

B07 - BOILER, BUTANE FIRED, < 10 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.

- Assumes AP-42 Commercial Boilers represent equipment with <10 mmBtu capacities.

- Assumes TOC speciation profile 0003 for natural gas combustion is applicable to butane fuel for organic emissions.

POLLUTANT	District Emission Factor (lbs/1000 gal fuel burned)	EPA REFERENCE DOCUMENT	EPA FACTOR	(UNITS)	COMMENTS
NOX	15.00	AP-42, Sect.1.5,10/96, Table 1.5-1	15.00	lbs/1000 gal	
CO	2.10	AP-42, Sect.1.5,10/96, Table 1.5-1	2.10	lbs/1000 gal	
SOX	0.016	AP-42, Sect.1.5,10/96, Table 1.5-1	0.016	lbs/1000 gal	Assume a sulfur content of 0.18 gr/100 ft.3.
TOG	0.60	AP-42, Sect.1.5,10/96, Table 1.5-2	0.60	lbs/1000 gal	
ROG	0.40	AP-42, Sect.1.5,10/96, Table 1.5-2	0.40	lbs/1000 gal	
TSP	0.50	AP-42, Sect.1.5,10/96, Table 1.5-1	0.50	lbs/1000 gal	
PM10	0.50	AP-42, Sect.1.5,10/96, Table 1.5-1	0.50	lbs/1000 gal	
ACETONE					
ARSENIC					
BARIUM					
BENZENE	2.40E-02	Using EPA VOC Profile 0003 1/90	4.00%	lb / lb TOG	= 0.60 x 0.04
BERYLLIUM					
CADMIUM					
CHLORINE					
CHROMIUM HEXA VALENT					
CHROMIUM NONHEXA VALENT					
COBALT					
COPPER					
ETHYL BENZENE					
FORMALDEHYDE	4.80E-02	Using EPA VOC Profile 0003 1/90	8.00%	lb / lb TOG	= 0.60 x 0.08
HEXANE	1.20E-02	Using EPA VOC Profile 0003 1/90	2.00%	lb / lb TOG	= 0.60 x 0.02
HYDROGEN CHLORIDE					
HYDROGEN SULFIDE					
LEAD					
MANGANESE					
MERCURY					
NAPHTHALENE					
NICKEL					
PAH'S					
SELENIUM					
TOLUENE	1.20E-02	Using EPA VOC Profile 0003 1/90	2.00%	lb / lb TOG	= 0.60 x 0.02
XYLENES					
ZINC					