

**V07 - SOIL VAPOR EXTRACTION PROCESSES, PERCHLOROETHYLENE MITIGATION, OUTLET QUANTIFIED AS PERCHLOROETHYLENE AFTER CONTROLS**

**CALCULATION METHODS**

$$E_a = U_a \times \text{PPM}_v \times \text{MW} \times C_i \times k$$

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

**NOTES:**

- A calculation procedure Molecular Weight = 166 lbs/lb mole (Perchloroethylene) 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.

<b>POLLUTANT</b>	<b>District Emission Factor</b>	<b>REFERENCE</b>	<b>AP-42</b>	<b>(UNITS)</b>	<b>COMMENTS</b>
	<b>(weight percent)</b>	<b>DOCUMENT</b>	<b>FACTOR</b>		
NOX					
CO					
SOX					
TOG	100.00%	District Engineering Estimates			Assumes all Perchloroethylene and no ROG as default contamination profile.
ROG	0.00%	District Engineering Estimates			Perchloroethylene = Tetrachloroethylene = C2Cl4
TSP					
PM10					
BENZENE					
ETHYL BENZENE					
ETHYLENE DICHLORIDE					
FORMALDEHYDE					
HEXANE					
HYDROGEN CHLORIDE					
METHYLENE CHLORIDE					
PERCHLOROETHYLENE	100.00%				Assumes only Perchloroethylene as contaminant.
TOLUENE					
XYLENES					