

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.

POLLUTANT	District Emission Factor	REFERENCE	AP-42	(UNITS)	COMMENTS
	(weight percent)	DOCUMENT	FACTOR		
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					