbs	0.5	141.99	0.12	0.20	0.04	0.06	20.20
Med-Heavy Truck 14,001-33,000 lbs	0.9	255.59	0.08	0.05	0.05	0.03	9.68
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	170.39	0.08	0.05	0.03	0.02	6.45
Other Bus	0.1	28.40	0.08	0.05	0.01	0.00	1.08
Urban Bus	0.1	28.40	0.08	0.05	0.01	0.00	1.08
Motorcycle	2.9	823.56	0.42	0.01	0.76	0.02	21.64
School Bus	0.1	28.40	0.08	0.05	0.01	0.00	1.08
Motor Home	0.9	255.59	0.07	0.08	0.04	0.05	14.80
Total Project			**1.44**	**1.15**	**4.80**	**4.87**	**1,609.98**
Net Emissions From Mobile Sources					**4.80**	**4.87**	**1,609.98**

[a] Emission factors from Table C.5, General Reporting Protocol, California Climate Action Registry, April 2008.

[b] Global Warming Potential is 21 for CH_4 and 310 for N_2O, General Reporting Protocol, California Climate Action Registry, April 2008.

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Wilmington Waterfront (2020)

Regional Emission Calculations (lbs/day)

	ROC	NOx	CO	SOx	PM10	PM2.5
Existing Condition						
Mobile	0.0	0.0	0.0	0.0	0.0	0.0
Area	0.0	0.0	0.0	0.0	0.0	0.0
Stationary	0.0	0.0	0.0	0.0	0.0	0.0
Total Existing	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Project Condition						
Mobile	21.7	30.3	242.2	0.5	83.2	16.2
Area	1.9	1.6	7.7	0.0	0.0	0.0
Stationary	0.1	8.3	1.4	0.7	0.2	0.2
Total Project	**23.8**	**40.1**	**251.3**	**1.2**	**83.5**	**16.4**
Net Project Emissions						
Net Mobile	21.7	30.3	242.2	0.5	83.2	16.2
Net Area	1.9	1.6	7.7	0.0	0.0	0.0
Net Stationary	0.1	8.3	1.4	0.7	0.2	0.2
Total Net	23.8	40.1	251.3	1.2	83.5	16.4
SCAQMD Significance Threshold	55	55	550	150	150	55
Difference	**(31)**	**(15)**	**(299)**	**(149)**	**(67)**	**(39)**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\Day)	CO 0.2	ROC 0.01	NOx 1.15	PM10 0.04	SOx 0.12
					Emissions from Electricity Consumption (lbs/day)				
Existing									
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Retail	0.0	13.55	0	0.000	0.000	0.000	0.000	0.000	0.000
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Restaurant	0.0	47.45	0	0.000	0.000	0.000	0.000	0.000	0.000
Food Store	0.0	53.30	0	0.000	0.000	0.000	0.000	0.000	0.000
Warehouse	0.0	4.35	0	0.000	0.000	0.000	0.000	0.000	0.000
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.50	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.90	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.70	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	0.0	10.50	0	0.000	0.000	0.000	0.000	0.000	0.000
Residential (DU)	0.0	5,627	0	0.000	0.000	0.000	0.000	0.000	0.000
Total Existing			**0**	**0.000**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Project									
Office	0.0	12.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Retail	58.0	13.55	785,900	2.153	0.431	0.022	2.476	0.086	0.258
Hotel/Motel	0.0	9.95	0	0.000	0.000	0.000	0.000	0.000	0.000
Restaurant	12.0	47.45	569,400	1.560	0.312	0.016	1.794	0.062	0.187
Food Store	0.0	53.3	0	0.000	0.000	0.000	0.000	0.000	0.000
Warehouse	150.0	4.35	652,500	1.788	0.358	0.018	2.056	0.072	0.215
College/University	0.0	11.55	0	0.000	0.000	0.000	0.000	0.000	0.000
High School	0.0	10.5	0	0.000	0.000	0.000	0.000	0.000	0.000
Elementary School	0.0	5.9	0	0.000	0.000	0.000	0.000	0.000	0.000
Hospital	0.0	21.7	0	0.000	0.000	0.000	0.000	0.000	0.000
Miscellaneous	17.5	10.5	183,225	0.502	0.100	0.005	0.577	0.020	0.060
Residential (DU)	0.0	5,627	0	0.000	0.000	0.000	0.000	0.000	0.000
Total Project			**2,191,025**	**6.003**	**1.20**	**0.06**	**6.90**	**0.24**	**0.72**
Net Emissions From Electricity Usage					**1.20**	**0.06**	**6.90**	**0.24**	**0.72**

Natural Gas Usage

Land Use	1,000 Sqft	Natural Gas Usage Rate [c] (cu.ft\sq.ft\mo)	Total Natural Gas Usage (cu.ft\mo)	Total Natural Gas Usage (cu.ft\DAY)	CO 20	ROC 5.3	NOx 120/80 [e]	PM10 0.2	SOx 0
					Emissions from Natural Gas Consumption (lbs/day)				
Existing									
Office	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Retail	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Hotel/Motel	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Restaurant	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Food Store	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Warehouse	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
College/University	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
High School	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Elementary School	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Hospital	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Miscellaneous	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Residential (Single Family DU)	0.0	6,665	**0**	**0**	0.000	0.000	0.000	0.000	
Residential (Multi-Family DU)	0.0	4,012	**0**	**0**	0.000	0.000	0.000	0.000	--
Total Existing			**0**	**0**	**0.00**	**0.00**	**0.00**	**0.00**	--
Project									
Office	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Retail	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Hotel/Motel	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Restaurant	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Food Store	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Warehouse	150.0	2.0	**300,000**	**10,000**	0.200	0.053	1.200	0.002	--
College/University	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
High School	0.0	2.9	**0**	**0**	0.000	0.000	0.000	0.000	--
Elementary School	0.0	2.0	**0**	**0**	0.000	0.000	0.000	0.000	--
Hospital	0.0	4.8	**0**	**0**	0.000	0.000	0.000	0.000	--
Miscellaneous	17.5	2.9	**50,605**	**1,687**	0.034	0.009	0.202	0.000	--
Residential (Single Family DU)	0.0	6,665	**0**	**0**	0.000	0.000	0.000	0.000	
Residential (Multi-Family DU)	0.0	4,012	**0**	**0**	0.000	0.000	0.000	0.000	--
Total Project			**350,605**	**11,687**	**0.23**	**0.06**	**1.40**	**0.00**	--
Net Emissions From Natural Gas Usage					**0.23**	**0.06**	**1.40**	**0.00**	--

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Existing Emissions (lbs/day)	0.00	0.00	0.00	0.00	0.00
Total Project Emissions (lbs/day)	1.43	0.12	8.31	0.24	0.72
Total Net Emissions (lbs/day)	**1.43**	**0.12**	**8.31**	**0.24**	**0.72**

[a] Electricity Usage Rates from Table A9-11-A,CEQA Air Quality Handbook SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B,CEQA Air Quality Handbook SCAQMD, 1993.

[c] Natural Gas Usage Rates from Table A9-12-A,CEQA Air Quality Handbook SCAQMD, 1993.

[d] Emission Factors from Table A9-12-B,CEQA Air Quality Handbook SCAQMD, 1993.

[e] The emission factors for NOx in lbs per million cuft of natural gas are 120 for nonresidential uses and 80 for residential uses.

Wilmington Waterfront (2020)

Regional Greenhouse Gas Emission Calculations (lbs/day)

	CO_2	CH_4	N_2O	CO_2e
Existing Condition				
Mobile	-	-	-	-
Area	-	-	-	-
Stationary	-	-	-	-
Total Existing	**-**	**-**	**-**	**-**
Project Condition				
Mobile	49,894.16	6.77	7.09	52,234.92
Area	1,789.43	-	-	1,789.43
Stationary	7,042.70	0.19	0.03	7,054.74
Total Project	**58,726.29**	**6.97**	**7.12**	**61,079.08**
Net Project Emissions				
Net Mobile	49,894.16	6.77	7.09	52,234.92
Net Area	1,789.43	-	-	1,789.43
Net Stationary	7,042.70	0.19	0.03	7,054.74
Total Net	58,726.29	6.97	7.12	61,079.08
SCAQMD Significance Threshold	--	--	--	--
Difference	**--**	**--**	**--**	**--**
Significant?	**No**	**No**	**No**	**No**

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\day)	Emission Factors (lbs/MWh) [b] CO_2 878.71	CH_4 0.0067	N_2O 0.0037	CO_2e 21/310[c]
Existing					Emissions from Electricity (lbs/day)			
Office	0.0	12.95	-	-	-	-	-	-
Retail	0.0	13.55	-	-	-	-	-	-
Hotel/Motel	0.0	9.95	-	-	-	-	-	-
Restaurant	0.0	47.45	-	-	-	-	-	-
Food Store	0.0	53.30	-	-	-	-	-	-
Warehouse	0.0	4.35	-	-	-	-	-	-
College/University	0.0	11.55	-	-	-	-	-	-
High School	0.0	10.50	-	-	-	-	-	-
Elementary School	0.0	5.90	-	-	-	-	-	-
Hospital	0.0	21.70	-	-	-	-	-	-
Miscellaneous	0.0	10.50	-	-	-	-	-	-
Residential (DU)	0.0	5,627	-	-	-	-	-	-
Total Existing			**-**	**-**	**-**	**-**	**-**	**-**
Project								
Office	0.0	12.95	-	-	-	-	-	-
Retail	58.0	13.55	785,900.00	2.15	1,892.00	0.01	0.01	1,894.77
Hotel/Motel	0.0	9.95	-	-	-	-	-	-
Restaurant	12.0	47.45	569,400.00	1.56	1,370.79	0.01	0.01	1,372.86
Food Store	0.0	53.3	-	-	-	-	-	-
Warehouse	150.0	4.35	652,500.00	1.79	1,570.85	0.01	0.01	1,573.27
College/University	0.0	11.55	-	-	-	-	-	-
High School	0.0	10.5	-	-	-	-	-	-
Elementary School	0.0	5.9	-	-	-	-	-	-
Hospital	0.0	21.7	-	-	-	-	-	-
Miscellaneous	17.5	10.5	183,225.00	0.50	441.10	0.00	0.00	441.78
Residential (DU)	0.0	5,627	-	-	-	-	-	-
Total Project			**2,191,025.00**	**6.00**	**5,274.73**	**0.04**	**0.02**	**5,282.68**
Net Emissions From Electricity Usage					**5,274.73**	**0.04**	**0.02**	**5,282.68**

Natural Gas Usage

Land Use	1,000 Sqft	Natural Gas Usage Rate [d] (cu.ft\sq.ft\mo)	Total Natural Gas Usage (cu.ft\mo)	Total Natural Gas Usage (Btu/day)[f]	Emission Factors (kg/MMBtu) [e] CO_2 66.88	CH_4 0.0059	N_2O 0.0001	CO_2e 21/310[c]
Existing					Emissions from Natural Gas (lbs/day)			
Office	0.0	2.0	-	-	-	-	-	-
Retail	0.0	2.9	-	-	-	-	-	-
Hotel/Motel	0.0	4.8	-	-	-	-	-	-
Restaurant	0.0	4.8	-	-	-	-	-	-
Food Store	0.0	2.9	-	-	-	-	-	-
Warehouse	0.0	2.0	-	-	-	-	-	-
College/University	0.0	4.8	-	-	-	-	-	-
High School	0.0	2.9	-	-	-	-	-	-
Elementary School	0.0	2.0	-	-	-	-	-	-
Hospital	0.0	4.8	-	-	-	-	-	-
Miscellaneous	0.0	2.9	-	-	-	-	-	-
Residential (Single Family DU)	0.0	6,665	-	-	-	-	-	-
Residential (Multi-Family DU)	0.0	4,012	-	-	-	-	-	-
Total Existing			**-**	**-**	**-**	**-**	**-**	**-**
Project								
Office	0.0	2.0	-	-	-	-	-	-
Retail	0.0	2.9	-	-	-	-	-	-
Hotel/Motel	0.0	4.8	-	-	-	-	-	-
Restaurant	0.0	4.8	-	-	-	-	-	-
Food Store	0.0	2.9	-	-	-	-	-	-
Warehouse	150.0	2.0	**300,000.00**	**10,260,000.00**	1,512.79	0.13	0.00	1,516.29
College/University	0.0	4.8	-	-	-	-	-	-
High School	0.0	2.9	-	-	-	-	-	-
Elementary School	0.0	2.0	-	-	-	-	-	-
Hospital	0.0	4.8	-	-	-	-	-	-
Miscellaneous	17.5	2.9	**50,605.00**	**1,730,691.00**	255.18	0.02	0.00	255.77
Residential (Single Family DU)	0.0	6,665	-	-	-	-	-	-
Residential (Multi-Family DU)	0.0	4,012	-	-	-	-	-	-
Total Project			**350,605.00**	**11,990,691.00**	**1,767.97**	**0.16**	**0.00**	**1,772.06**
Net Emissions From Natural Gas Usage					**1,767.97**	**0.16**	**0.00**	**1,772.06**

Summary of Stationary Emissions

	CO_2	CH_4	N_2O	CO_2e
Total Existing Emissions (lbs/day)	-	-	-	-
Total Project Emissions (lbs/day)	7,042.70	0.19	0.03	7,054.74
Total Net Emissions (lbs/day)	**7,042.70**	**0.19**	**0.03**	**7,054.74**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table C.2 and Table C.3, General Reporting Protocol, California Climate Action Registry, April 2008.

[c] Global Warming Potential is 21 for CH_4 and 310 for N_2O, General Reporting Protocol, California Climate Action Registry, April 2008.

[d] Natural Gas Usage Rates from Table A9-12-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[e] Emission Factors from Table C.6 and Table C.7, General Reporting Protocol, California Climate Action Registry, March 2007.

[f] 1 Cubic Foot of natural gas = 1,026 Btu. Energy Information Administration. Available http://www.eia.doe.gov/basics/conversion_basics.html

Mobile Sources

Vehicle Type	Percent Type	VMT by Type	Emission Factors [a] CH_4	Emission Factors [a] N_2O	CH_4	N_2O	CO_2e 21/310[b]
	100	0					
Existing					Emissions from Mobile Sources (lbs/day)		
Light Auto	50.6	-	0.05	0.04	-	-	-
Light Truck < 3750 lbs	7.2	-	0.06	0.06	-	-	-
Light Truck 3751-5750 lbs	23.3	-	0.06	0.06	-	-	-
Med Truck 5751-8500 lbs	11.0	-	0.12	0.20	-	-	-
Lite-Heavy Truck 8501-10,000 lbs	1.7	-	0.12	0.20	-	-	-
Lite-Heavy Truck 10,001-14,000 lbs	0.5	-	0.12	0.20	-	-	-
Med-Heavy Truck 14,001-33,000 lbs	1.0	-	0.06	0.05	-	-	-
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	-	0.06	0.05	-	-	-
Other Bus	0.1	-	0.06	0.05	-	-	-
Urban Bus	0.1	-	0.06	0.05	-	-	-
Motorcycle	2.9	-	0.09	0.01	-	-	-
School Bus	0.1	-	0.06	0.05	-	-	-
Motor Home	0.9	-	0.06	0.06	-	-	-
Total Existing			**0.98**	**1.08**	**-**	**-**	**-**

Vehicle Type	Percent Type	VMT by Type	Emission Factors [a] CH_4	Emission Factors [a] N_2O	CH_4	N_2O	CO_2e 21/310[b]
	100	48214.12					
Project							
Light Auto	50.6	24,396.34	0.05	0.04	2.69	2.15	723.40
Light Truck < 3750 lbs	7.2	3,471.42	0.06	0.06	0.46	0.46	151.99
Light Truck 3751-5750 lbs	23.3	11,233.89	0.06	0.06	1.49	1.49	491.86
Med Truck 5751-8500 lbs	11.0	5,303.55	0.12	0.20	1.40	2.34	754.39
Lite-Heavy Truck 8501-10,000 lbs	1.7	819.64	0.12	0.20	0.22	0.36	116.59
Lite-Heavy Truck 10,001-14,000 lbs	0.5	241.07	0.12	0.20	0.06	0.11	34.29
Med-Heavy Truck 14,001-33,000 lbs	1.0	482.14	0.06	0.05	0.06	0.05	17.81
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	289.28	0.06	0.05	0.04	0.03	10.69
Other Bus	0.1	48.21	0.06	0.05	0.01	0.01	1.78
Urban Bus	0.1	48.21	0.06	0.05	0.01	0.01	1.78
Motorcycle	2.9	1,398.21	0.09	0.01	0.28	0.03	15.38
School Bus	0.1	48.21	0.06	0.05	0.01	0.01	1.78
Motor Home	0.9	433.93	0.06	0.06	0.06	0.06	19.00
Total Project			**0.98**	**1.08**	**6.77**	**7.09**	**2,340.76**
Net Emissions From Mobile Sources					**6.77**	**7.09**	**2,340.76**

[a] Emission factors from Table C.5, General Reporting Protocol, California Climate Action Registry, April 2008.

