

**V08 - SOIL VAPOR EXTRACTION PROCESSES, 1,1,1 - TRICHLOROETHANE MITIGATION, OUTLET QUANTIFIED AS 1,1,1 - TRICHLOROETHANE AFTER CONTROLS**

**CALCULATION METHODS**

$E_a = U_a \times \text{PPMV}_a \times MW \times C_i \times k$

$E_h = U_h \times \text{PPMV}_m \times MW \times C_i \times k$

**NOTES:**

- A calculation procedure Molecular Weight = 133 lbs/lb mole (1,1,1 - Trichloroethane) is used in the for quantifying total organic outlet emissions.
- Must match calculation procedure reference compound to outlet concentration reference compound to correctly estimate emissions.
- Material composition is used as outlet speciation profile. Adjust the weight % of each compound for changes due to the control device if necessary.
- Use site specific outlet speciation information where available. Outlet ppmv measurements must reference the same compound (molecular weight) as the calculation method selected.
- Annual and maximum hourly outlet concentrations may decrease over time with mitigation of the contaminant source.
- The following emission factors are for the  $C_i$  portion of the above equation where  $C_i$  speciates the exhaust concentration by weight percent.

POLLUTANT	District Emission Factor	REFERENCE	AP-42	(UNITS)	COMMENTS
	(weight percent)	DOCUMENT	FACTOR		
NOX					
CO					
SOX					
TOG	100.00%	District Engineering Estimates			Assumes all 1,1,1 Trichloroethylene and no ROG as default contamination profile.
ROG	0.00%	District Engineering Estimates			1,1,1 Trichloroethylene = Methyl Chloroform = C2H3Cl3
TSP					
PM10					
BENZENE					
ETHYL BENZENE					
ETHYLENE DICHLORIDE					
FORMALDEHYDE					
HEXANE					
HYDROGEN CHLORIDE					
METHYLENE CHLORIDE					
PERCHLOROETHYLENE					
TOLUENE					
1,1,1 TRICHLOROETHANE	100.00%				Assumes only 1,1,1 Trichloroethane as contaminant.
VINYL CHLORIDE					
VINYLDENE CHLORIDE					
XYLENES					