Emissions From Miscellaneous Sources

Architectural Paint Emissions Worksheet

VOC Emissions

LA Ent Usage gals/yr	LA Ent VOC EF, lb/gals	LA Ent VOC lb/yr	LA Ent VOC lb/day
8000	2	16,000	44

Broiler Emission Worksheet

LA Ent Boilers
800,000,000
762,000

<10 MMBTU Pollutant	EF lb/scf	LA Ent lb/yr	LA Ent lb/day
Nitrogen oxide[9]	6.56E-05	50.0	0.13695
Carbon monoxid	2.00E-05	15.24	0.04175
Sulfur dioxide	6.00E-07	0.46	0.00125
PM	3.00E-06	2.29	0.00626
Acetaldehyde	3.53E-08	0.0269	0.00007
Xylenes	2.20E-09	0.00168	0.000005
Toluene	5.90E-09	0.0045	0.00001
Formaldehyde	4.09E-08	0.0312	0.00009
Benzene	1.85E-08	0.0141	0.00004
Methane	2.70E-06	2.06	0.00564
Non-methane H	5.30E-06	4.04	0.01106
PAH	1.17E-09	0.00089	0.000002

Boiler Emission Worksheet

LA Ent Boilers	
105,000,000,000	btu/yr
99,960,000	scf/yr

<10 MMBTU Pollutant	EF lb/scf	LA Ent lb/yr	LA Ent lb/day
Nitrogen oxide[8]	6.56E-05	6,557	17.9654
Carbon monoxide	2.00E-05	1,999	5.4773
Sulfur dioxide	6.00E-07	60.0	0.1643
PM	3.00E-06	300	0.8216
Acetaldehyde	3.53E-08	3.53	0.0097
Xylenes	2.20E-09	0.220	0.0006
Toluene	5.90E-09	0.59	0.0016
Formaldehyde	4.09E-08	4.09	0.0112
Benzene	1.85E-08	1.85	0.0051
Methane	2.70E-06	270	0.7394
Non-methane HC	5.30E-06	530	1.4515
PAH	1.17E-09	0.117	0.0003

Emergency Generator Emissions Worksheet

LA Ent Area square feet
3,960,000

La Ent Natural Gas Usage, scf	LA Ent Natural Gas Usage, scf
132,000	300,000

Natural Gas Emissions

Pollutants	EF lb/scf[4]	LA Ent AAE, lb/y	LA Ent AAE, lb/day
Nitrogen oxide	1.00E-04	3.00E+01	8.22E-02
Carbon mono	2.00E-05	6.00E+00	1.64E-02
Sulfur dioxide	6.00E-07	1.80E-01	4.93E-04
PM	3.00E-06	9.00E-01	2.47E-03
Acetaldehyde	3.53E-08	1.06E-02	2.90E-05
Xylenes	2.20E-09	6.60E-04	1.81E-06
Toluene	5.90E-09	1.77E-03	4.85E-06
Formaldehyde	1.05E-06	3.15E-01	8.63E-04
Benzene	3.20E-07	9.60E-02	2.63E-04
Methane	2.70E-06	8.10E-01	2.22E-03
Non methane	5.30E-06	1.59E+00	4.36E-03
PAH	1.17E-09	3.51E-04	9.62E-07

Paint Spray

LA Ent Usage gals/yr
900

Pollutant	LA Ent lb/yr	LA Ent lb/day
VOC	884.4	2.4230
Glycol Ether	39.6	0.1085
Toluene	300.96	0.8245
Isocyanates	35.64	0.0976
Xylene	34.32	0.0940
TCA	2.64	0.0072
Styrene	5.28	0.0145
Methanol	29.04	0.0796
Lead compoun	0	0.0000

Off-Road Engines - Lawn & Garden
LA Entertainment

Statewide 2005

Emissions in tons/day (from Table K-3, Appendix M, Offroad Vehicle Emissions Inventory and CO Credits)

	Engine Population	% of Total	Fuel Consump.	Exhaust PM	Exhaust PM10 =19% PM*	Exhaust Nox	Exhaust CO	Exhaust ROG	Evap ROG	Container ROG	Dist. S&T ROG	Sum ROG
2-stroke < 25 hp	2153439	40.52%	63293	0.16	0.03	0.61	71.78	23.33	1.17	1.90	0.11	26.50
4-stroke < 25 hp	3097046	58.28%	117964	0.13	0.02	2.42	241.63	9.33	4.66	3.54	0.20	17.74
2-stroke > 25 hp	497	0.01%	2167	0.00	0.00	0.04	2.84	0.07	0.00	0.02	0.00	0.10
4-stroke > 25 hp	63540	1.20%	30515	0.17	0.03	1.10	65.21	1.75	0.88	0.88	0.05	2.98
Total	5314522	100.00%	213939	0.46	0.09	4.17	381.46	34.48	6.71	6.34	0.36	47.32
Avg. Emissions per Engine in tons/ day (fuel in gal./day)			0.040256	8.66E-08	1.64E-08	7.85E-07	7.18E-05	6.49E-06	1.26E-06	1.19E-06	6.77E-08	8.9E-06
Engine Population for Proposed Action =			50	**								
Emissions per Day for Proposed Action in tons/ day (fuel in gal./day)			2.012777	4.33E-06	8.22E-07	3.92E-05	0.003589	0.000324	6.31E-05	5.96E-05	3.39E-06	0.000445
Emissions per Day for Proposed Action in pounds/ day (fuel in gal./day)			2.0128	0.0087	0.0016	0.0785	7.1777	0.6488	0.1263	0.1193	0.0068	0.8904

*Source: CEPA ARB, "A Report to the California Legislature on the Potential Health and Environmental Impacts of Leaf Blowers", Mobile Source Control Division, February 2000.

**Assuming 2 min engine use/100 sf landscaping, biweekly maintenance; Source: January 8, 1998 press release from Aero Air Pollution, Los Angeles.