[b] Global Warming Potential is 21 for CH_4 and 310 for N_2O, General Reporting Protocol, California Climate Action Registry, April 2008.

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URBEMIS2007 Output Sheets

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: F:\Work\Wilmington Waterfront\Impact Analysis\URBEMIS\ExistingWWF.urb924

Project Name: Existing WWF

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.56	1.74	6.05	0.00	0.02	0.02	2,021.32

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	9.37	10.96	98.69	0.11	11.63	2.29	6,955.74

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	10.93	12.70	104.74	0.11	11.65	2.31	8,977.06

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.12	1.68	1.41	0.00	0.00	0.00	2,012.89
Hearth - No Summer Emissions							
Landscape	0.37	0.06	4.64	0.00	0.02	0.02	8.43
Consumer Products	0.00						
Architectural Coatings	1.07						
TOTALS (lbs/day, unmitigated)	1.56	1.74	6.05	0.00	0.02	0.02	2,021.32

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Government (civic center)	3.04	4.24	37.60	0.04	4.48	0.88	2,672.63
General light industry	5.23	6.70	60.87	0.07	7.12	1.40	4,267.44
General heavy industry	1.10	0.02	0.22	0.00	0.03	0.01	15.67
TOTALS (lbs/day, unmitigated)	9.37	10.96	98.69	0.11	11.63	2.29	6,955.74

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2006 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Government (civic center)		27.92	1000 sq ft	10.00	279.20	2,586.79

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General light industry	6.97	1000 sq ft	55.00	383.35	4,111.43
General heavy industry	0.01	1000 sq ft	118.00	1.18	15.09
				663.73	6,713.31

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	52.0	2.5	97.1	0.4
Light Truck < 3750 lbs	7.4	5.4	90.5	4.1
Light Truck 3751-5750 lbs	22.6	0.9	98.7	0.4
Med Truck 5751-8500 lbs	10.5	1.9	98.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	100.0	0.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.7	81.5	18.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	12.5	75.0	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Government (civic center)				10.0	5.0	85.0
General light industry				50.0	25.0	25.0
General heavy industry				90.0	5.0	5.0

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: F:\Work\Wilmington Waterfront\Impact Analysis\URBEMIS\ExistingWWF.urb924

Project Name: Existing WWF

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.19	1.68	1.41	0.00	0.00	0.00	2,012.89

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	9.53	13.27	95.61	0.10	11.63	2.29	6,318.59

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	10.72	14.95	97.02	0.10	11.63	2.29	8,331.48

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.12	1.68	1.41	0.00	0.00	0.00	2,012.89
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	1.07						
TOTALS (lbs/day, unmitigated)	1.19	1.68	1.41	0.00	0.00	0.00	2,012.89

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Government (civic center)	3.43	5.13	36.65	0.04	4.48	0.88	2,427.12
General light industry	5.62	8.11	58.75	0.06	7.12	1.40	3,877.24
General heavy industry	0.48	0.03	0.21	0.00	0.03	0.01	14.23
TOTALS (lbs/day, unmitigated)	9.53	13.27	95.61	0.10	11.63	2.29	6,318.59

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

7/24/2008 03:12:31 PM

Analysis Year: 2006 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Government (civic center)		27.92	1000 sq ft	10.00	279.20	2,586.79
General light industry		6.97	1000 sq ft	55.00	383.35	4,111.43
General heavy industry		0.01	1000 sq ft	118.00	1.18	15.09
					663.73	6,713.31

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	52.0	2.5	97.1	0.4
Light Truck < 3750 lbs	7.4	5.4	90.5	4.1
Light Truck 3751-5750 lbs	22.6	0.9	98.7	0.4
Med Truck 5751-8500 lbs	10.5	1.9	98.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	100.0	0.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.7	81.5	18.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	12.5	75.0	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)			
Government (civic center)	10.0	5.0	85.0
General light industry	50.0	25.0	25.0
General heavy industry	90.0	5.0	5.0

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: G:\3_Projects_Air Quality\Wilmington Waterfront\Impact Analysis\URBEMIS\Operations\InterimYear2011Operation.urb924

Project Name: Wilmington Waterfront Interim Year 2011 Operations

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.54	0.85	3.89	0.00	0.01	0.01	971.94

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.28	2.99	27.34	0.03	4.91	0.95	2,939.77

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.82	3.84	31.23	0.03	4.92	0.96	3,911.71

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.06	0.81	0.68	0.00	0.00	0.00	966.44
Hearth - No Summer Emissions							
Landscape	0.26	0.04	3.21	0.00	0.01	0.01	5.50
Consumer Products	0.00						
Architectural Coatings	0.22						
TOTALS (lbs/day, unmitigated)	0.54	0.85	3.89	0.00	0.01	0.01	971.94

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
City park	0.05	0.05	0.41	0.00	0.07	0.01	44.51
General light industry	2.23	2.94	26.93	0.03	4.84	0.94	2,895.26
TOTALS (lbs/day, unmitigated)	2.28	2.99	27.34	0.03	4.91	0.95	2,939.77

7/1/2008 12:17:02 PM

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
City park		1.59	acres	3.00	4.77	43.32
General light industry		6.97	1000 sq ft	37.50	261.37	2,803.25
					266.14	2,846.57

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.6	0.8	99.0	0.2
Light Truck < 3750 lbs	7.3	2.7	94.6	2.7
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.6	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	64.3	35.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)			
City park	5.0	2.5	92.5
General light industry	50.0	25.0	25.0

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: G:\3_Projects_Air Quality\Wilmington Waterfront\Impact Analysis\URBEMIS\Operations\InterimYear2011Operation.urb924

Project Name: Wilmington Waterfront Interim Year 2011 Operations

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.28	0.81	0.68	0.00	0.00	0.00	966.44

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.41	3.61	26.01	0.02	4.91	0.95	2,662.61

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.69	4.42	26.69	0.02	4.91	0.95	3,629.05

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.06	0.81	0.68	0.00	0.00	0.00	966.44
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.22						
TOTALS (lbs/day, unmitigated)	0.28	0.81	0.68	0.00	0.00	0.00	966.44

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
City park	0.04	0.06	0.39	0.00	0.07	0.01	40.29
General light industry	2.37	3.55	25.62	0.02	4.84	0.94	2,622.32
TOTALS (lbs/day, unmitigated)	2.41	3.61	26.01	0.02	4.91	0.95	2,662.61

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Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
City park		1.59	acres	3.00	4.77	43.32
General light industry		6.97	1000 sq ft	37.50	261.37	2,803.25
					266.14	2,846.57

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.6	0.8	99.0	0.2
Light Truck < 3750 lbs	7.3	2.7	94.6	2.7
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.6	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	64.3	35.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)			
City park	5.0	2.5	92.5
General light industry	50.0	25.0	25.0

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: G:\3_Projects_Air Quality\Wilmington Waterfront\Impact Analysis\URBEMIS\Phase1Operation.urb924

Project Name: Wilmington Waterfront Phase I Operations

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.27	1.43	5.96	0.00	0.01	0.01	1,647.48

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	15.09	21.58	193.02	0.29	49.06	9.55	29,286.77

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	16.36	23.01	198.98	0.29	49.07	9.56	30,934.25

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.10	1.37	1.15	0.00	0.00	0.00	1,639.24
Hearth - No Summer Emissions							
Landscape	0.39	0.06	4.81	0.00	0.01	0.01	8.24
Consumer Products	0.00						
Architectural Coatings	0.78						
TOTALS (lbs/day, unmitigated)	1.27	1.43	5.96	0.00	0.01	0.01	1,647.48

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
City park	0.28	0.34	3.01	0.00	0.77	0.15	458.12
Strip mall	11.55	17.02	151.05	0.23	38.60	7.51	23,020.04
General light industry	3.26	4.22	38.96	0.06	9.69	1.89	5,808.61
TOTALS (lbs/day, unmitigated)	15.09	21.58	193.02	0.29	49.06	9.55	29,286.77

4/29/2008 11:24:06 AM

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
City park		5.02	acres	9.75	48.94	444.54
Strip mall		42.94	1000 sq ft	58.00	2,490.52	22,347.43
General light industry		6.97	1000 sq ft	75.00	522.75	5,606.49
					3,062.21	28,398.46

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	50.9	0.2	99.6	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.2	0.0	100.0	0.0
Med Truck 5751-8500 lbs	10.8	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.9	48.3	51.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
City park				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General light industry				50.0	25.0	25.0

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: G:\3_Projects_Air Quality\Wilmington Waterfront\Impact Analysis\URBEMIS\Phase1Operation.urb924

Project Name: Wilmington Waterfront Phase I Operations

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.88	1.37	1.15	0.00	0.00	0.00	1,639.24

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	16.68	25.94	183.03	0.24	49.06	9.55	26,496.47

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	17.56	27.31	184.18	0.24	49.06	9.55	28,135.71

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.10	1.37	1.15	0.00	0.00	0.00	1,639.24
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.78						
TOTALS (lbs/day, unmitigated)	0.88	1.37	1.15	0.00	0.00	0.00	1,639.24

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
City park	0.28	0.41	2.86	0.00	0.77	0.15	414.44
Strip mall	12.96	20.45	143.62	0.19	38.60	7.51	20,824.29
General light industry	3.44	5.08	36.55	0.05	9.69	1.89	5,257.74
TOTALS (lbs/day, unmitigated)	16.68	25.94	183.03	0.24	49.06	9.55	26,496.47

4/29/2008 11:23:57 AM

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
City park		5.02	acres	9.75	48.94	444.54
Strip mall		42.94	1000 sq ft	58.00	2,490.52	22,347.43
General light industry		6.97	1000 sq ft	75.00	522.75	5,606.49
					3,062.21	28,398.46

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	50.9	0.2	99.6	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.2	0.0	100.0	0.0
Med Truck 5751-8500 lbs	10.8	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.9	48.3	51.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)			
City park	5.0	2.5	92.5
Strip mall	2.0	1.0	97.0
General light industry	50.0	25.0	25.0

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: G:\3_Projects_Air Quality\Wilmington Waterfront\Impact Analysis\URBEMIS\FullBuildOutOperations.urb924

Project Name: Wilmington Waterfront Full Build Out Operations

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.92	1.55	7.65	0.00	0.02	0.02	1,789.43

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	19.75	25.21	242.20	0.51	83.22	16.16	49,894.16

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	21.67	26.76	249.85	0.51	83.24	16.18	51,683.59

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.11	1.48	1.24	0.00	0.00	0.00	1,778.44
Hearth - No Summer Emissions							
Landscape	0.52	0.07	6.41	0.00	0.02	0.02	10.99
Consumer Products	0.00						
Architectural Coatings	1.29						
TOTALS (lbs/day, unmitigated)	1.92	1.55	7.65	0.00	0.02	0.02	1,789.43

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
City park	0.39	0.42	3.98	0.01	1.37	0.27	822.48
High turnover (sit-down) rest.	5.40	7.26	69.27	0.15	23.92	4.64	14,326.01
Strip mall	8.90	11.72	111.47	0.23	38.57	7.49	23,092.20
General light industry	5.06	5.81	57.48	0.12	19.36	3.76	11,653.47
TOTALS (lbs/day, unmitigated)	19.75	25.21	242.20	0.51	83.22	16.16	49,894.16

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Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
City park		5.02	acres	17.45	87.60	795.62
High turnover (sit-down) rest.		127.15	1000 sq ft	12.00	1,525.80	13,858.08
Strip mall		42.94	1000 sq ft	58.00	2,490.52	22,347.43
General light industry		6.97	1000 sq ft	150.00	1,045.50	11,212.99
					5,149.42	48,214.12

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	50.6	0.0	100.0	0.0
Light Truck < 3750 lbs	7.2	0.0	98.6	1.4
Light Truck 3751-5750 lbs	23.3	0.0	100.0	0.0
Med Truck 5751-8500 lbs	11.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.9	41.4	58.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)			
City park	5.0	2.5	92.5
High turnover (sit-down) rest.	5.0	2.5	92.5
Strip mall	2.0	1.0	97.0
General light industry	50.0	25.0	25.0

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: G:\3_Projects_Air Quality\Wilmington Waterfront\Impact Analysis\URBEMIS\FullBuildOutOperations.urb924

Project Name: Wilmington Waterfront Full Build Out Operations

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.40	1.48	1.24	0.00	0.00	0.00	1,778.44

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	21.74	30.28	228.16	0.42	83.22	16.16	45,111.57

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	23.14	31.76	229.40	0.42	83.22	16.16	46,890.01

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.11	1.48	1.24	0.00	0.00	0.00	1,778.44
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	1.29						
TOTALS (lbs/day, unmitigated)	1.40	1.48	1.24	0.00	0.00	0.00	1,778.44

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
City park	0.39	0.50	3.75	0.01	1.37	0.27	743.56
High turnover (sit-down) rest.	6.11	8.72	65.40	0.12	23.92	4.64	12,951.36
Strip mall	9.95	14.07	105.35	0.19	38.57	7.49	20,875.45
General light industry	5.29	6.99	53.66	0.10	19.36	3.76	10,541.20
TOTALS (lbs/day, unmitigated)	21.74	30.28	228.16	0.42	83.22	16.16	45,111.57

4/29/2008 11:22:29 AM

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
City park		5.02	acres	17.45	87.60	795.62
High turnover (sit-down) rest.		127.15	1000 sq ft	12.00	1,525.80	13,858.08
Strip mall		42.94	1000 sq ft	58.00	2,490.52	22,347.43
General light industry		6.97	1000 sq ft	150.00	1,045.50	11,212.99
					5,149.42	48,214.12

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	50.6	0.0	100.0	0.0
Light Truck < 3750 lbs	7.2	0.0	98.6	1.4
Light Truck 3751-5750 lbs	23.3	0.0	100.0	0.0
Med Truck 5751-8500 lbs	11.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.7	0.0	82.4	17.6
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.0	0.0	20.0	80.0
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.9	41.4	58.6	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)			
City park	5.0	2.5	92.5
High turnover (sit-down) rest.	5.0	2.5	92.5
Strip mall	2.0	1.0	97.0
General light industry	50.0	25.0	25.0

Emfac2007 Emission Factors

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Title : Los Angeles County Avg Annual All CYrs 2009 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 11:33:35
Scen Year: 2009 -- All model years in the range 1965 to 2009 selected
Season : Annual
Area : Los Angeles
****

Year: 2009 -- Model Years 1965 to 2009 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	12.541	0.574
10	0.289	7.776	0.631
25	0.115	1.683	0.187
30	0.094	1.352	0.151
55	0.073	0.978	0.114

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	46.902	2.146
10	4.399	22.618	5.232
25	3.05	10.219	3.378
30	2.787	8.579	3.052
55	2.241	5.738	2.401

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	103.478	4.734
10	0.375	29.578	1.711
25	0.284	17.768	1.084
30	0.269	17.207	1.044
55	0.265	16.77	1.02

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6312.903	288.784
10	724.634	3096.795	833.149
25	391.169	1980.264	463.862
30	343.095	1861.875	412.571
55	310.863	1609.255	370.258

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.06	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.004
30	0.003	0.018	0.004
55	0.003	0.015	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	1.884	0.086
10	0.033	2.012	0.123
25	0.013	0.766	0.047
30	0.01	0.655	0.04
55	0.007	0.653	0.037

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.035	0.009
25	0.008	0.035	0.009
30	0.008	0.035	0.009
55	0.008	0.035	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.108	4.612	12.092
25	22.392	11.285	22.368
30	25.525	13.628	25.499
55	28.235	15.355	28.207

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	27.71	3.184	4.129
25	27.71	4.935	5.811
30	27.71	5.238	6.103
55	27.71	6.064	6.897

