

B09 - BOILER, PROPANE 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 propane fuel for organic emissions.

| POLLUTANT | District Emission Factor (lbs/1000 gal fuel burned) | EPA REFERENCE DOCUMENT | EPA FACTOR | (UNITS) | COMMENTS |
|-------------------------|--|------------------------------------|---------------|--------------|--|
| NOX | 14.00 | AP-42, Sect.1.5,10/96, Table 1.5-1 | 14.00 | lbs/1000 gal | |
| CO | 1.90 | AP-42, Sect.1.5,10/96, Table 1.5-1 | 1.90 | 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 | 0.50 | AP-42, Sect.1.5,10/96, Table 1.5-1 | 0.50 | lbs/1000 gal | |
| ROG | 0.30 | AP-42, Sect.1.5,10/96, Table 1.5-1 | 0.30 | lbs/1000 gal | |
| TSP | 0.40 | AP-42, Sect.1.5,10/96, Table 1.5-1 | 0.40 | lbs/1000 gal | |
| PM10 | 0.40 | AP-42, Sect.1.5,10/96, Table 1.5-1 | 0.40 | lbs/1000 gal | |
| ACETONE | | | | | |
| ARSENIC | | | | | |
| BARIUM | | | | | |
| BENZENE | 2.00E-02 | Using EPA VOC Profile 0003 1/90 | 4.00% | lb / lb TOG | = 0.50 x 0.04 |
| BERYLLIUM | | | | | |
| CADMIUM | | | | | |
| CHLORINE | | | | | |
| CHROMIUM HEXA VALENT | | | | | |
| CHROMIUM NONHEXA VALENT | | | | | |
| COBALT | | | | | |
| COPPER | | | | | |
| ETHYL BENZENE | | | | | |
| FORMALDEHYDE | 4.00E-02 | Using EPA VOC Profile 0003 1/90 | 8.00% | lb / lb TOG | = 0.50 x 0.08 |
| HEXANE | 1.00E-02 | Using EPA VOC Profile 0003 1/90 | 2.00% | lb / lb TOG | = 0.50 x 0.02 |
| HYDROGEN CHLORIDE | | | | | |
| HYDROGEN SULFIDE | | | | | |
| LEAD | | | | | |
| MANGANESE | | | | | |
| MERCURY | | | | | |
| NAPHTHALENE | | | | | |
| NICKEL | | | | | |
| PAH'S | | | | | |
| SELENIUM | | | | | |
| TOLUENE | 1.00E-02 | Using EPA VOC Profile 0003 1/90 | 2.00% | lb / lb TOG | = 0.50 x 0.02 |
| XYLENES | | | | | |
| ZINC | | | | | |