

B01 - BOILER, RESIDUAL OIL FIRED, >100 MMBTU/HR, UNCONTROLLED

CALCULATION METHODS

$E_a = U_a \times EF$ (lbs/1000 gallons)

$E_h = U_h$ (gal/hr) x (1/1000) x EF (lbs/1000 gallons)

NOTES:

- Control efficiencies must be included in emission factors since the calculation procedure will not refer to this data.

- The ROG factor based on the speciation table is 0.93 lbs/1000 gal versus 0.76 lbs/1000 gal using AP-42, Section 1.3 assumption.

POLLUTANT	District Emission Factor	EPA REFERENCE	EPA	(UNITS)	COMMENTS
	(lbs/1000 gal fuel burned)	DOCUMENT	FACTOR		
NOX		AP-42, Sect.1.3,10/96, Table 1.3-1	67	lbs/1000 gal	Use site specific NOx source test data for SDGE Encina & South Bay
CO	5.00	AP-42, Sect.1.3,10/96, Table 1.3-1	5	lbs/1000 gal	Use site specific CO source test data if available
SOX	35.50		90	lbs/1000 gal	Assume a sulfur content of 0.5% and a fuel density of 7.1 lbs/gallon
TOG	1.04	AP-42, Sect.1.3,10/96, Table 1.3-2	1.04	lbs/1000 gal	
ROG	0.93	Calculated from EPA VOC speciation profile	0.93	lbs/1000 gal	Use EPA VOC Profile (89% ROG) not AP-42 factor (0.76 lbs/kgal)
TSP	10.00	AP-42, Sect.1.3,10/96, Table 1.3-1	10	lbs/1000 gal	
PM10	10.00	AP-42, Sect.1.3,10/96, Table 1.3-1	10	lbs/1000 gal	
ACETONE	2.91E-01	EPA VOC Speciation Profile # 0001 1/90	28.00%	lbs/lb TOC	= 1.04 x 0.28
ARSENIC	1.32E-03	AP-42 Table 1.3-10	1.32E-03	lbs/1000 gal	
BARIUM	2.57E-03	AP-42 Table 1.3-10	2.57E-03	lbs/1000 gal	
BENZENE	2.14E-04	AP-42 Table 1.3-8	2.14E-04	lbs/1000 gal	
BERYLLIUM	2.78E-05	AP-42 Table 1.3-10	2.78E-05	lbs/1000 gal	
CADMIUM	3.98E-04	AP-42 Table 1.3-10	3.98E-04	lbs/1000 gal	
CHLORINE					
CHROMIUM HEXVALENT	2.48E-04	AP-42 Table 1.3-10	2.48E-04	lbs/1000 gal	
CHROMIUM NONHEXVALENT	8.45E-04	AP-42 Table 1.3-10	8.45E-04	lbs/1000 gal	
COBALT	6.02E-03	AP-42 Table 1.3-10	6.02E-03	lbs/1000 gal	
COPPER	1.76E-03	AP-42 Table 1.3-10	1.76E-03	lbs/1000 gal	
ETHYL BENZENE	6.36E-06	AP-42 Table 1.3-8	6.36E-06	lbs/1000 gal	
FORMALDEHYDE	3.12E-01	EPA VOC Speciation Profile # 0001 1/90	30.00%	lbs/lb TOC	= 1.04 x 0.30
HEXANE	5.20E-02	EPA VOC Speciation Profile # 0001 1/90	5.00%	lbs/lb TOC	= 1.04 x 0.05
HYDROGEN CHLORIDE					
HYDROGEN SULFIDE					
LEAD	1.51E-03	AP-42 Table 1.3-10	1.51E-03	lbs/1000 gal	

MANGANESE	3.00E-03	AP-42 Table 1.3-10	3.00E-03	lbs/1000 gal	
MERCURY	1.13E-04	AP-42 Table 1.3-10	1.13E-04	lbs/1000 gal	
NAPHTHALENE	1.13E-03	AP-42 Table 1.3-8	1.13E-03	lbs/1000 gal	
NICKEL	8.45E-02	AP-42 Table 1.3-10	8.45E-02	lbs/1000 gal	
PAH'S (UNSPECIFIED)	5.13E-05	AP-42 Table 1.3-8	5.13E-05	lbs/1000 gal	
- BENZO(A)ANTHRACENE	4.01E-06	AP-42 Table 1.3-8	4.01E-06	lbs/1000 gal	
- BENZO(B)FLUORANTHENE	1.48E-06	AP-42 Table 1.3-8	1.48E-06	lbs/1000 gal	
- INDENO(1,2,3-CD)PYRENE	2.14E-06	AP-42 Table 1.3-8	2.14E-06	lbs/1000 gal	
- DIBENZ(A,H)ANTHRACENE	1.67E-06	AP-42 Table 1.3-8	1.67E-06	lbs/1000 gal	
SELENIUM	6.83E-04	AP-42 Table 1.3-10	6.83E-04	lbs/1000 gal	
TOLUENE	6.20E-03	AP-42 Table 1.3-8	6.20E-03	lbs/1000 gal	
1,1,1-TRICHLOROETHANE	2.36E-04	AP-42 Table 1.3-8	2.36E-04	lbs/1000 gal	
XYLENES	1.90E-04	AP-42 Table 1.3-8	1.90E-04	lbs/1000 gal	
ZINC	2.91E-02	AP-42 Table 1.3-10	2.91E-02	lbs/1000 gal	

Last Updated on 8/24/99
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