Title : Los Angeles County Avg Annual All CYrs 2009 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 11:33:35
Scen Year: 2010 -- All model years in the range 1966 to 2010 selected
Season : Annual
Area : Los Angeles
****

Year: 2010 -- Model Years 1966 to 2010 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	11.967	0.561
10	0.246	7.225	0.573
25	0.097	1.564	0.166
30	0.079	1.258	0.134
55	0.061	0.903	0.1

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	46.283	2.169
10	3.93	20.692	4.715
25	2.754	9.253	3.058
30	2.518	7.792	2.765
55	1.991	5.314	2.147

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	105.673	4.953
10	0.337	27.282	1.6
25	0.254	16.327	1.007
30	0.24	15.771	0.968
55	0.235	15.255	0.939

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6341.961	297.232
10	722.868	3103.352	834.435
25	390.175	1986.225	464.978
30	342.212	1867.83	413.714
55	310.055	1614.326	371.183

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.061	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.015	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	1.718	0.081
10	0.033	1.795	0.116
25	0.013	0.686	0.044
30	0.01	0.588	0.037
55	0.007	0.604	0.035

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.035	0.009
25	0.008	0.035	0.009
30	0.008	0.035	0.009
55	0.008	0.035	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.148	4.611	12.133
25	22.47	11.283	22.447
30	25.614	13.626	25.59
55	28.331	15.353	28.305

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	27.746	3.184	3.985
25	27.746	4.935	5.678
30	27.746	5.238	5.972
55	27.746	6.064	6.77

Title : Los Angeles County Avg Annual All CYrs 2009 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 11:33:35
Scen Year: 2011 -- All model years in the range 1967 to 2011 selected
Season : Annual
Area : Los Angeles
****

Year: 2011 -- Model Years 1967 to 2011 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	11.43	0.545
10	0.211	6.631	0.517
25	0.082	1.438	0.147
30	0.067	1.16	0.119
55	0.051	0.825	0.088

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	45.685	2.178
10	3.524	18.678	4.246
25	2.493	8.268	2.768
30	2.281	6.989	2.505
55	1.777	4.871	1.925

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	107.71	5.136
10	0.303	24.88	1.475
25	0.227	14.833	0.924
30	0.214	14.289	0.885
55	0.209	13.705	0.852

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6368.055	303.651
10	721.367	3109.241	835.229
25	389.328	1991.58	465.729
30	341.46	1873.18	414.497
55	309.366	1618.88	371.808

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.061	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.015	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	1.557	0.074
10	0.033	1.577	0.107
25	0.013	0.607	0.041
30	0.01	0.522	0.035
55	0.008	0.555	0.034

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.035	0.009
25	0.008	0.035	0.009
30	0.008	0.035	0.009
55	0.008	0.035	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.183	4.619	12.169
25	22.538	11.302	22.517
30	25.692	13.648	25.67
55	28.415	15.378	28.39

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	27.788	3.184	3.864
25	27.788	4.935	5.566
30	27.788	5.238	5.861
55	27.788	6.064	6.663

Title : Los Angeles County Avg Annual All CYrs 2009 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 11:33:35
Scen Year: 2012 -- All model years in the range 1968 to 2012 selected
Season : Annual
Area : Los Angeles
****

Year: 2012 -- Model Years 1968 to 2012 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	10.935	0.532
10	0.182	6.014	0.466
25	0.07	1.309	0.131
30	0.057	1.059	0.106
55	0.043	0.745	0.077

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	45.125	2.196
10	3.168	16.653	3.824
25	2.262	7.299	2.507
30	2.071	6.198	2.272
55	1.59	4.425	1.728

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	109.606	5.334
10	0.273	22.473	1.353
25	0.204	13.345	0.843
30	0.192	12.815	0.806
55	0.186	12.174	0.769

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6392.797	311.086
10	720.103	3114.823	836.635
25	388.614	1996.655	466.865
30	340.825	1878.251	415.639
55	308.785	1623.198	372.747

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.061	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	1.404	0.068
10	0.034	1.365	0.099
25	0.013	0.531	0.038
30	0.01	0.46	0.032
55	0.008	0.504	0.032

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.035	0.009
25	0.008	0.035	0.009
30	0.008	0.035	0.009
55	0.008	0.035	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.213	4.633	12.2
25	22.596	11.335	22.577
30	25.76	13.688	25.739
55	28.487	15.42	28.464

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	27.839	3.184	3.758
25	27.839	4.935	5.468
30	27.839	5.238	5.765
55	27.839	6.064	6.571

Title : Los Angeles County Avg Annual All CYrs 2009 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 11:33:35
Scen Year: 2013 -- All model years in the range 1969 to 2013 selected
Season : Annual
Area : Los Angeles
****

Year: 2013 -- Model Years 1969 to 2013 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	10.477	0.522
10	0.157	5.39	0.418
25	0.06	1.179	0.116
30	0.049	0.958	0.094
55	0.037	0.665	0.068

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	44.601	2.22
10	2.858	14.66	3.446
25	2.057	6.36	2.272
30	1.885	5.43	2.061
55	1.429	3.982	1.556

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	111.397	5.546
10	0.246	20.105	1.235
25	0.183	11.89	0.766
30	0.172	11.378	0.73
55	0.166	10.692	0.69

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6416.956	319.471
10	719.047	3120.276	838.594
25	388.016	2001.613	468.349
30	340.293	1883.203	417.107
55	308.297	1627.416	373.969

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.061	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	1.257	0.063
10	0.034	1.163	0.09
25	0.013	0.46	0.035
30	0.01	0.4	0.03
55	0.008	0.454	0.03

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.035	0.009
25	0.008	0.035	0.009
30	0.008	0.035	0.009
55	0.008	0.035	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.239	4.65	12.227
25	22.647	11.378	22.629
30	25.818	13.739	25.799
55	28.548	15.476	28.528

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	27.9	3.184	3.664
25	27.9	4.935	5.381
30	27.9	5.238	5.679
55	27.9	6.064	6.488

Title : Los Angeles County Avg Annual All CYrs 2009 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 11:33:35
Scen Year: 2014 -- All model years in the range 1970 to 2014 selected
Season : Annual
Area : Los Angeles
****

Year: 2014 -- Model Years 1970 to 2014 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	10.044	0.518
10	0.137	4.788	0.377
25	0.052	1.055	0.104
30	0.042	0.861	0.084
55	0.031	0.589	0.06

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	44.09	2.273
10	2.591	12.959	3.126
25	1.88	5.559	2.07
30	1.724	4.774	1.881
55	1.29	3.613	1.409

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	113.043	5.827
10	0.224	17.84	1.132
25	0.166	10.507	0.699
30	0.156	10.017	0.664
55	0.149	9.304	0.621

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6437.659	331.85
10	718.186	3124.946	842.251
25	387.527	2005.86	470.949
30	339.858	1887.446	419.634
55	307.898	1631.028	376.103

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.061	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	1.113	0.057
10	0.035	0.976	0.083
25	0.013	0.393	0.033
30	0.01	0.345	0.028
55	0.008	0.405	0.028

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.035	0.009
25	0.008	0.035	0.009
30	0.008	0.035	0.009
55	0.008	0.035	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.26	4.663	12.249
25	22.69	11.407	22.673
30	25.867	13.774	25.849
55	28.6	15.511	28.581

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	27.952	3.184	3.583
25	27.952	4.935	5.305
30	27.952	5.238	5.604
55	27.952	6.064	6.415

Title : Los Angeles County Avg Annual All CYrs 2009 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 11:33:35
Scen Year: 2015 -- All model years in the range 1971 to 2015 selected
Season : Annual
Area : Los Angeles
****

Year: 2015 -- Model Years 1971 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	9.652	0.516
10	0.12	4.222	0.339
25	0.045	0.938	0.093
30	0.036	0.769	0.075
55	0.027	0.518	0.053

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	43.621	2.33
10	2.358	11.38	2.84
25	1.723	4.829	1.889
30	1.58	4.173	1.719
55	1.169	3.263	1.281

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	114.525	6.117
10	0.204	15.738	1.033
25	0.15	9.231	0.635
30	0.141	8.765	0.602
55	0.135	8.038	0.557

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6456.258	344.863
10	717.482	3129.144	846.302
25	387.126	2009.677	473.795
30	339.5	1891.258	422.388
55	307.569	1634.274	378.436

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.062	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.978	0.052
10	0.035	0.808	0.076
25	0.013	0.334	0.03
30	0.011	0.295	0.026
55	0.008	0.359	0.026

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.035	0.009
25	0.008	0.035	0.009
30	0.008	0.035	0.009
55	0.008	0.035	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.279	4.679	12.268
25	22.726	11.447	22.711
30	25.909	13.822	25.893
55	28.644	15.56	28.626

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	28.013	3.184	3.512
25	28.013	4.935	5.239
30	28.013	5.238	5.538
55	28.013	6.064	6.353

Title : Los Angeles County Avg Annual All CYrs 2009 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 11:33:35
Scen Year: 2016 -- All model years in the range 1972 to 2016 selected
Season : Annual
Area : Los Angeles
****

Year: 2016 -- Model Years 1972 to 2016 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	9.331	0.509
10	0.106	3.766	0.306
25	0.04	0.844	0.084
30	0.032	0.696	0.068
55	0.023	0.461	0.047

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	43.235	2.361
10	2.163	10.117	2.597
25	1.591	4.25	1.736
30	1.459	3.697	1.581
55	1.069	2.984	1.173

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	115.753	6.32
10	0.187	14.071	0.945
25	0.137	8.219	0.579
30	0.129	7.772	0.546
55	0.123	7.034	0.5

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6472.218	353.396
10	716.924	3132.745	848.832
25	386.807	2012.951	475.597
30	339.216	1894.53	424.139
55	307.308	1637.06	379.915

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.062	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.863	0.047
10	0.035	0.676	0.07
25	0.013	0.287	0.028
30	0.011	0.256	0.024
55	0.008	0.322	0.025

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.035	0.01
25	0.008	0.035	0.01
30	0.008	0.035	0.01
55	0.008	0.035	0.01

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.294	4.694	12.284
25	22.756	11.482	22.742
30	25.944	13.863	25.929
55	28.68	15.602	28.663

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	28.086	3.184	3.458
25	28.086	4.935	5.189
30	28.086	5.238	5.49
55	28.086	6.064	6.306

Title : Los Angeles County Avg Annual All CYrs 2009 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 11:33:35
Scen Year: 2017 -- All model years in the range 1973 to 2017 selected
Season : Annual
Area : Los Angeles
****

Year: 2017 -- Model Years 1973 to 2017 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	9.049	0.502
10	0.094	3.383	0.277
25	0.035	0.765	0.075
30	0.028	0.634	0.061
55	0.02	0.414	0.042

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	42.893	2.38
10	1.982	9.074	2.376
25	1.466	3.775	1.595
30	1.346	3.305	1.455
55	0.976	2.751	1.074

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	116.812	6.482
10	0.171	12.684	0.865
25	0.125	7.379	0.528
30	0.118	6.95	0.497
55	0.111	6.207	0.45

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6485.529	359.89
10	716.437	3135.749	850.687
25	386.528	2015.683	476.932
30	338.967	1897.258	425.438
55	307.079	1639.383	381.01

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.062	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.76	0.042
10	0.035	0.567	0.065
25	0.013	0.249	0.026
30	0.011	0.224	0.023
55	0.008	0.289	0.023

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.036	0.01
25	0.008	0.036	0.01
30	0.008	0.036	0.01
55	0.008	0.036	0.01

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.307	4.708	12.298
25	22.783	11.514	22.77
30	25.975	13.901	25.961
55	28.712	15.64	28.697

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	28.142	3.184	3.413
25	28.142	4.935	5.147
30	28.142	5.238	5.448
55	28.142	6.064	6.266

Title : Mitigated Los Angeles County Avg Annual All CYrs 2009 to 2011 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 15:27:18
Scen Year: 2009 -- All model years in the range 2004 to 2009 selected
Season : Annual
Area : Los Angeles
****

Year: 2009 -- Model Years 2004 to 2009 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	7.408	0.277
10	0.032	1.992	0.105
25	0.012	0.494	0.03
30	0.009	0.428	0.025
55	0.007	0.243	0.016

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	40.108	1.502
10	1.043	6.631	1.252
25	0.804	2.585	0.871
30	0.741	2.361	0.802
55	0.514	2.442	0.586

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	119.582	4.478
10	0.087	17.304	0.732
25	0.064	9.732	0.426
30	0.06	8.828	0.388
55	0.054	6.899	0.31

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6406.238	239.902
10	712.801	3117.857	802.866
25	384.479	1999.414	444.955
30	337.147	1881.006	394.961
55	305.412	1625.544	354.849

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.061	0.002
10	0.007	0.03	0.008
25	0.004	0.019	0.004
30	0.003	0.018	0.004
55	0.003	0.016	0.003

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.492	0.018
10	0.016	0.272	0.026
25	0.006	0.22	0.014
30	0.005	0.222	0.013
55	0.004	0.372	0.017

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.035	0.009
25	0.008	0.035	0.009
30	0.008	0.035	0.009
55	0.008	0.035	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.4	4.928	12.391
25	22.968	12.035	22.955
30	26.189	14.52	26.175
55	28.934	16.266	28.919

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0	3.184	3.184
25	0	4.935	4.935
30	0	5.238	5.238
55	0	6.064	6.064

Title : Mitigated Los Angeles County Avg Annual All CYrs 2009 to 2011 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 15:27:18
Scen Year: 2010 -- All model years in the range 2004 to 2010 selected
Season : Annual
Area : Los Angeles
****

Year: 2010 -- Model Years 2004 to 2010 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	7.452	0.307
10	0.031	2.029	0.114
25	0.011	0.502	0.032
30	0.009	0.436	0.027
55	0.007	0.247	0.017

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	40.347	1.664
10	1.027	6.383	1.248
25	0.791	2.48	0.861
30	0.729	2.279	0.793
55	0.506	2.376	0.583

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	120.294	4.961
10	0.083	15.395	0.715
25	0.062	8.655	0.416
30	0.058	7.851	0.379
55	0.052	6.133	0.303

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6444.365	265.776
10	712.801	3126.461	812.344
25	384.479	2007.237	451.404
30	337.147	1888.821	401.14
55	305.412	1632.199	360.131

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.062	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.004
30	0.003	0.018	0.004
55	0.003	0.016	0.003

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.429	0.018
10	0.018	0.25	0.028
25	0.007	0.202	0.015
30	0.005	0.205	0.014
55	0.004	0.342	0.018

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.035	0.009
25	0.008	0.035	0.009
30	0.008	0.035	0.009
55	0.008	0.035	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.401	4.911	12.392
25	22.97	11.993	22.957
30	26.191	14.47	26.177
55	28.936	16.211	28.921

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0	3.184	3.184
25	0	4.935	4.935
30	0	5.238	5.238
55	0	6.064	6.064

Title : Mitigated Los Angeles County Avg Annual All CYrs 2009 to 2011 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 15:27:18
Scen Year: 2011 -- All model years in the range 2004 to 2011 selected
Season : Annual
Area : Los Angeles
****
Year: 2011 -- Model Years 2004 to 2011 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	7.481	0.332
10	0.031	2.04	0.12
25	0.011	0.505	0.033
30	0.009	0.438	0.028
55	0.007	0.249	0.017

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	40.504	1.799
10	1.007	6.177	1.237
25	0.776	2.395	0.848
30	0.716	2.211	0.782
55	0.496	2.318	0.577

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	120.763	5.363
10	0.08	13.832	0.691
25	0.059	7.775	0.402
30	0.055	7.052	0.366
55	0.05	5.508	0.292

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6469.497	287.305
10	712.801	3132.132	820.242
25	384.479	2012.393	456.773
30	337.147	1893.973	406.284
55	305.412	1636.585	364.529

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.062	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.004
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.382	0.017
10	0.02	0.231	0.029
25	0.007	0.187	0.015
30	0.006	0.189	0.014
55	0.004	0.316	0.018

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.035	0.009
25	0.008	0.035	0.009
30	0.008	0.035	0.009
55	0.008	0.035	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.401	4.898	12.394
25	22.971	11.962	22.96
30	26.192	14.432	26.18
55	28.937	16.169	28.924

