

**M01 - MISCELLANEOUS EXTERNAL COMBUSTION EQUIPMENT, NATURAL GAS FIRED, < 0.3 MMBTU/HR, UNCONTROLLED**

**CALCULATION METHODS**

$E_a = U_a \times EF$  (lbs/mmft3)

$E_h = U_h$  (scfm) x (60/1000000) x EF (lbs/mmft3)

**NOTES:**

- Control efficiencies must be included in emission factors since the calculation procedure will not refer to this data.
- No particulate speciation table exists for natural gas combustion.
- Emission factors for NOx, CO, and TOG are based on a natural gas BTU content of 1020 BTU/scf.
- Trace organic emissions are based on EPA speciation profile #0003 rather than the E rated factors listed in AP-42.
- Use this calculation procedure for small gas fired boilers, hot water heaters, ovens, etc. .

POLLUTANT	District Emission Factor	EPA REFERENCE	EPA	(UNITS)	COMMENTS
	(lbs/million ft3 fuel burned)	DOCUMENT	FACTOR		
NOX	94.00	AP-42, Sect.1.4, 2/98, Table 1.4-1	94	lbs/million ft3	
CO	40.00	AP-42, Sect.1.4, 2/98, Table 1.4-1	40	lbs/million ft3	
SOX	0.60	AP-42, Sect.1.4, 3/98, Table 1.4-2	0.6	lbs/million ft3	Assumes an average sulfur content of 2000 grains MM ft3 natural gas.
TOG	11.00	AP-42, Sect.1.4, 3/98, Table 1.4-2	11	lbs/million ft3	
ROG	5.50	AP-42, Sect.1.4, 3/98, Table 1.4-2	5.5	lbs/million ft3	
TSP	7.60	AP-42, Sect.1.4, 3/98, Table 1.4-2	7.6	lbs/million ft3	
PM10	7.60	AP-42, Sect.1.4, 3/98, Table 1.4-2	7.6	lbs/million ft3	Assumes PM10 = TSP per EPA instructions.
ACETALDEHYDE					
AMMONIA					
BENZENE	0.4400	EPA VOC Speciation Profile # 0003 1/90	4.00%	lbs/lb TOC	
1,3-BUTADIENE					
ETHYL BENZENE					
FORMALDEHYDE	0.8800	EPA VOC Speciation Profile # 0003 1/90	8.00%	lbs/lb TOC	
HEXANE	0.1100	EPA VOC Speciation Profile # 0003 1/90	1.00%	lbs/lb TOC	
HYDROGEN CHLORIDE					
HYDROGEN SULFIDE					
ISOPROPANOL					
METHANOL					
PROPYLENE					
TOLUENE	0.2200	EPA VOC Speciation Profile # 0003 1/90	2.00%	lbs/lb TOC	
XYLENES					