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 Ci portion of the above equation where Ci speciates the exhaust concentration by weight percent.

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>District Emission Factor (weight percent)</th>
<th>REFERENCE DOCUMENT</th>
<th>AP-42 FACTOR (UNITS)</th>
<th>COMMENTS</th>
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<tbody>
<tr>
<td>NOX</td>
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<td>CO</td>
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<tr>
<td>SOX</td>
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<tr>
<td>TOG</td>
<td>100.00%</td>
<td>District Engineering Estimates</td>
<td></td>
<td>Assumes all 1,1,1 Trichloroethylene and no ROG as default contamination profile.</td>
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<tr>
<td>ROG</td>
<td>0.00%</td>
<td>District Engineering Estimates</td>
<td></td>
<td>1,1,1 Trichloroethylene = Methyl Chloroform = C2H3Cl3</td>
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<tr>
<td>TSP</td>
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<tr>
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<tr>
<td>PERCHLOROETHYLENE</td>
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<tr>
<td>TOLUENE</td>
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<tr>
<td>1,1,1 TRICHLOROETHANE</td>
<td>100.00%</td>
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<td>Assumes only 1,1,1 Trichloroethane as contaminant.</td>
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