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0	3.184	3.184
25	0	4.935	4.935
30	0	5.238	5.238
55	0	6.064	6.064

Title : Mitigated Los Angeles County Avg Annual All CYrs 2012 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 15:28:21
Scen Year: 2012 -- All model years in the range 2007 to 2012 selected
Season : Annual
Area : Los Angeles
****

Year: 2012 -- Model Years 2007 to 2012 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	7.568	0.373
10	0.02	1.472	0.092
25	0.008	0.363	0.025
30	0.006	0.316	0.021
55	0.004	0.18	0.013

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	40.972	2.021
10	0.629	3.85	0.788
25	0.485	1.478	0.534
30	0.447	1.39	0.494
55	0.31	1.492	0.368

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	122.159	6.026
10	0.051	8.313	0.459
25	0.038	4.663	0.266
30	0.035	4.227	0.242
55	0.032	3.294	0.193

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6544.263	322.843
10	712.801	3149.003	832.984
25	384.479	2027.734	465.544
30	337.147	1909.297	414.704
55	305.412	1649.634	371.726

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.062	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.004
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.109	0.005
10	0.016	0.068	0.019
25	0.006	0.055	0.008
30	0.005	0.056	0.007
55	0.004	0.093	0.008

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.036	0.009
25	0.008	0.036	0.009
30	0.008	0.036	0.009
55	0.008	0.036	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.413	4.989	12.408
25	23	12.182	22.993
30	26.226	14.696	26.22
55	28.966	16.461	28.959

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0	3.184	3.184
25	0	4.935	4.935
30	0	5.238	5.238
55	0	6.064	6.064

Title : Mitigated Los Angeles County Avg Annual All CYrs 2012 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 15:28:21
Scen Year: 2013 -- All model years in the range 2007 to 2013 selected
Season : Annual
Area : Los Angeles
****

Year: 2013 -- Model Years 2007 to 2013 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	7.57	0.399
10	0.021	1.49	0.098
25	0.008	0.367	0.027
30	0.006	0.32	0.023
55	0.004	0.182	0.014

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	40.986	2.159
10	0.639	3.891	0.811
25	0.493	1.494	0.546
30	0.454	1.405	0.504
55	0.315	1.508	0.378

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	122.198	6.438
10	0.051	7.732	0.456
25	0.038	4.339	0.265
30	0.035	3.933	0.241
55	0.032	3.066	0.192

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6546.376	344.912
10	712.801	3149.479	841.183
25	384.479	2028.167	471.081
30	337.147	1909.731	420.002
55	305.412	1650.002	376.255

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.062	0.003
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.109	0.006
10	0.018	0.072	0.021
25	0.007	0.058	0.009
30	0.005	0.059	0.008
55	0.004	0.098	0.009

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.036	0.009
25	0.008	0.036	0.009
30	0.008	0.036	0.009
55	0.008	0.036	0.009

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.412	4.98	12.408
25	22.999	12.161	22.992
30	26.225	14.671	26.218
55	28.965	16.433	28.958

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0	3.184	3.184
25	0	4.935	4.935
30	0	5.238	5.238
55	0	6.064	6.064

Title : Mitigated Los Angeles County Avg Annual All CYrs 2012 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 15:28:21
Scen Year: 2014 -- All model years in the range 2007 to 2014 selected
Season : Annual
Area : Los Angeles
****

Year: 2014 -- Model Years 2007 to 2014 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	7.572	0.427
10	0.021	1.495	0.104
25	0.008	0.369	0.028
30	0.006	0.321	0.024
55	0.005	0.182	0.015

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	40.995	2.314
10	0.649	3.906	0.833
25	0.5	1.5	0.556
30	0.461	1.41	0.515
55	0.32	1.514	0.387

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	122.226	6.899
10	0.052	7.281	0.46
25	0.038	4.086	0.267
30	0.036	3.705	0.243
55	0.032	2.888	0.193

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6547.867	369.618
10	712.801	3149.816	850.367
25	384.479	2028.473	477.28
30	337.147	1910.036	425.934
55	305.412	1650.263	381.327

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.063	0.004
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.109	0.006
10	0.019	0.074	0.023
25	0.007	0.06	0.01
30	0.006	0.061	0.009
55	0.004	0.102	0.01

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.036	0.01
25	0.008	0.036	0.01
30	0.008	0.036	0.01
55	0.008	0.036	0.01

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.412	4.972	12.407
25	22.998	12.142	22.991
30	26.224	14.649	26.217
55	28.964	16.409	28.957

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0	3.184	3.184
25	0	4.935	4.935
30	0	5.238	5.238
55	0	6.064	6.064

Title : Mitigated Los Angeles County Avg Annual All CYrs 2012 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 15:28:21
Scen Year: 2015 -- All model years in the range 2007 to 2015 selected
Season : Annual
Area : Los Angeles
****

Year: 2015 -- Model Years 2007 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	7.573	0.453
10	0.021	1.489	0.109
25	0.008	0.367	0.029
30	0.006	0.319	0.025
55	0.005	0.182	0.015

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	41.002	2.453
10	0.654	3.896	0.848
25	0.504	1.496	0.564
30	0.465	1.407	0.521
55	0.322	1.51	0.393

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	122.248	7.313
10	0.052	6.911	0.462
25	0.038	3.879	0.268
30	0.036	3.517	0.244
55	0.032	2.743	0.194

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6549.034	391.771
10	712.801	3150.079	858.602
25	384.479	2028.712	482.839
30	337.147	1910.275	431.253
55	305.412	1650.466	385.875

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.063	0.004
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.109	0.007
10	0.021	0.076	0.024
25	0.008	0.062	0.011
30	0.006	0.062	0.01
55	0.005	0.104	0.011

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.036	0.01
25	0.008	0.036	0.01
30	0.008	0.036	0.01
55	0.008	0.036	0.01

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.013
25	0.013	0.028	0.013
30	0.013	0.028	0.013
55	0.013	0.028	0.013

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.412	4.966	12.407
25	22.998	12.128	22.991
30	26.224	14.631	26.216
55	28.964	16.389	28.956

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0	3.184	3.184
25	0	4.935	4.935
30	0	5.238	5.238
55	0	6.064	6.064

Title : Mitigated Los Angeles County Avg Annual All CYrs 2012 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 15:28:21
Scen Year: 2016 -- All model years in the range 2007 to 2016 selected
Season : Annual
Area : Los Angeles
****
Year: 2016 -- Model Years 2007 to 2016 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	7.575	0.468
10	0.021	1.493	0.112
25	0.008	0.368	0.03
30	0.006	0.32	0.026
55	0.005	0.182	0.016

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	41.012	2.533
10	0.661	3.911	0.861
25	0.509	1.502	0.571
30	0.469	1.412	0.528
55	0.325	1.515	0.399

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	122.277	7.551
10	0.052	6.71	0.463
25	0.038	3.768	0.269
30	0.036	3.416	0.245
55	0.032	2.664	0.195

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6550.578	404.512
10	712.801	3150.427	863.329
25	384.479	2029.029	486.033
30	337.147	1910.592	434.31
55	305.412	1650.736	388.489

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.063	0.004
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.109	0.007
10	0.022	0.079	0.026
25	0.008	0.063	0.012
30	0.007	0.064	0.01
55	0.005	0.107	0.011

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.036	0.01
25	0.008	0.036	0.01
30	0.008	0.036	0.01
55	0.008	0.036	0.01

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.014
25	0.013	0.028	0.014
30	0.013	0.028	0.014
55	0.013	0.028	0.014

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.412	4.958	12.407
25	22.997	12.107	22.99
30	26.223	14.606	26.216
55	28.964	16.361	28.955

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0	3.184	3.184
25	0	4.935	4.935
30	0	5.238	5.238
55	0	6.064	6.064

Title : Mitigated Los Angeles County Avg Annual All CYrs 2012 to 2017 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/07/10 15:28:21
Scen Year: 2017 -- All model years in the range 2007 to 2017 selected
Season : Annual
Area : Los Angeles
****

Year: 2017 -- Model Years 2007 to 2017 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Reactive Org Gases Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	7.577	0.476
10	0.021	1.5	0.114
25	0.008	0.37	0.031
30	0.006	0.322	0.026
55	0.005	0.183	0.016

Pollutant Name: Carbon Monoxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	41.02	2.578
10	0.665	3.93	0.87
25	0.513	1.509	0.575
30	0.473	1.418	0.532
55	0.328	1.523	0.403

Pollutant Name: Oxides of Nitrogen Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	122.302	7.685
10	0.052	6.589	0.463
25	0.038	3.699	0.268
30	0.036	3.354	0.244
55	0.032	2.616	0.195

Pollutant Name: Carbon Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	6551.934	411.719
10	712.801	3150.734	865.999
25	384.479	2029.308	487.839
30	337.147	1910.87	436.038
55	305.412	1650.973	389.966

Pollutant Name: Sulfur Dioxide Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.063	0.004
10	0.007	0.03	0.008
25	0.004	0.019	0.005
30	0.003	0.018	0.004
55	0.003	0.016	0.004

Pollutant Name: PM10 Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0.109	0.007
10	0.024	0.081	0.027
25	0.009	0.065	0.012
30	0.007	0.066	0.011
55	0.005	0.111	0.012

Pollutant Name: PM10 - Tire Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.008	0.036	0.01
25	0.008	0.036	0.01
30	0.008	0.036	0.01
55	0.008	0.036	0.01

Pollutant Name: PM10 - Break Wear Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0.013	0.028	0.014
25	0.013	0.028	0.014
30	0.013	0.028	0.014
55	0.013	0.028	0.014

Pollutant Name: Gasoline - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	12.412	4.949	12.407
25	22.997	12.086	22.99
30	26.223	14.582	26.215
55	28.963	16.335	28.955

Pollutant Name: Diesel - mi/gal Temperature: 60F Relative Humidity: 50%

Speed MPH	LDA ALL	HHD ALL	ALL ALL
0	0	0	0
10	0	3.184	3.184
25	0	4.935	4.935
30	0	5.238	5.238
55	0	6.064	6.064

Title : Los Angeles County Avg Annual CYr 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/05/01 17:04:37
Scen Year: 2015 -- All model years in the range 1971 to 2015 selected
Season : Annual
Area : Los Angeles
****
Year: 2015 -- Model Years 1971 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile)
Pollutant Name: Carbon Monoxide
Temperature: 60F
Relative Humidity: 50%

Speed MPH	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	ALL
3	2.833	5.149	4.154	5.713	11.687	5.805	9.211	16.755	7.249	26.271	27.934	18.977	24.611	4.574
4	2.754	4.954	4.036	5.504	11.687	5.805	9.211	16.755	7.249	26.271	27.934	18.977	24.611	4.471
5	2.679	4.772	3.925	5.309	11.687	5.805	9.211	16.755	7.249	26.271	27.934	18.977	24.611	4.375
6	2.609	4.601	3.819	5.128	10.729	5.338	8.493	15.52	6.675	23.978	26.884	17.473	22.587	4.194
7	2.541	4.441	3.718	4.958	9.871	4.918	7.846	14.369	6.158	21.936	25.92	16.122	20.775	4.027
8	2.477	4.292	3.622	4.8	9.101	4.541	7.263	13.298	5.693	20.115	25.034	14.905	19.151	3.871
9	2.416	4.152	3.531	4.651	8.41	4.202	6.737	12.303	5.274	18.488	24.22	13.809	17.692	3.726
10	2.358	4.021	3.444	4.511	7.789	3.896	6.261	11.38	4.896	17.032	23.472	12.82	16.38	3.591
11	2.302	3.898	3.361	4.38	7.229	3.62	5.83	10.527	4.554	15.727	22.786	11.925	15.199	3.465
12	2.249	3.783	3.281	4.256	6.724	3.371	5.44	9.74	4.245	14.555	22.156	11.116	14.135	3.347
13	2.198	3.674	3.205	4.139	6.268	3.146	5.086	9.018	3.965	13.503	21.58	10.383	13.173	3.237
14	2.149	3.572	3.132	4.029	5.855	2.942	4.764	8.358	3.711	12.555	21.053	9.718	12.304	3.134
15	2.102	3.475	3.063	3.925	5.482	2.757	4.472	7.758	3.48	11.701	20.572	9.114	11.518	3.038
16	2.057	3.384	2.996	3.827	5.144	2.589	4.206	7.218	3.271	10.93	20.134	8.566	10.805	2.948
17	2.014	3.298	2.932	3.733	4.837	2.436	3.963	6.734	3.08	10.234	19.738	8.066	10.159	2.864
18	1.973	3.217	2.87	3.645	4.558	2.297	3.742	6.307	2.906	9.604	19.381	7.612	9.573	2.785
19	1.933	3.14	2.811	3.561	4.305	2.171	3.54	5.918	2.748	9.034	19.06	7.197	9.04	2.712
20	1.894	3.066	2.754	3.481	4.075	2.056	3.355	5.709	2.604	8.517	18.775	6.819	8.556	2.646
21	1.858	2.997	2.699	3.405	3.865	1.951	3.187	5.512	2.472	8.049	18.523	6.474	8.115	2.585
22	1.822	2.931	2.646	3.333	3.674	1.856	3.033	5.326	2.352	7.623	18.305	6.159	7.714	2.526
23	1.788	2.869	2.596	3.265	3.501	1.768	2.892	5.151	2.242	7.237	18.118	5.871	7.349	2.47
24	1.755	2.81	2.547	3.199	3.343	1.689	2.763	4.986	2.141	6.886	17.962	5.608	7.017	2.418
25	1.723	2.754	2.5	3.137	3.198	1.616	2.645	4.829	2.049	6.567	17.836	5.368	6.714	2.368
26	1.692	2.7	2.455	3.078	3.067	1.55	2.537	4.682	1.966	6.278	17.741	5.148	6.438	2.32
27	1.663	2.649	2.411	3.021	2.948	1.49	2.438	4.543	1.889	6.015	17.675	4.948	6.188	2.275
28	1.634	2.601	2.369	2.968	2.839	1.435	2.347	4.412	1.819	5.776	17.638	4.765	5.96	2.232
29	1.607	2.555	2.329	2.916	2.741	1.385	2.265	4.289	1.755	5.56	17.631	4.598	5.753	2.192
30	1.58	2.512	2.289	2.868	2.651	1.339	2.189	4.173	1.697	5.364	17.655	4.446	5.566	2.153
31	1.554	2.47	2.252	2.821	2.57	1.298	2.121	4.064	1.645	5.186	17.708	4.307	5.396	2.117
32	1.53	2.431	2.216	2.777	2.497	1.261	2.058	3.963	1.597	5.027	17.793	4.182	5.244	2.082
33	1.506	2.394	2.181	2.735	2.432	1.227	2.002	3.867	1.553	4.883	17.91	4.068	5.106	2.049
34	1.483	2.359	2.147	2.695	2.373	1.197	1.95	3.779	1.514	4.754	18.06	3.966	4.984	2.018
35	1.461	2.326	2.114	2.657	2.321	1.169	1.904	3.696	1.479	4.639	18.245	3.874	4.874	1.989
36	1.439	2.295	2.083	2.621	2.275	1.145	1.862	3.62	1.448	4.538	18.465	3.792	4.778	1.961
37	1.418	2.265	2.053	2.587	2.234	1.124	1.825	3.55	1.42	4.448	18.723	3.719	4.694	1.935
38	1.399	2.238	2.024	2.555	2.2	1.106	1.793	3.485	1.396	4.371	19.02	3.655	4.622	1.911
39	1.379	2.212	1.996	2.525	2.17	1.09	1.764	3.427	1.374	4.305	19.359	3.599	4.56	1.888
40	1.361	2.188	1.97	2.497	2.146	1.076	1.739	3.374	1.356	4.249	19.743	3.552	4.51	1.867

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Title : Los Angeles County Avg Annual CYr 2020 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/05/01 17:05:16
Scen Year: 2020 -- All model years in the range 1976 to 2020 selected
Season : Annual
Area : Los Angeles
****

Year: 2020 -- Model Years 1976 to 2020 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006
Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Carbon Monoxide
Temperature: 60F
Relative Humidity: 50%

