**Section 215.APPENDIX F Coefficients for the Total Resource Effectiveness Index (TRE) Equation**

This Appendix contains values for the total resource effectiveness index (TRE) equation in Subpart V.

If a flow rate falls exactly on the boundary between the indicated ranges, the operator shall use the row in which the flow rate is maximum.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| COEFFICIENTS FOR TRE EQUATION  FOR CHLORINATED PROCESS VENT STREAMS WITH  NET HEATING VALUE LESS THAN OR EQUAL TO 3.5 MJ/scm | | | | | | | |
| FLOW RATE | | a | b | c | d | e | f |
| (scm/min) | |
| Min. | Max. |
|  |  |  |  |  |  |  |  |
| 0.0 | 13.5 | 48.73 | 0. | 0.404 | -0.1632 | 0. | 0. |
| 13.5 | 700. | 42.35 | 0.624 | 0.404 | -0.1632 | 0. | 0.0245 |
| 700. | 1400. | 84.38 | 0.678 | 0.404 | -0.1632 | 0. | 0.0346 |
| 1400. | 2100. | 126.41 | 0.712 | 0.404 | -0.1632 | 0. | 0.0424 |
| 2100. | 2800. | 168.44 | 0.747 | 0.404 | -0.1632 | 0. | 0.0490 |
| 2800. | 3500. | 210.47 | 0.758 | 0.404 | -0.1632 | 0. | 0.0548 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| COEFFICIENTS FOR TRE EQUATION  FOR CHLORINATED PROCESS VENT STREAMS WITH  NET HEATING VALUE LESS THAN 3.5 MJ/scm | | | | | | | |
| FLOW RATE | | a | b | c | d | e | f |
| (scm/min) | |
| Min. | Max. |
|  |  |  |  |  |  |  |  |
| 0. | 13.5 | 47.76 | 0. | -0.292 | 0. | 0. | 0. |
| 13.5 | 700. | 41.58 | 0.605 | -0.292 | 0. | 0. | 0.0245 |
| 700. | 1400. | 82.84 | 0.658 | -0.292 | 0. | 0. | 0.0346 |
| 1400. | 2100. | 123.10 | 0.691 | -0.292 | 0. | 0. | 0.0424 |
| 2100. | 2800. | 165.36 | 0.715 | -0.292 | 0. | 0. | 0.0490 |
| 2800. | 3500. | 206.62 | 0.734 | -0.292 | 0. | 0. | 0.0548 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| COEFFICIENTS FOR TRE EQUATION  FOR NONCHLORINATED PROCESS VENT STREAMS WITH  NET HEATING VALUE LESS THAN OR EQUAL TO 0.48 MJ/scm | | | | | | | |
| FLOW RATE | | a | b | c | d | e | f |
| (scm/min) | |
| Min. | Max. |
|  |  |  |  |  |  |  |  |
| 0. | 13.5 | 19.05 | 0. | 0.113 | -0.214 | 0. | 0. |
| 13.5 | 1350. | 16.61 | 0.239 | 0.113 | -0.214 | 0. | 0.0245 |
| 1350. | 2700. | 32.91 | 0.260 | 0.113 | -0.214 | 0. | 0.0346 |
| 2700. | 4050. | 49.21 | 0.273 | 0.113 | -0.214 | 0. | 0.0424 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| COEFFICIENTS FOR THE TRE EQUATION FOR NONCHLORINATED PROCESS  VENT STREAMS WITH NET HEATING VALUE GREATER THAN 0.48  AND LESS THAN OR EQUAL TO 1.9 MJ/scm | | | | | | | |
| FLOW RATE | | a | b | c | d | e | f |
| (scm/min) | |
| Min. | Max. |
|  |  |  |  |  |  |  |  |
| 0. | 13.5 | 19.74 | 0. | 0.400 | -0.202 | 0. | 0. |
| 13.5 | 1350. | 18.30 | 0.138 | 0.400 | -0.202 | 0. | 0.0245 |
| 1350. | 2700. | 36.28 | 0.150 | 0.400 | -0.202 | 0. | 0.0346 |
| 2700. | 4050. | 54.26 | 0.158 | 0.400 | -0.202 | 0. | 0.0424 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| COEFFICIENTS FOR TRE EQUATION FOR NONCHLORINATED PROCESS  VENT STREAMS WITH NET HEATING VALUE GREATER THAN 1.9  AND LESS THAN OR EQUAL TO 3.6 MJ/scm | | | | | | | |
| FLOW RATE | | a | b | c | d | e | f |
| (scm/min) | |
| Min. | Max. |
|  |  |  |  |  |  |  |  |
| 0. | 13.5 | 15.24 | 0. | 0.033 | 0. | 0. | 0. |
| 13.5 | 1190. | 13.63 | 0.157 | 0.033 | 0. | 0. | 0.0245 |
| 1190. | 2380. | 26.95 | 0.171 | 0.033 | 0. | 0. | 0.0346 |
| 2380. | 3570. | 40.27 | 0.179 | 0.033 | 0. | 0. | 0.0424 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| COEFFICIENTS FOR TRE EQUATION  FOR NONCHLORINATED PROCESS VENT STREAMS WITH  NET HEATING VALUE GREATER THAN 3.6 MJ/scm | | | | | | | |
| FLOW RATE | | a | b | c | d | e | f |
| (scm/min) | |
| Min. | Max. |
|  |  |  |  |  |  |  |  |
| 0. | 13.5 | 15.24 | 0. | 0. | 0.0090 | 0. | 0. |
| 13.5 | 1190. | 13.63 | 0. | 0. | 0.0090 | 0.0503 | 0.0245 |
| 1190. | 2380. | 26.95 | 0. | 0. | 0.0090 | 0.0546 | 0.0346 |
| 2380. | 3570. | 40.27 | 0. | 0. | 0.0090 | 0.0573 | 0.0424 |

(Source: Added at 11 Ill. Reg. 20829, effective December 14, 1987)