M01 - MISCELLANEOUS EXTERNAL COMBUSTION EQUIPMENT, NATURAL GAS FIRED, < 0.3 MMBTU/HR, UNCONTROLLED

CALCULATION METHODS

\[ E_a = U_a \times EF \text{ (lbs/million ft}^3\text{)} \]
\[ E_h = U_h \times (\frac{60}{1000000}) \times EF \text{ (lbs/million ft}^3\text{)} \]

NOTES:
- Control efficiencies must be included in emission factors since the calculation procedure will not refer to this data.
- No particulate speciation table exists for natural gas combustion.
- Emission factors for NOx, CO, and TOG are based on a natural gas BTU content of 1020 BTU/scf.
- Trace organic emissions are based on EPA speciation profile #0003 rather than the E rated factors listed in AP-42.
- Use this calculation procedure for small gas fired boilers, hot water heaters, ovens, etc.

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>District Emission Factor (lbs/million ft3 fuel burned)</th>
<th>EPA REFERENCE</th>
<th>EPA (UNITS)</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOX</td>
<td>0.60</td>
<td>AP-42, Sect.1.4, 2/98, Table 1.4-2</td>
<td>0.6</td>
<td>lbs/million ft3</td>
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<tr>
<td>CO</td>
<td>0.40</td>
<td>AP-42, Sect.1.4, 2/98, Table 1.4-1</td>
<td>0.40</td>
<td>lbs/million ft3</td>
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<tr>
<td>SOX</td>
<td>0.50</td>
<td>AP-42, Sect.1.4, 3/98, Table 1.4-1</td>
<td>0.50</td>
<td>lbs/million ft3</td>
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<td>TOG</td>
<td>0.11</td>
<td>AP-42, Sect.1.4, 2/98, Table 1.4-2</td>
<td>0.11</td>
<td>lbs/million ft3</td>
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<tr>
<td>ROG</td>
<td>0.55</td>
<td>AP-42, Sect.1.4, 2/98, Table 1.4-2</td>
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<td>TSP</td>
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<td>PM10</td>
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<tr>
<td>ACETALDEHYDE</td>
<td>0.4400</td>
<td>EPA VOC Speciation Profile # 0003 1/90</td>
<td>4.00%</td>
<td>lbs/lb TOC</td>
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<tr>
<td>AMMONIA</td>
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<td>EPA VOC Speciation Profile # 0003 1/90</td>
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<td>BENZENE</td>
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<tr>
<td>1,3-BUTADIENE</td>
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<td>EPA VOC Speciation Profile # 0003 1/90</td>
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<td>lbs/lb TOC</td>
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<tr>
<td>ETHYL BENZENE</td>
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<td>lbs/lb TOC</td>
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<tr>
<td>FORMALDEHYDE</td>
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<td>HEXANE</td>
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<td>XYLENES</td>
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<td>lbs/lb TOC</td>
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</tbody>
</table>