Speed MPH	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	ALL
3	1.818	2.914	3.052	4.018	6.974	3.292	6.594	10.538	5.749	21.491	25.073	15.342	7.94	3.079
4	1.776	2.834	2.978	3.894	6.974	3.292	6.594	10.538	5.749	21.491	25.073	15.342	7.94	3.022
5	1.736	2.757	2.907	3.777	6.974	3.292	6.594	10.538	5.749	21.491	25.073	15.342	7.94	2.968
6	1.697	2.684	2.839	3.667	6.404	3.031	6.087	9.68	5.301	19.616	24.176	14.139	7.288	2.854
7	1.66	2.613	2.774	3.564	5.894	2.796	5.63	8.882	4.897	17.947	23.349	13.056	6.705	2.748
8	1.624	2.546	2.711	3.466	5.435	2.584	5.217	8.142	4.533	16.458	22.586	12.08	6.181	2.65
9	1.589	2.483	2.651	3.373	5.024	2.394	4.844	7.456	4.204	15.127	21.884	11.2	5.711	2.557
10	1.556	2.422	2.592	3.285	4.654	2.222	4.506	6.823	3.907	13.937	21.237	10.405	5.289	2.471
11	1.523	2.364	2.536	3.201	4.32	2.067	4.2	6.242	3.638	12.87	20.641	9.685	4.908	2.39
12	1.492	2.308	2.482	3.122	4.019	1.926	3.922	5.71	3.395	11.912	20.092	9.034	4.565	2.314
13	1.462	2.255	2.43	3.047	3.747	1.799	3.67	5.227	3.174	11.051	19.587	8.443	4.255	2.243
14	1.433	2.204	2.38	2.975	3.501	1.684	3.44	4.792	2.973	10.276	19.124	7.906	3.974	2.176
15	1.404	2.155	2.331	2.906	3.278	1.579	3.231	4.403	2.79	9.577	18.699	7.419	3.721	2.114
16	1.377	2.108	2.284	2.841	3.077	1.484	3.04	4.059	2.624	8.947	18.311	6.975	3.491	2.056
17	1.351	2.063	2.239	2.778	2.893	1.397	2.867	3.76	2.473	8.377	17.957	6.571	3.282	2.001
18	1.325	2.02	2.195	2.719	2.727	1.318	2.708	3.505	2.335	7.862	17.635	6.203	3.093	1.95
19	1.3	1.979	2.153	2.661	2.576	1.246	2.563	3.28	2.209	7.396	17.345	5.867	2.921	1.903
20	1.276	1.939	2.112	2.607	2.438	1.181	2.43	3.179	2.094	6.973	17.084	5.561	2.765	1.86
21	1.253	1.9	2.072	2.554	2.313	1.121	2.309	3.085	1.988	6.59	16.851	5.281	2.623	1.82
22	1.23	1.863	2.034	2.504	2.199	1.066	2.198	2.997	1.892	6.242	16.646	5.025	2.493	1.782
23	1.208	1.828	1.997	2.455	2.095	1.016	2.096	2.914	1.804	5.926	16.468	4.791	2.375	1.746
24	1.187	1.793	1.961	2.409	2.001	0.971	2.003	2.836	1.724	5.639	16.315	4.576	2.268	1.711
25	1.166	1.76	1.926	2.365	1.914	0.929	1.917	2.764	1.65	5.378	16.188	4.381	2.17	1.678
26	1.146	1.729	1.892	2.322	1.836	0.891	1.839	2.696	1.583	5.141	16.086	4.202	2.081	1.646
27	1.126	1.698	1.859	2.281	1.764	0.857	1.768	2.633	1.521	4.926	16.008	4.038	2	1.616
28	1.107	1.668	1.828	2.241	1.699	0.825	1.702	2.574	1.465	4.731	15.956	3.888	1.926	1.587
29	1.089	1.64	1.797	2.203	1.64	0.796	1.642	2.519	1.413	4.554	15.928	3.752	1.859	1.56
30	1.071	1.612	1.767	2.167	1.587	0.77	1.587	2.469	1.366	4.393	15.925	3.627	1.799	1.534
31	1.054	1.586	1.738	2.132	1.538	0.746	1.537	2.421	1.323	4.248	15.948	3.514	1.744	1.509
32	1.037	1.56	1.71	2.098	1.495	0.724	1.491	2.378	1.284	4.117	15.997	3.411	1.695	1.485
33	1.021	1.535	1.683	2.066	1.455	0.704	1.449	2.338	1.249	4	16.073	3.317	1.65	1.462
34	1.005	1.511	1.657	2.035	1.42	0.687	1.412	2.301	1.217	3.894	16.176	3.233	1.61	1.44
35	0.989	1.488	1.631	2.005	1.388	0.671	1.378	2.268	1.188	3.8	16.308	3.157	1.575	1.42
36	0.974	1.466	1.606	1.977	1.361	0.657	1.347	2.238	1.162	3.717	16.469	3.089	1.544	1.4
37	0.96	1.445	1.582	1.949	1.336	0.644	1.319	2.211	1.139	3.644	16.662	3.028	1.516	1.382
38	0.945	1.424	1.559	1.923	1.315	0.633	1.295	2.187	1.119	3.581	16.888	2.974	1.493	1.364
39	0.932	1.405	1.537	1.898	1.297	0.624	1.273	2.167	1.101	3.527	17.148	2.928	1.473	1.348
40	0.918	1.386	1.515	1.874	1.283	0.615	1.255	2.149	1.085	3.481	17.445	2.888	1.457	1.332

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Offroad2007 Results

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Marine Pleasure Craft Emissions - 2015

Vessel Type		% of SC Population	Project Trips	HP (avg.)	LF	NOx EF (g/bhp-hr)	CO EF (g/bhp-hr)	ROG EF (g/bhp-hr)	PM EF (g/bhp-hr)	NOx (lbs/day)	CO (lbs/day)	ROG (lbs/day)	PM-10 (lbs/day)	PM-2.5 (lbs/day)
Vessels w/Outboard Engines	G2	49%	18	211	21%	0.074	3.046	1.625	0.151	0.13	5.25	2.80	0.26	0.24
Sailboat Auxiliary Outboard Engines	G2	2%	1	27	32%	0.000	0.021	0.013	0.001	0.00	0.04	0.02	0.00	0.00
Vessels w/Inboard Engines	G4	11%	4	211	21%	1.890	48.156	1.895	0.025	3.26	82.98	3.26	0.04	0.04
Vessels w/Outboard Engines	G4	3%	1	211	21%	0.057	1.720	0.068	0.001	0.10	2.96	0.12	0.00	0.00
Vessels w/Sterndrive Engines	G4	30%	11	211	21%	3.082	81.211	3.207	0.042	5.31	139.94	5.53	0.07	0.07
Sailboat Auxiliary Inboard Engines	G4	1%	0	27	32%	0.001	0.022	0.001	0.000	0.00	0.04	0.00	0.00	0.00
Vessels w/Inboard Engines	D	2%	1	211	21%	0.663	0.294	0.196	0.017	1.14	0.51	0.34	0.03	0.03
Sailboat Auxiliary Inboard Engines	D	2%	1	27	32%	0.009	0.004	0.003	0.000	0.02	0.01	0.00	0.00	0.000
Water Taxis	D		16	211	21%	0.074	3.046	1.625	0.151	0.13	5.25	2.80	0.26	0.239
total			**36**							**10.1**	**237.0**	**14.9**	**0.7**	**0.6**

Percentage of SC Population taked from 2002 ARB Pleasure Craft Exhaust Emissions Inventory
Average hp and LF were taken from ARB's Attachment D, Emission Inventory Development
ARB's numbers were based on the Systems Applications International (SAI) report.
The SAI report is entitled "Development of an Improved Inventory of Emissions from Pleasure Craft in California, dated June 1995.
Average hp for outboards taken from table 4, MSC98-14, Proposed Pleasure Craft Emissions Inventory
ARB's EF vary for 2 stroke, 4 stroke, and diesel engines, taken from table 8a and 8b, of MSC 98-34
ARB uses OFFROAD model for estimating the emissions
Personal Water Crafts (Jet Skis) are not part of the POLA inventory
Fuel Correction factors are multiplicative factors applied to emission rates.
Deterioration Rates (DR), table 9 of MSC 98-34
Fuel Correction factors (FCF), table 10 and 11 of MSC 98-34
Fuel correction factors vary by vessel year (pre-1992,1992-1995,1996+) for gasoline powered engines and by summer/winter
Median engine age is 13 years, making 2015 inventory have 2002 average engine age.

TOG = 1.07*HC for diesel, 1.04*HC for gasoline
PM is assumed to be PM-10
PM-2.5 is 92% of PM-10

Did not take into account deterioration factor or fuel correction factor

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Marine Pleasure Craft Emissions - 2020

Vessel Type		% of SC Population	Project Trips	HP (avg.)	LF	NOx EF (g/bhp-hr)	CO EF (g/bhp-hr)	ROG EF (g/bhp-hr)	PM EF (g/bhp-hr)	NOx (lbs/day)	CO (lbs/day)	ROG (lbs/day)	PM-10 (lbs/day)	PM-2.5 (lbs/day)
Vessels w/Outboard Engines	G2	49%	18	211	21%	0.141	1.167	0.609	0.149	0.24	2.01	1.05	0.26	0.24
Sailboat Auxiliary Outboard Engines	G2	2%	1	27	32%	0.001	0.007	0.004	0.001	0.00	0.01	0.01	0.00	0.00
Vessels w/Inboard Engines	G4	11%	4	211	21%	2.667	68.624	2.033	0.045	4.59	118.25	3.50	0.08	0.07
Vessels w/Outboard Engines	G4	3%	1	211	21%	0.059	1.944	0.073	0.001	0.10	3.35	0.13	0.00	0.00
Vessels w/Sterndrive Engines	G4	30%	11	211	21%	3.645	95.141	2.790	0.063	6.28	163.95	4.81	0.11	0.10
Sailboat Auxiliary Inboard Engines	G4	1%	0	27	32%	0.001	0.023	0.001	0.000	0.00	0.04	0.00	0.00	0.00
Vessels w/Inboard Engines	D	2%	1	211	21%	1.201	0.527	0.351	0.031	2.07	0.91	0.60	0.05	0.05
Sailboat Auxiliary Inboard Engines	D	2%	1	27	32%	0.008	0.003	0.002	0.000	0.01	0.01	0.00	0.00	0.000
Water Taxis	D		16	211	21%	0.074	3.046	1.625	0.151	0.13	5.25	2.80	0.26	0.239
total			**36**							**13.4**	**293.8**	**12.9**	**0.8**	**0.7**

Percentage of SC Population taked from 2002 ARB Pleasure Craft Exhaust Emissions Inventory
Average hp and LF were taken from ARB's Attachment D, Emission Inventory Development
ARB's numbers were based on the Systems Applications International (SAI) report.
The SAI report is entitled "Development of an Improved Inventory of Emissions from Pleasure Craft in California, dated June 1995.
Average hp for outboards taken from table 4, MSC98-14, Proposed Pleasure Craft Emissions Inventory
ARB's EF vary for 2 stroke, 4 stroke, and diesel engines, taken from table 8a and 8b, of MSC 98-34
ARB uses OFFROAD model for estimating the emissions
Personal Water Crafts (Jet Skis) are not part of the POLA inventory
Fuel Correction factors are multiplicative factors applied to emission rates.
Deterioration Rates (DR), table 9 of MSC 98-34
Fuel Correction factors (FCF), table 10 and 11 of MSC 98-34
Fuel correction factors vary by vessel year (pre-1992,1992-1995,1996+) for gasoline powered engines and by summer/winter
Median engine age is 13 years, making 2020 inventory have 2017 average engine age.

TOG = 1.07*HC for diesel, 1.04*HC for gasoline
PM is assumed to be PM-10
PM-2.5 is 92% of PM-10

Did not take into account deterioration factor or fuel correction factor

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Caline4 Output Sheets

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

      JOB:   MARINE AVE AND HARRY BRIDGES BLVD AMNP
      RUN: Hour 1           (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

 I.  SITE VARIABLES

       U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
     BRG= WORST CASE            VD=   .0 CM/S
    CLAS=     7 (G)             VS=   .0 CM/S
    MIXH= 1000. M              AMB=   .0 PPM
   SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
  DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     2  -450     2  -150 *  AG     19   2.2     .0  10.5
B. NA           *     2  -150     2     0 *  AG     17   4.6     .0   9.9
C. ND           *     2     0     2   150 *  AG     57   4.6     .0   9.9
D. NE           *     2   150     2   450 *  AG     57   2.2     .0  10.5
E. SF           *    -2   450    -2   150 *  AG     33   2.2     .0  10.5
F. SA           *    -2   150    -2     0 *  AG     19   4.6     .0   9.9
G. SD           *    -2     0    -2  -150 *  AG      9   4.6     .0   9.9
H. SE           *    -2  -150    -2  -450 *  AG      9   2.2     .0  10.5
I. WF           *   450     5   150     5 *  AG   1004   2.2     .0  15.0
J. WA           *   150     5     0     5 *  AG   1002   3.0     .0   9.9
K. WD           *     0     5  -150     5 *  AG   1008   2.3     .0   9.9
L. WE           *  -150     5  -450     5 *  AG   1008   2.2     .0  15.0
M. EF           *  -450    -5  -150    -5 *  AG    773   2.2     .0  15.0
N. EA           *  -150    -5     0    -5 *  AG    730   3.0     .0   9.9
O. ED           *     0    -5   150    -5 *  AG    755   2.3     .0   9.9
P. EE           *   150    -5   450    -5 *  AG    755   2.2     .0  15.0
Q. NL           *     0     0     2  -150 *  AG      2   4.6     .0   9.9
R. SL           *     0     0    -2   150 *  AG     14   4.6     .0   9.9
S. WL           *     0     0   150     2 *  AG      2   2.9     .0   9.9
T. EL           *     0     0  -150    -2 *  AG     43   2.9     .0   9.9

 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. NE3      *      8     12   1.8
2. SE3      *      8    -12   1.8
3. SW3      *     -8    -12   1.8
4. NW3      *     -8     12   1.8

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*----------------------------------------
1. NE3      *  265. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0
3. SW3      *  275. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .7 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .1   .0   .3   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .1   .0   .3   .0   .0   .0   .0   .0   .0
4. NW3      *   .0   .4   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB:   MARINE AVE AND HARRY BRIDGES BLVD AMWP
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

 I.  SITE VARIABLES

       U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
     BRG= WORST CASE            VD=   .0 CM/S
    CLAS=     7 (G)             VS=   .0 CM/S
    MIXH= 1000. M              AMB=   .0 PPM
   SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
  DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     2  -450     2  -150 *  AG     27   2.2     .0  10.5
B. NA           *     2  -150     2     0 *  AG     23   4.6     .0   9.9
C. ND           *     2     0     2   150 *  AG     80   4.6     .0   9.9
D. NE           *     2   150     2   450 *  AG     80   2.2     .0  10.5
E. SF           *    -2   450    -2   150 *  AG     42   2.2     .0  10.5
F. SA           *    -2   150    -2     0 *  AG     28   4.6     .0   9.9
G. SD           *    -2     0    -2  -150 *  AG     20   4.6     .0   9.9
H. SE           *    -2  -150    -2  -450 *  AG     20   2.2     .0  10.5
I. WF           *   450     5   150     5 *  AG   1014   2.2     .0  15.0
J. WA           *   150     5     0     5 *  AG   1012   3.0     .0   9.9
K. WD           *     0     5  -150     5 *  AG   1018   2.3     .0   9.9
L. WE           *  -150     5  -450     5 *  AG   1018   2.2     .0  15.0
M. EF           *  -450    -5  -150    -5 *  AG    810   2.2     .0  15.0
N. EA           *  -150    -5     0    -5 *  AG    754   3.0     .0   9.9
O. ED           *     0    -5   150    -5 *  AG    775   2.3     .0   9.9
P. EE           *   150    -5   450    -5 *  AG    775   2.2     .0  15.0
Q. NL           *     0     0     2  -150 *  AG      4   4.6     .0   9.9
R. SL           *     0     0    -2   150 *  AG     14   4.6     .0   9.9
S. WL           *     0     0   150     2 *  AG      2   2.9     .0   9.9
T. EL           *     0     0  -150    -2 *  AG     56   2.9     .0   9.9

III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. NE3      *      8     12   1.8
2. SE3      *      8    -12   1.8
3. SW3      *     -8    -12   1.8
4. NW3      *     -8     12   1.8

