

P03 - PRINTING, LETTERPRESS, RULE 67.16, MASS BALANCE, UNCONTROLLED

CALCULATION METHODS

$E_a = U_a \text{ (gal/yr)} \times D \text{ (lbs/gal)} \times \text{Conc. (lbs/lb)} \times (1 - \% \text{retained})$

$E_h = U_h \text{ (gal/hr)} \times D \text{ (lbs/gal)} \times \text{Conc. (lbs/lb)} \times (1 - \% \text{retained})$

NOTES:

- Do not include control efficiencies in emission factors. Volatile compound capture and removal efficiencies due to controls must be specified by release point.
- No trace toxic emission factors can be developed as default values since emissions are based on material composition and process type.
- Estimates regarding the % solvent retained on printed documents have been developed for a variety of processes based on information in AP-42 Section 4.9 (1/95).
- ROG, TOG, and all volatile organic emissions are assumed to be reduced by the % retained factor developed from the AP-42 information.
- All pigments and particulates are assumed to have a 100% transfer efficiency to the printed documents (i.e.: assumed no PM emissions from printing).
- Use site specific emissions testing to estimate control equipment capture and removal efficiencies if available.

| POLLUTANT | District Emission Factor | EPA REFERENCE | EPA | (UNITS) | COMMENTS |
|-----------------------|---|--------------------------|---------------|----------------|---|
| | (lbs/million ft³ fuel burned) | DOCUMENT | FACTOR | | |
| NOX | | | | | |
| CO | | | | | |
| SOX | | | | | |
| TOG | | AP-42 Section 4.9 (1/95) | | | percent retention = 40% percent TOG emitted = 60% |
| ROG | | AP-42 Section 4.9 (1/95) | | | percent retention = 40% percent ROG emitted = 60% |
| TSP | | | | | |
| PM10 | | | | | |
| BENZENE | | | | | |
| FORMALDEHYDE | | | | | |
| HEXANE | | | | | |
| METHYLENE CHLORIDE | | | | | |
| TOLUENE | | | | | |
| 1,1,1-TRICHLOROETHANE | | | | | |
| XYLENES | | | | | |