

I01 - INCINERATOR, NATURAL GAS FIRED, REFUSE, MODULAR EXCESS AIR COMBUSTORS

CALCULATION METHODS

$E_a = U_a \times EF$ (lbs/ton charged or lbs/mmscf natural gas)

$E_h = U_h \times EF$ (lbs/ton charged or lbs/mmscf natural gas)

NOTES:

- Control efficiencies must be included in emission factors since the calculation procedure will not refer to this data.
- Trace toxic emission factors for refuse incinerators are based on Section 2.1 of AP-42 (10/96).
- Emission factors for NOx, CO, SOx, TOG, and ROG are based on fuel usage and assumed to be equivalent to a small, uncontrolled, commercial boiler (AP-42 Section 1.4).
- ROG emissions are assumed to be 48% of the TOG emissions per AP-42 Section 1.4, Table 1.4-3.
- NOx, CO, TOG, and ROG factors have been adjusted for fuel BTU content per AP-42 Section 1.4.
- Use site specific particulate emissions testing if available. The default value (6.5 lbs PM10/ton charged) is based on the emission limit of 0.3 grains/dscf exhaust.

POLLUTANT	District Emission Factor (lbs/million ft3 fuel burned)	EPA REFERENCE DOCUMENT	EPA FACTOR	(UNITS)	COMMENTS
NOX	103.10	AP-42, Sect.1.4,10/96, Table 1.4-1	100	lbs/million ft3	
CO	21.65	AP-42, Sect.1.4,10/96, Table 1.4-1	21	lbs/million ft3	
SOX	0.60			lbs/million ft3	Use average SDG&E natural gas sulfur content (0.6 lbs SOx/million ft3).
TOG	5.98	AP-42, Sect.1.4,10/96, Table 1.4-3	5.8	lbs/million ft3	
ROG	2.87		48.00%	lbs/lb TOC	

POLLUTANT	District Emission Factor (lbs/ton charged)	EPA REFERENCE DOCUMENT	EPA FACTOR	(UNITS)	COMMENTS
TSP	6.50				Based on District emission standard of 0.3 grains / dscf exhaust
PM10	6.50				Assumes all TSP is <PM10.
ACETALDEHYDE					
ARSENIC	4.37E-03	AP-42, Sect.2.1,10/96, Table 2.1-2	4.37E-03	lbs/ton charged	
BENZENE					
BERYLLIUM					
CADMIUM	1.09E-02	AP-42, Sect.2.1,10/96, Table 2.1-2	1.09E-02	lbs/ton charged	
CHROMIUM, NONHEXAVALENT	8.52E-03	AP-42, Sect.2.1,10/96, Table 2.1-2	8.97E-03	lbs/ton charged	Assume 95% Cr total is nonhexavalent per ARB guidance.
CHROMIUM, HEXAVALENT	4.49E-04				Assume 5% Cr converted to Cr+6 per ARB guidance.
COPPER					
FORMALDEHYDE					
HEXANE					
HYDROGEN CHLORIDE	6.40E+00	AP-42, Sect.2.1,10/96, Table 2.1-2	6.40E+00	lbs/ton charged	
HYDROGEN FLUORIDE					
LEAD	2.13E-01	AP-42, Sect.2.1,10/96, Table 2.1-2	2.13E-01	lbs/ton charged	

MERCURY	5.60E-03	AP-42, Sect.2.1.10/96, Table 2.1-2	5.60E-03	lbs/ton charged	
NICKEL	7.85E-03	AP-42, Sect.2.1.10/96, Table 2.1-2	7.85E-03	lbs/ton charged	
PAH'S, UNSPECIFIED					
SELENIUM					
TOLUENE					
1,1,1-TRICHLOROETHANE					
TRICHLOROETHYLENE					
VINYL CHLORIDE					
VINYLDENE CHLORIDE					
XYLENES					
ZINC					

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