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*----------------------------------------
1. NE3      *  265. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0
3. SW3      *  275. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .7 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .0   .3   .0   .1   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .1   .0   .3   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .1   .0   .3   .0   .0   .0   .0   .0   .0
4. NW3      *   .0   .4   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

      JOB:   MARINE AVE AND HARRY BRIDGES BLVD PMNP
      RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

 I.  SITE VARIABLES

       U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
     BRG= WORST CASE            VD=   .0 CM/S
    CLAS=     7 (G)             VS=   .0 CM/S
    MIXH= 1000. M              AMB=   .0 PPM
   SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     2  -450     2  -150 *  AG     54   2.2     .0  10.5
B. NA           *     2  -150     2     0 *  AG     50   4.6     .0   9.9
C. ND           *     2     0     2   150 *  AG     82   4.6     .0   9.9
D. NE           *     2   150     2   450 *  AG     82   2.2     .0  10.5
E. SF           *    -2   450    -2   150 *  AG     57   2.2     .0  10.5
F. SA           *    -2   150    -2     0 *  AG     38   4.6     .0   9.9
G. SD           *    -2     0    -2  -150 *  AG      1   4.6     .0   9.9
H. SE           *    -2  -150    -2  -450 *  AG      1   2.2     .0  10.5
I. WF           *   450     5   150     5 *  AG   1048   2.2     .0  15.0
J. WA           *   150     5     0     5 *  AG   1048   3.0     .0   9.9
K. WD           *     0     5  -150     5 *  AG   1077   2.3     .0   9.9
L. WE           *  -150     5  -450     5 *  AG   1077   2.2     .0  15.0
M. EF           *  -450    -5  -150    -5 *  AG   1143   2.2     .0  15.0
N. EA           *  -150    -5     0    -5 *  AG   1076   3.0     .0   9.9
O. ED           *     0    -5   150    -5 *  AG   1142   2.3     .0   9.9
P. EE           *   150    -5   450    -5 *  AG   1142   2.2     .0  15.0
Q. NL           *     0     0     2  -150 *  AG      4   4.6     .0   9.9
R. SL           *     0     0    -2   150 *  AG     19   4.6     .0   9.9
S. WL           *     0     0   150     2 *  AG      0   2.9     .0   9.9
T. EL           *     0     0  -150    -2 *  AG     67   2.9     .0   9.9

III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*--------------------
1. NE3      *      8     12   1.8
2. SE3      *      8    -12   1.8
3. SW3      *     -8    -12   1.8
4. NW3      *     -8     12   1.8

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
 RECEPTOR   * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*----------------------------------------
1. NE3      *  264. *    .7 *   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .8 *   .0   .0   .0   .0   .0   .0   .0   .0
3. SW3      *  276. *    .7 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .7 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
 RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .0   .3   .0   .1   .1   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .1   .0   .4   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .1   .0   .4   .0   .0   .0   .0   .0   .0
4. NW3      *   .0   .4   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0
```

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

      JOB:   MARINE AVE AND HARRY BRIDGES BLVD PMWP
      RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

 I.  SITE VARIABLES

       U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
     BRG= WORST CASE            VD=   .0 CM/S
    CLAS=     7 (G)             VS=   .0 CM/S
    MIXH= 1000. M              AMB=   .0 PPM
   SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     2  -450     2  -150 *  AG     79   2.2     .0  10.5
B. NA           *     2  -150     2     0 *  AG     64   4.6     .0   9.9
C. ND           *     2     0     2   150 *  AG     98   4.6     .0   9.9
D. NE           *     2   150     2   450 *  AG     98   2.2     .0  10.5
E. SF           *    -2   450    -2   150 *  AG     89   2.2     .0  10.5
F. SA           *    -2   150    -2     0 *  AG     66   4.6     .0   9.9
G. SD           *    -2     0    -2  -150 *  AG     27   4.6     .0   9.9
H. SE           *    -2  -150    -2  -450 *  AG     27   2.2     .0  10.5
I. WF           *   450     5   150     5 *  AG   1070   2.2     .0  15.0
J. WA           *   150     5     0     5 *  AG   1070   3.0     .0   9.9
K. WD           *     0     5  -150     5 *  AG   1123   2.3     .0   9.9
L. WE           *  -150     5  -450     5 *  AG   1123   2.2     .0  15.0
M. EF           *  -450    -5  -150    -5 *  AG   1162   2.2     .0  15.0
N. EA           *  -150    -5     0    -5 *  AG   1093   3.0     .0   9.9
O. ED           *     0    -5   150    -5 *  AG   1152   2.3     .0   9.9
P. EE           *   150    -5   450    -5 *  AG   1152   2.2     .0  15.0
Q. NL           *     0     0     2  -150 *  AG     15   4.6     .0   9.9
R. SL           *     0     0    -2   150 *  AG     23   4.6     .0   9.9
S. WL           *     0     0   150     2 *  AG      0   2.9     .0   9.9
T. EL           *     0     0  -150    -2 *  AG     69   2.9     .0   9.9

 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. NE3      *      8     12   1.8
2. SE3      *      8    -12   1.8
3. SW3      *     -8    -12   1.8
4. NW3      *     -8     12   1.8

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
 RECEPTOR   * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*----------------------------------------
1. NE3      *  264. *    .7 *   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .8 *   .0   .0   .0   .0   .0   .0   .0   .0
3. SW3      *  276. *    .7 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .8 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
 RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .0   .4   .0   .1   .1   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .1   .0   .4   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .1   .0   .4   .0   .0   .0   .0   .0   .0
4. NW3      *   .0   .4   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0
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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

     JOB:   MARINE AVE AND HARRY BRIDGES BLVD AMNP
     RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

 I.  SITE VARIABLES

       U=    .5 M/S            Z0= 100. CM           ALT=     0. (M)
     BRG= WORST CASE           VD=   .0 CM/S
    CLAS=     7 (G)            VS=   .0 CM/S
    MIXH= 1000. M             AMB=   .0 PPM
   SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
  DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     2  -450     2  -150 *  AG     19   1.5     .0  10.5
B. NA           *     2  -150     2     0 *  AG     17   3.1     .0   9.9
C. ND           *     2     0     2   150 *  AG     59   3.1     .0   9.9
D. NE           *     2   150     2   450 *  AG     59   1.5     .0  10.5
E. SF           *    -2   450    -2   150 *  AG     34   1.5     .0  10.5
F. SA           *    -2   150    -2     0 *  AG     20   3.1     .0   9.9
G. SD           *    -2     0    -2  -150 *  AG      9   3.1     .0   9.9
H. SE           *    -2  -150    -2  -450 *  AG      9   1.5     .0  10.5
I. WF           *   450     5   150     5 *  AG   1025   1.5     .0  15.0
J. WA           *   150     5     0     5 *  AG   1023   2.1     .0   9.9
K. WD           *     0     5  -150     5 *  AG   1029   1.7     .0   9.9
L. WE           *  -150     5  -450     5 *  AG   1029   1.5     .0  15.0
M. EF           *  -450    -5  -150    -5 *  AG    790   1.5     .0  15.0
N. EA           *  -150    -5     0    -5 *  AG    746   2.1     .0   9.9
O. ED           *     0    -5   150    -5 *  AG    771   1.6     .0   9.9
P. EE           *   150    -5   450    -5 *  AG    771   1.5     .0  15.0
Q. NL           *     0     0     2  -150 *  AG      2   3.1     .0   9.9
R. SL           *     0     0    -2   150 *  AG     14   3.1     .0   9.9
S. WL           *     0     0   150     2 *  AG      2   2.0     .0   9.9
T. EL           *     0     0  -150    -2 *  AG     44   2.0     .0   9.9

 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. NE3      *      8     12   1.8
2. SE3      *      8    -12   1.8
3. SW3      *     -8    -12   1.8
4. NW3      *     -8     12   1.8

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*-----------------------------------------
1. NE3      *  264. *    .4 *   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .4 *   .0   .0   .0   .0   .0   .0   .0   .0
3. SW3      *  276. *    .4 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .5 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0   .0
4. NW3      *   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   MARINE AVE AND HARRY BRIDGES BLVD AMWP
              RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide

  I.  SITE VARIABLES

         U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     2  -450     2  -150 *  AG     27   1.5     .0  10.5
B. NA           *     2  -150     2     0 *  AG     23   3.1     .0   9.9
C. ND           *     2     0     2   150 *  AG     82   3.1     .0   9.9
D. NE           *     2   150     2   450 *  AG     82   1.5     .0  10.5
E. SF           *    -2   450    -2   150 *  AG     43   1.5     .0  10.5
F. SA           *    -2   150    -2     0 *  AG     29   3.1     .0   9.9
G. SD           *    -2     0    -2  -150 *  AG     20   3.1     .0   9.9
H. SE           *    -2  -150    -2  -450 *  AG     20   1.5     .0  10.5
I. WF           *   450     5   150     5 *  AG   1035   1.5     .0  15.0
J. WA           *   150     5     0     5 *  AG   1033   2.1     .0   9.9
K. WD           *     0     5  -150     5 *  AG   1039   1.7     .0   9.9
L. WE           *  -150     5  -450     5 *  AG   1039   1.5     .0  15.0
M. EF           *  -450    -5  -150    -5 *  AG    827   1.5     .0  15.0
N. EA           *  -150    -5     0    -5 *  AG    770   2.1     .0   9.9
O. ED           *     0    -5   150    -5 *  AG    791   1.6     .0   9.9
P. EE           *   150    -5   450    -5 *  AG    791   1.5     .0  15.0
Q. NL           *     0     0     2  -150 *  AG      4   3.1     .0   9.9
R. SL           *     0     0    -2   150 *  AG     14   3.1     .0   9.9
S. WL           *     0     0   150     2 *  AG      2   2.0     .0   9.9
T. EL           *     0     0  -150    -2 *  AG     57   2.0     .0   9.9

 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*--------------------
1. NE3      *      8     12   1.8
2. SE3      *      8    -12   1.8
3. SW3      *     -8    -12   1.8
4. NW3      *     -8     12   1.8

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*----------------------------------------
1. NE3      *  264. *    .4 *   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .4 *   .0   .0   .0   .0   .0   .0   .0   .0
3. SW3      *  276. *    .4 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .5 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0   .0
4. NW3      *   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

      JOB:   MARINE AVE AND HARRY BRIDGES BLVD PMNP
      RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

 I.  SITE VARIABLES

       U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
     BRG= WORST CASE            VD=   .0 CM/S
    CLAS=     7 (G)             VS=   .0 CM/S
    MIXH= 1000. M              AMB=   .0 PPM
   SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
  DESCRIPTION   *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     2  -450     2  -150 *  AG     56   1.5     .0  10.5
B. NA           *     2  -150     2     0 *  AG     52   3.1     .0   9.9
C. ND           *     2     0     2   150 *  AG     83   3.1     .0   9.9
D. NE           *     2   150     2   450 *  AG     83   1.5     .0  10.5
E. SF           *    -2   450    -2   150 *  AG     59   1.5     .0  10.5
F. SA           *    -2   150    -2     0 *  AG     39   3.1     .0   9.9
G. SD           *    -2     0    -2  -150 *  AG      1   3.1     .0   9.9
H. SE           *    -2  -150    -2  -450 *  AG      1   1.5     .0  10.5
I. WF           *   450     5   150     5 *  AG   1071   1.5     .0  15.0
J. WA           *   150     5     0     5 *  AG   1071   2.1     .0   9.9
K. WD           *     0     5  -150     5 *  AG   1101   1.7     .0   9.9
L. WE           *  -150     5  -450     5 *  AG   1101   1.5     .0  15.0
M. EF           *  -450    -5  -150    -5 *  AG   1165   1.5     .0  15.0
N. EA           *  -150    -5     0    -5 *  AG   1097   2.1     .0   9.9
O. ED           *     0    -5   150    -5 *  AG   1166   1.7     .0   9.9
P. EE           *   150    -5   450    -5 *  AG   1166   1.5     .0  15.0
Q. NL           *     0     0     2  -150 *  AG      4   3.1     .0   9.9
R. SL           *     0     0    -2   150 *  AG     20   3.1     .0   9.9
S. WL           *     0     0   150     2 *  AG      0   2.0     .0   9.9
T. EL           *     0     0  -150    -2 *  AG     68   2.0     .0   9.9

 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*--------------------
1. NE3      *      8     12   1.8
2. SE3      *      8    -12   1.8
3. SW3      *     -8    -12   1.8
4. NW3      *     -8     12   1.8

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
 RECEPTOR   * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*----------------------------------------
1. NE3      *  264. *    .5 *   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .5 *   .0   .0   .0   .0   .0   .0   .0   .0
3. SW3      *  276. *    .5 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .5 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
 RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0   .0
4. NW3      *   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
         JUNE 1989 VERSION
         PAGE   1

      JOB:   MARINE AVE AND HARRY BRIDGES BLVD PMWP
      RUN: Hour 1           (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide
```

I. SITE VARIABLES

```
     U=    .5 M/S            Z0= 100. CM           ALT=     0. (M)
   BRG= WORST CASE           VD=   .0 CM/S
  CLAS=     7 (G)            VS=   .0 CM/S
  MIXH= 1000. M             AMB=   .0 PPM
 SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NF	2	-450	2	-150	AG	81	1.5	.0	10.5
B. NA	2	-150	2	0	AG	66	3.1	.0	9.9
C. ND	2	0	2	150	AG	99	3.1	.0	9.9
D. NE	2	150	2	450	AG	99	1.5	.0	10.5
E. SF	-2	450	-2	150	AG	91	1.5	.0	10.5
F. SA	-2	150	-2	0	AG	67	3.1	.0	9.9
G. SD	-2	0	-2	-150	AG	27	3.1	.0	9.9
H. SE	-2	-150	-2	-450	AG	27	1.5	.0	10.5
I. WF	450	5	150	5	AG	1093	1.5	.0	15.0
J. WA	150	5	0	5	AG	1093	2.1	.0	9.9
K. WD	0	5	-150	5	AG	1147	1.7	.0	9.9
L. WE	-150	5	-450	5	AG	1147	1.5	.0	15.0
M. EF	-450	-5	-150	-5	AG	1184	1.5	.0	15.0
N. EA	-150	-5	0	-5	AG	1114	2.2	.0	9.9
O. ED	0	-5	150	-5	AG	1176	1.7	.0	9.9
P. EE	150	-5	450	-5	AG	1176	1.5	.0	15.0
Q. NL	0	0	2	-150	AG	15	3.1	.0	9.9
R. SL	0	0	-2	150	AG	24	3.1	.0	9.9
S. WL	0	0	150	2	AG	0	2.0	.0	9.9
T. EL	0	0	-150	-2	AG	70	2.0	.0	9.9

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. NE3	8	12	1.8
2. SE3	8	-12	1.8
3. SW3	-8	-12	1.8
4. NW3	-8	12	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE3	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	276.	.6	.0	.0	.0	.0	.0	.0	.0	.0
3. SW3	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
4. NW3	95.	.5	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.0	.3	.0	.0	.1	.0	.0	.0	.0	.0	.0
2. SE3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
3. SW3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
4. NW3	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   AVALON BLVD AND ANAHEIM ST   AMNP
              RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide

  I.  SITE VARIABLES

         U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     5  -450     5  -150 *  AG    414   1.5     .0  15.0
B. NA           *     5  -150     5     0 *  AG    353   2.6     .0   9.9
C. ND           *     5     0     5   150 *  AG    489   1.8     .0   9.9
D. NE           *     5   150     5   450 *  AG    489   1.5     .0  15.0
E. SF           *    -5   450    -5   150 *  AG    614   1.5     .0  15.0
F. SA           *    -5   150    -5     0 *  AG    500   2.7     .0   9.9
G. SD           *    -5     0    -5  -150 *  AG    505   1.8     .0   9.9
H. SE           *    -5  -150    -5  -450 *  AG    505   1.5     .0  15.0
I. WF           *   450     7   150     7 *  AG    899   1.5     .0  15.0
J. WA           *   150     7     0     7 *  AG    822   2.2     .0  13.5
K. WD           *     0     7  -150     7 *  AG    935   1.7     .0   9.9
L. WE           *  -150     7  -450     7 *  AG    935   1.5     .0  15.0
M. EF           *  -450    -7  -150    -7 *  AG    877   1.5     .0  15.0
N. EA           *  -150    -7     0    -7 *  AG    770   2.2     .0  13.5
O. ED           *     0    -7   150    -7 *  AG    875   1.7     .0   9.9
P. EE           *   150    -7   450    -7 *  AG    875   1.5     .0  15.0
Q. NL           *     0     0     2  -150 *  AG     61   2.6     .0   9.9
R. SL           *     0     0    -2   150 *  AG    114   2.6     .0   9.9
S. WL           *     0     0   150     5 *  AG     77   2.1     .0   9.9
T. EL           *     0     0  -150    -5 *  AG    107   2.1     .0   9.9

 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. NE3      *     12     14   1.8
2. SE3      *     12    -14   1.8
3. SW3      *    -12    -14   1.8
4. NW3      *    -12     14   1.8

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*-----------------------------------------
1. NE3      *  262. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .5 *   .0   .0   .0   .0   .0   .0   .0   .0
3. SW3      *   82. *    .5 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
4. NW3      *   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   AVALON BLVD AND ANAHEIM ST   AMWP
              RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide

  I.  SITE VARIABLES

         U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     5  -450     5  -150 *  AG    424   1.5     .0  15.0
B. NA           *     5  -150     5     0 *  AG    363   2.6     .0   9.9
C. ND           *     5     0     5   150 *  AG    499   1.8     .0   9.9
D. NE           *     5   150     5   450 *  AG    499   1.5     .0  15.0
E. SF           *    -5   450    -5   150 *  AG    637   1.5     .0  15.0
F. SA           *    -5   150    -5     0 *  AG    523   2.7     .0   9.9
G. SD           *    -5     0    -5  -150 *  AG    531   1.8     .0   9.9
H. SE           *    -5  -150    -5  -450 *  AG    531   1.5     .0  15.0
I. WF           *   450     7   150     7 *  AG    910   1.5     .0  15.0
J. WA           *   150     7     0     7 *  AG    830   2.2     .0  13.5
K. WD           *     0     7  -150     7 *  AG    946   1.7     .0   9.9
L. WE           *  -150     7  -450     7 *  AG    946   1.5     .0  15.0
M. EF           *  -450    -7  -150    -7 *  AG    881   1.5     .0  15.0
N. EA           *  -150    -7     0    -7 *  AG    774   2.2     .0  13.5
O. ED           *     0    -7   150    -7 *  AG    876   1.7     .0   9.9
P. EE           *   150    -7   450    -7 *  AG    876   1.5     .0  15.0
Q. NL           *     0     0     2  -150 *  AG     61   2.6     .0   9.9
R. SL           *     0     0    -2   150 *  AG    114   2.6     .0   9.9
S. WL           *     0     0   150     5 *  AG     80   2.1     .0   9.9
T. EL           *     0     0  -150    -5 *  AG    107   2.1     .0   9.9

 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*--------------------
1. NE3      *     12     14   1.8
2. SE3      *     12    -14   1.8
3. SW3      *    -12    -14   1.8
4. NW3      *    -12     14   1.8

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*-----------------------------------------
1. NE3      *  262. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .5 *   .0   .0   .0   .0   .0   .0   .0   .0
3. SW3      *   82. *    .5 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .0   .2   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
4. NW3      *   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   AVALON BLVD AND ANAHEIM ST   PMNP
              RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide

  I.  SITE VARIABLES

         U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     5  -450     5  -150 *  AG    585   1.5     .0  15.0
B. NA           *     5  -150     5     0 *  AG    499   2.6     .0   9.9
C. ND           *     5     0     5   150 *  AG    678   1.8     .0   9.9
D. NE           *     5   150     5   450 *  AG    678   1.5     .0  15.0
E. SF           *    -5   450    -5   150 *  AG    696   1.5     .0  15.0
F. SA           *    -5   150    -5     0 *  AG    614   2.7     .0   9.9
G. SD           *    -5     0    -5  -150 *  AG    600   1.8     .0   9.9
H. SE           *    -5  -150    -5  -450 *  AG    600   1.5     .0  15.0
I. WF           *   450     7   150     7 *  AG   1146   1.5     .0  15.0
J. WA           *   150     7     0     7 *  AG   1060   2.2     .0  13.5
K. WD           *     0     7  -150     7 *  AG   1129   1.7     .0   9.9
L. WE           *  -150     7  -450     7 *  AG   1129   1.5     .0  15.0
M. EF           *  -450    -7  -150    -7 *  AG    951   1.5     .0  15.0
N. EA           *  -150    -7     0    -7 *  AG    860   2.2     .0  13.5
O. ED           *     0    -7   150    -7 *  AG    971   1.7     .0   9.9
P. EE           *   150    -7   450    -7 *  AG    971   1.5     .0  15.0
Q. NL           *     0     0     2  -150 *  AG     86   2.6     .0   9.9
R. SL           *     0     0    -2   150 *  AG     82   2.6     .0   9.9
S. WL           *     0     0   150     5 *  AG     86   2.2     .0   9.9
T. EL           *     0     0  -150    -5 *  AG     91   2.2     .0   9.9

III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*--------------------
1. NE3      *     12     14   1.8
2. SE3      *     12    -14   1.8
3. SW3      *    -12    -14   1.8
4. NW3      *    -12     14   1.8

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*-----------------------------------------
1. NE3      *  262. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *  354. *    .6 *   .0   .0   .2   .0   .0   .0   .0   .0
3. SW3      *   82. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .7 *   .0   .0   .0   .0   .0   .1   .0   .0

            *                          CONC/LINK
            *                            (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
3. SW3      *   .0   .1   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
4. NW3      *   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   AVALON BLVD AND ANAHEIM ST  PMWP
              RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide

  I.  SITE VARIABLES

         U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     5  -450     5  -150 *  AG    617   1.5     .0  15.0
B. NA           *     5  -150     5     0 *  AG    528   2.7     .0   9.9
C. ND           *     5     0     5   150 *  AG    707   1.8     .0   9.9
D. NE           *     5   150     5   450 *  AG    707   1.5     .0  15.0
E. SF           *    -5   450    -5   150 *  AG    716   1.5     .0  15.0
F. SA           *    -5   150    -5     0 *  AG    634   2.7     .0   9.9
G. SD           *    -5     0    -5  -150 *  AG    620   1.8     .0   9.9
H. SE           *    -5  -150    -5  -450 *  AG    620   1.5     .0  15.0
I. WF           *   450     7   150     7 *  AG   1147   1.5     .0  15.0
J. WA           *   150     7     0     7 *  AG   1061   2.2     .0  13.5
K. WD           *     0     7  -150     7 *  AG   1133   1.7     .0   9.9
L. WE           *  -150     7  -450     7 *  AG   1133   1.5     .0  15.0
M. EF           *  -450    -7  -150    -7 *  AG    962   1.5     .0  15.0
N. EA           *  -150    -7     0    -7 *  AG    868   2.2     .0  13.5
O. ED           *     0    -7   150    -7 *  AG    982   1.7     .0   9.9
P. EE           *   150    -7   450    -7 *  AG    982   1.5     .0  15.0
Q. NL           *     0     0     2  -150 *  AG     89   2.6     .0   9.9
R. SL           *     0     0    -2   150 *  AG     82   2.6     .0   9.9
S. WL           *     0     0   150     5 *  AG     86   2.2     .0   9.9
T. EL           *     0     0  -150    -5 *  AG     94   2.2     .0   9.9

 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. NE3      *     12     14   1.8
2. SE3      *     12    -14   1.8
3. SW3      *    -12    -14   1.8
4. NW3      *    -12     14   1.8

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*-----------------------------------------
1. NE3      *  262. *    .7 *   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *  354. *    .6 *   .0   .0   .2   .0   .0   .0   .0   .0
3. SW3      *   82. *    .6 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .7 *   .0   .0   .0   .0   .0   .1   .0   .0

            *                          CONC/LINK
            *                            (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
3. SW3      *   .0   .1   .0   .0   .0   .0   .2   .0   .0   .0   .0   .0
4. NW3      *   .0   .3   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
```

```
          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   ALAMEDA ST AND ANAHEIM ST   AMNP
              RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide

  I.  SITE VARIABLES

         U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     5  -450     5  -150 *  AG    784   1.5     .0  15.0
B. NA           *     5  -150     5     0 *  AG    764   2.8     .0   9.9
C. ND           *     5     0     5   150 *  AG    420   1.8     .0   9.9
D. NE           *     5   150     5   450 *  AG    420   1.5     .0  15.0
E. SF           *    -5   450    -5   150 *  AG    537   1.5     .0  15.0
F. SA           *    -5   150    -5     0 *  AG    524   2.7     .0   9.9
G. SD           *    -5     0    -5  -150 *  AG    699   1.8     .0   9.9
H. SE           *    -5  -150    -5  -450 *  AG    699   1.5     .0  15.0
I. WF           *   450     7   150     7 *  AG   1278   1.5     .0  15.0
J. WA           *   150     7     0     7 *  AG    931   2.2     .0  13.5
K. WD           *     0     7  -150     7 *  AG   1132   1.7     .0   9.9
L. WE           *  -150     7  -450     7 *  AG   1132   1.5     .0  15.0
M. EF           *  -450    -7  -150    -7 *  AG    996   1.5     .0  15.0
N. EA           *  -150    -7     0    -7 *  AG    884   2.2     .0  13.5
O. ED           *     0    -7   150    -7 *  AG   1344   1.7     .0   9.9
P. EE           *   150    -7   450    -7 *  AG   1344   1.5     .0  15.0
Q. NL           *     0     0     2  -150 *  AG     20   2.6     .0   9.9
R. SL           *     0     0    -2   150 *  AG     13   2.6     .0   9.9
S. WL           *     0     0   150     5 *  AG    347   2.2     .0   9.9
T. EL           *     0     0  -150    -5 *  AG    112   2.1     .0   9.9

III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. NE3      *     12     14   1.8
2. SE3      *     12    -14   1.8
3. SW3      *    -12    -14   1.8
4. NW3      *    -12     14   1.8

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
 RECEPTOR   * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*----------------------------------------
1. NE3      *  186. *    .7 *   .0   .3   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .7 *   .0   .1   .0   .0   .0   .0   .0   .0
3. SW3      *   82. *    .8 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .7 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
 RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .1   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0
4. NW3      *   .0   .3   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   ALAMEDA ST AND ANAHEIM ST   AMWP
              RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide

  I.  SITE VARIABLES

         U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     5  -450     5  -150 *  AG    802   1.5     .0  15.0
B. NA           *     5  -150     5     0 *  AG    782   2.8     .0   9.9
C. ND           *     5     0     5   150 *  AG    431   1.8     .0   9.9
D. NE           *     5   150     5   450 *  AG    431   1.5     .0  15.0
E. SF           *    -5   450    -5   150 *  AG    556   1.5     .0  15.0
F. SA           *    -5   150    -5     0 *  AG    543   2.7     .0   9.9
G. SD           *    -5     0    -5  -150 *  AG    725   1.9     .0   9.9
H. SE           *    -5  -150    -5  -450 *  AG    725   1.5     .0  15.0
I. WF           *   450     7   150     7 *  AG   1309   1.5     .0  15.0
J. WA           *   150     7     0     7 *  AG    955   2.2     .0  13.5
K. WD           *     0     7  -150     7 *  AG   1156   1.7     .0   9.9
L. WE           *  -150     7  -450     7 *  AG   1156   1.5     .0  15.0
M. EF           *  -450    -7  -150    -7 *  AG   1001   1.5     .0  15.0
N. EA           *  -150    -7     0    -7 *  AG    889   2.2     .0  13.5
O. ED           *     0    -7   150    -7 *  AG   1356   1.7     .0   9.9
P. EE           *   150    -7   450    -7 *  AG   1356   1.5     .0  15.0
Q. NL           *     0     0     2  -150 *  AG     20   2.6     .0   9.9
R. SL           *     0     0    -2   150 *  AG     13   2.6     .0   9.9
S. WL           *     0     0   150     5 *  AG    354   2.2     .0   9.9
T. EL           *     0     0  -150    -5 *  AG    112   2.1     .0   9.9

 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. NE3      *     12     14   1.8
2. SE3      *     12    -14   1.8
3. SW3      *    -12    -14   1.8
4. NW3      *    -12     14   1.8

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*-----------------------------------------
1. NE3      *  186. *    .7 *   .0   .3   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .7 *   .0   .1   .0   .0   .0   .0   .0   .0
3. SW3      *   82. *    .8 *   .0   .0   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .7 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .1   .0   .0   .0   .0   .0   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .0   .0   .0   .3   .0   .0   .0   .0   .0
4. NW3      *   .0   .3   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   ALAMEDA ST AND ANAHEIM ST   PMNP
              RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide

  I.  SITE VARIABLES

         U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     5  -450     5  -150 *  AG   1135   1.5     .0  15.0
B. NA           *     5  -150     5     0 *  AG   1116   3.0     .0   9.9
C. ND           *     5     0     5   150 *  AG    590   1.8     .0   9.9
D. NE           *     5   150     5   450 *  AG    590   1.5     .0  15.0
E. SF           *    -5   450    -5   150 *  AG    558   1.5     .0  15.0
F. SA           *    -5   150    -5     0 *  AG    526   2.6     .0   9.9
G. SD           *    -5     0    -5  -150 *  AG    682   1.8     .0   9.9
H. SE           *    -5  -150    -5  -450 *  AG    682   1.5     .0  15.0
I. WF           *   450     7   150     7 *  AG   1240   1.5     .0  15.0
J. WA           *   150     7     0     7 *  AG    990   2.2     .0  13.5
K. WD           *     0     7  -150     7 *  AG   1082   1.7     .0   9.9
L. WE           *  -150     7  -450     7 *  AG   1082   1.5     .0  15.0
M. EF           *  -450    -7  -150    -7 *  AG   1152   1.5     .0  15.0
N. EA           *  -150    -7     0    -7 *  AG   1054   2.3     .0  13.5
O. ED           *     0    -7   150    -7 *  AG   1731   2.0     .0   9.9
P. EE           *   150    -7   450    -7 *  AG   1731   1.5     .0  15.0
Q. NL           *     0     0     2  -150 *  AG     19   2.6     .0   9.9
R. SL           *     0     0    -2   150 *  AG     32   2.6     .0   9.9
S. WL           *     0     0   150     5 *  AG    250   2.2     .0   9.9
T. EL           *     0     0  -150    -5 *  AG     98   2.2     .0   9.9

 III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*--------------------
1. NE3      *     12     14   1.8
2. SE3      *     12    -14   1.8
3. SW3      *    -12    -14   1.8
4. NW3      *    -12     14   1.8

  IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
  RECEPTOR  * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*-----------------------------------------
1. NE3      *  186. *    .9 *   .0   .5   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .8 *   .0   .2   .0   .0   .0   .0   .0   .0
3. SW3      *   82. *    .9 *   .0   .1   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .7 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
  RECEPTOR  *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .1   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .4   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .0   .0   .0   .4   .0   .0   .0   .0   .0
4. NW3      *   .0   .3   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0
```

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          CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
                   JUNE 1989 VERSION
                   PAGE   1

              JOB:   ALAMEDA ST AND ANAHEIM ST   PMWP
              RUN: Hour 1           (WORST CASE ANGLE)
        POLLUTANT: Carbon Monoxide

  I.  SITE VARIABLES

         U=    .5 M/S             Z0= 100. CM            ALT=     0. (M)
       BRG= WORST CASE            VD=   .0 CM/S
      CLAS=     7 (G)             VS=   .0 CM/S
      MIXH= 1000. M              AMB=   .0 PPM
     SIGTH=    5. DEGREES       TEMP= 15.6 DEGREE (C)

 II.  LINK VARIABLES

      LINK      *  LINK COORDINATES (M)   *              EF     H     W
   DESCRIPTION  *   X1    Y1    X2    Y2  * TYPE  VPH  (G/MI)  (M)   (M)
----------------*-------------------------*------------------------------
A. NF           *     5  -450     5  -150 *  AG   1169   1.5     .0  15.0
B. NA           *     5  -150     5     0 *  AG   1150   3.0     .0   9.9
C. ND           *     5     0     5   150 *  AG    619   1.8     .0   9.9
D. NE           *     5   150     5   450 *  AG    619   1.5     .0  15.0
E. SF           *    -5   450    -5   150 *  AG    583   1.5     .0  15.0
F. SA           *    -5   150    -5     0 *  AG    551   2.6     .0   9.9
G. SD           *    -5     0    -5  -150 *  AG    715   1.8     .0   9.9
H. SE           *    -5  -150    -5  -450 *  AG    715   1.5     .0  15.0
I. WF           *   450     7   150     7 *  AG   1261   1.5     .0  15.0
J. WA           *   150     7     0     7 *  AG   1003   2.2     .0  13.5
K. WD           *     0     7  -150     7 *  AG   1095   1.7     .0   9.9
L. WE           *  -150     7  -450     7 *  AG   1095   1.5     .0  15.0
M. EF           *  -450    -7  -150    -7 *  AG   1185   1.5     .0  15.0
N. EA           *  -150    -7     0    -7 *  AG   1087   2.3     .0  13.5
O. ED           *     0    -7   150    -7 *  AG   1769   2.1     .0   9.9
P. EE           *   150    -7   450    -7 *  AG   1769   1.5     .0  15.0
Q. NL           *     0     0     2  -150 *  AG     19   2.5     .0   9.9
R. SL           *     0     0    -2   150 *  AG     32   2.5     .0   9.9
S. WL           *     0     0   150     5 *  AG    258   2.2     .0   9.9
T. EL           *     0     0  -150    -5 *  AG     98   2.2     .0   9.9

III.  RECEPTOR LOCATIONS

            *    COORDINATES (M)
  RECEPTOR  *    X      Y      Z
------------*---------------------
1. NE3      *     12     14   1.8
2. SE3      *     12    -14   1.8
3. SW3      *    -12    -14   1.8
4. NW3      *    -12     14   1.8

 IV.  MODEL RESULTS (WORST CASE WIND ANGLE )

            *       * PRED  *                CONC/LINK
            *  BRG  * CONC  *                  (PPM)
 RECEPTOR   * (DEG) * (PPM) *   A    B    C    D    E    F    G    H
-------------*-------*-------*----------------------------------------
1. NE3      *  186. *    .9 *   .0   .5   .0   .0   .0   .0   .0   .0
2. SE3      *  275. *    .8 *   .0   .2   .0   .0   .0   .0   .0   .0
3. SW3      *   82. *   1.0 *   .0   .1   .0   .0   .0   .0   .0   .0
4. NW3      *   95. *    .8 *   .0   .0   .0   .0   .0   .0   .0   .0

            *                          CONC/LINK
            *                            (PPM)
 RECEPTOR   *   I    J    K    L    M    N    O    P    Q    R    S    T
------------*-------------------------------------------------------------
1. NE3      *   .0   .1   .0   .0   .0   .0   .1   .0   .0   .0   .0   .0
2. SE3      *   .0   .0   .0   .0   .0   .4   .0   .0   .0   .0   .0   .0
3. SW3      *   .0   .0   .0   .0   .0   .0   .5   .0   .0   .0   .0   .0
4. NW3      *   .0   .3   .0   .0   .0   .0   .0   .1   .0   .0   .0   .0
```

Climate and Ambient Monitoring Data

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California Environmental Protection Agency
AIR RESOURCES BOARD

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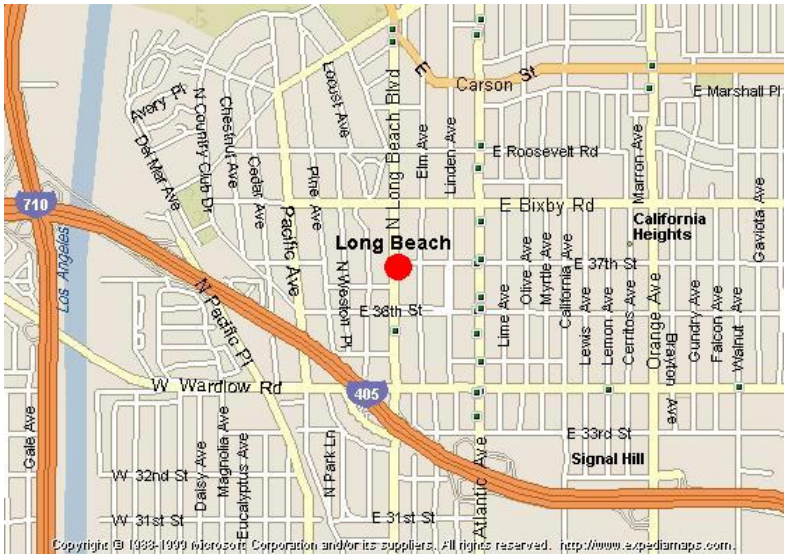
Quality Assurance
Site Information for North Long Beach (Long Beach)

This page updated May 15, 2008



AIRS Number	ARB Number	Site Start Date	Reporting Agency and Agency Code
060374002	70072	5/1/69	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
3648 N. Long Beach Bl, Long Beach CA 90807	Los Angeles	South Coast	33° 49' 25"	118° 11' 19"	6

Pollutants Monitored (click on parameter link for real-time data)
CO, SO_2, NO_2, O_3, PM_{10}, $TEOM_{PM10}$, $PM_{2.5}$, TSP, Toxics, Cr^{6+}, Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Barometric Pressure, Solar Radiation

Site Photos	Photo Sequences	Site Surveys
--Select Photos--	--Select Position And Direction--	--Select Survey--

Other ARB Database Information	Real-Time Met Data	Aerial Photos and Topo Maps Of Site
--Select Database--	--Select Data Server--	--Select External Map--

Site Information Menu Top Page **Quality Assurance Programs** **Search QA Site Information Database**

For real-time air quality data visit: Air Quality and Meteorological Information System (AQMIS)

For further information contact:

Merrin Wright, *Manager*
Quality Assurance Section

A department of the California Environmental Protection Agency

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iADAM

Highest 4 Daily Maximum Hourly Ozone Measurements

North Long Beach

FAQs

Year:	2005		2006		2007	
	Date	Measurement	Date	Measurement	Date	Measurement
First High:	May 14	0.091	Jul 22	0.081	Sep 3	0.099
Second High:	Sep 3	0.084	Jun 16	0.077	Sep 2	0.083
Third High:	Aug 27	0.077	Sep 4	0.074	May 19	0.073
Fourth High:	Apr 18	0.073	Aug 31	0.073	Sep 1	0.071
# Days Above State Standard:		0		0		1
California Designation Value:		0.09		0.09		0.08
Expected Peak Day Conc.:		0.093		0.088		0.080
# Days Above Nat'l Standard:		*0*		*0*		*0*
National Design Value:		*0.089*		*0.088*		*0.083*
Year Coverage:		98		97		95

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All concentrations are expressed in parts per million.
The national 1-hour ozone standard was revoked in June 2005 and is no longer in effect. Statistics related to the revoked standard are shown in *italics* or *italics* .
State exceedances are shown in **yellow** . Exceedances of the revoked national 1-hour standard are shown in *orange* .
An exceedance is not necessarily a violation.
Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period.
* There was insufficient (or no) data available to determine the value.

Switch: 8-Hour Ozone | PM10 | PM2.5 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide

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Highest 4 Daily Maximum 8-Hour Ozone Averages

North Long Beach

FAQs

Year:	2005		2006		2007	
	Date	8-Hr Average	Date	8-Hr Average	Date	8-Hr Average
National:						
First High:	May 14	0.069	Sep 3	0.058	Sep 3	0.073
Second High:	Apr 17	0.068	May 10	0.057	Sep 2	0.068
Third High:	Apr 18	0.064	Jun 16	0.057	May 19	0.063
Fourth High:	Aug 25	0.060	Jul 22	0.057	May 20	0.057
California:						
First High:	Apr 17	0.069	Sep 3	0.059	Sep 3	0.074
Second High:	May 14	0.069	May 10	0.058	Sep 2	0.068
Third High:	Apr 18	0.064	Jun 16	0.058	May 19	0.064
Fourth High:	May 13	0.060	Jul 22	0.057	May 18	0.057
National:						
# Days Above Nat'l 1997 Std.:		0		0		0
Nat'l 1997 Std. Design Value:		0.064		0.062		0.058
National Year Coverage:		99		97		95
California:						
# Days Above State Standard:		0		0		1
California Designation Value:		0.073		0.071		0.064
Expected Peak Day Conc.:		0.074		0.070		0.064
California Year Coverage:		98		97		95

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All averages are expressed in parts per million.
National exceedances are shown in **orange** . State exceedances are shown in **yellow** .
An exceedance is not necessarily a violation.
Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period.
* There was insufficient (or no) data available to determine the value.

Switch: Hourly Ozone | PM10 | PM2.5 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide

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Highest 4 Daily Maximum 8-Hour Carbon Monoxide Averages

North Long Beach

FAQs

Year:	2005		2006		2007	
	Date	Measurement	Date	Measurement	Date	Measurement
National:						
First High:	Nov 18	3.51	Feb 9	3.36	Jan 16	2.59
Second High:	Nov 18	3.07	Dec 7	3.31	Jan 24	2.44
Third High:	Nov 19	2.91	Feb 9	3.01	Aug 31	2.43
Fourth High:	Nov 17	2.90	Dec 8	2.93	Dec 5	2.41
California:						
First High:	Nov 18	3.51	Feb 9	3.36	Jan 16	2.59
Second High:	Nov 19	2.91	Dec 7	3.31	Jan 24	2.44
Third High:	Nov 17	2.90	Dec 8	2.80	Aug 31	2.43
Fourth High:	Oct 14	2.81	Feb 8	2.79	Dec 5	2.41
# Days Above Nat'l Standard:		0		0		0
# Days Above State Standard:		0		0		0
Year Coverage:		97		96		97

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All averages are expressed in parts per million.
State exceedances are shown in **yellow** . National exceedances are shown in **orange** .
An exceedance is not necessarily a violation.
Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period.
* There was insufficient (or no) data available to determine the value.

Switch: Hourly Ozone | 8-Hour Ozone | PM10 | PM2.5 | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide

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Highest 4 Daily Maximum Hourly Nitrogen Dioxide Measurements

North Long Beach

FAQs

Year:	2005		2006		2007	
	Date	Measurement	Date	Measurement	Date	Measurement
First High:	Oct 14	0.136	Apr 12	0.102	Oct 25	0.107
Second High:	Oct 13	0.110	Nov 20	0.092	Mar 12	0.090
Third High:	Oct 7	0.089	Dec 7	0.084	Nov 15	0.082
Fourth High:	Oct 5	0.081	Nov 18	0.083	Jan 24	0.081
# Days Above State Standard:		0		0		0
Annual Average:		0.024		0.022		0.020
Year Coverage:		98		97		97

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All concentrations are expressed in parts per million.
State exceedances are shown in **yellow** . National exceedances are shown in **orange** .
An exceedance is not necessarily a violation.
Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.
* There was insufficient (or no) data available to determine the value.

Switch: Hourly Ozone | 8-Hour Ozone | PM10 | PM2.5 | Carbon Monoxide | Sulfur Dioxide | Hydrogen Sulfide

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Highest 4 Daily Maximum 24-Hour Sulfur Dioxide Averages

North Long Beach

FAQs

Year:	2005		2006		2007	
	Date	Measurement	Date	Measurement	Date	Measurement
First High:	Dec 9	0.010	Aug 28	0.010	Sep 2	0.010
Second High:	Jul 21	0.009	Jan 7	0.009	Jan 24	0.010
Third High:	Jul 12	0.007	Aug 27	0.007	Jan 19	0.010
Fourth High:	Oct 7	0.007	Aug 23	0.005	Feb 7	0.009
# Days Above Nat'l Standard:		0		0		0
# Days Above State Standard:		0		0		0
Annual Average:		0.002		0.001		0.003
Year Coverage:		97		98		95

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All averages are expressed in parts per million.
State exceedances are shown in **yellow** . National exceedances are shown in **orange** .
National exceedances are also state exceedances.
An exceedance is not necessarily a violation.
Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period.
* There was insufficient (or no) data available to determine the value.

Switch: Hourly Ozone | 8-Hour Ozone | PM10 | PM2.5 | Carbon Monoxide | Nitrogen Dioxide | Hydrogen Sulfide

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Highest 4 Daily PM10 Measurements

North Long Beach

FAQs

Year:	2005		2006		2007	
	Date	Measurement	Date	Measurement	Date	Measurement
National:						
First High:	Nov 6	66.0	Dec 7	78.0	Oct 21	232.0
Second High:	Jan 22	61.0	May 11	64.0	Apr 12	75.0
Third High:	Nov 24	57.0	Dec 1	63.0	Jan 6	54.0
Fourth High:	Dec 21	54.0	Oct 26	58.0	Jan 24	53.0
California:						
First High:	Nov 6	66.0	Dec 7	78.0	Oct 21	232.0
Second High:	Jan 22	61.0	May 11	64.0	Apr 12	75.0
Third High:	Nov 24	57.0	Dec 1	63.0	Jan 6	54.0
Fourth High:	Dec 21	54.0	Oct 26	57.0	Jan 24	53.0
Measured:						
# Days Above Nat'l Standard:		0		0		1
# Days Above State Standard:		4		5		6
Estimated:						
3-Yr Avg # Days Above Nat'l Std:		0.0		0.0		2.0
# Days Above Nat'l Standard:		0.0		0.0		6.1
# Days Above State Standard:		23.7		29.3		*
State 3-Yr Maximum Average:		33		33		31
State Annual Average:		29.5		30.9		*
National 3-Year Average:		*32*		*31*		*31*
National Annual Average:		*29.7*		*31.0*		*33.5*
Year Coverage:		97		100		98

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All concentrations are expressed in micrograms per cubic meter.
The national annual average PM10 standard was revoked in December 2006 and is no longer in effect.
Statistics related to the revoked standard are shown in *italics* or *italics* .
State exceedances are shown in **yellow** . National exceedances are shown in **orange** .
An exceedance is not necessarily a violation.
Statistics may include data that are related to an exceptional event.
State and national statistics may differ for the following reasons:
State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods.
State and national statistics may therefore be based on different samplers.
State statistics for 1998 and later are based on *local* conditions (except for sites in the South Coast Air Basin, where State statistics for 2002 and later are based on *local* conditions).
National statistics are based on *standard* conditions.
State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.
Measurements are usually collected every six days. Measured days counts the days that a measurement was greater than the level of the standard; Estimated days mathematically estimates how many days concentrations would have been greater than the level of the standard had each day been monitored.
3-Year statistics represent the listed year and the 2 years before the listed year.
Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.
* There was insufficient (or no) data available to determine the value.

Switch: Hourly Ozone | 8-Hour Ozone | PM2.5 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide

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Highest 4 Daily PM2.5 Measurements

North Long Beach

FAQs

Year:	2005		2006		2007	
	Date	Measurement	Date	Measurement	Date	Measurement
National:						
First High:	Oct 21	53.8	Feb 11	58.5	Nov 19	82.8
Second High:	Mar 10	52.6	Feb 25	49.8	Nov 18	59.4
Third High:	Jan 22	51.3	Feb 4	43.4	Nov 2	47.9
Fourth High:	Nov 6	48.0	Feb 5	41.4	Nov 3	46.9
California:						
First High:	Oct 21	53.8	Feb 11	58.5	Nov 19	82.8
Second High:	Mar 10	52.6	Feb 25	49.8	Nov 18	59.4
Third High:	Jan 22	51.3	Feb 4	43.4	Nov 2	47.9
Fourth High:	Nov 6	48.0	Feb 5	41.4	Nov 3	46.9
Est Days > Nat'l '97 24-Hr Std:		*		*		1.1
Measured Days > Nat'l '97 24-Hr Std:		0		0		1
Nat'l '97 24-Hour Std Design Value:		*		*		*
Nat'l '97 24-Hr Std 98th Percentile:		*		*		40.7
National Annual Std Design Value:		17.3		16.0		14.9
National Annual Average:		15.9		14.1		14.6
State Ann'l Std Designation Value:		*		*		*
State Annual Average:		*		*		*
Year Coverage:		87		71		87

Go Backward One Year | New Top 4 Summary | Go Forward One Year

Notes: All concentrations are expressed in micrograms per cubic meter.
State exceedances are shown in **yellow** . National exceedances are shown in **orange** .
An exceedance is not necessarily a violation.
State and national statistics may differ for the following reasons:
State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods.
State and national statistics may therefore be based on different samplers.
State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.
Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.
* There was insufficient data available throughout the year to determine the value.

Switch: Hourly Ozone | 8-Hour Ozone | PM10 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide

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