Appendix F:

Burden and Cost for General Stationary Combustion Sources

(Subpart C)

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# Appendix F-1. Detailed Unit Burden and Costs for GHGRP Reporters Subject to Subpart C Only—Year 1 through Year 3

| **Year 1 - Year 3** | | | | | | (A) Hours per Occurrence | (B) Occurrences/ Respondent/Year | (C) Hours/ Respondent/  Year (A x B) | (D) Respondents/ Year | (E) Technical Hours/  Year  (C x D) | Legal Hours/Year | Clerical Hours/  Year | Manager Hours/  Year | (H) Cost/ Year |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1. APPLICATIONS (Not Applicable)** | | | | | |  |  |  |  |  |  |  |  |  |
| **2. SURVEY AND STUDIES (Not Applicable)** | | | | | |  |  |  |  |  |  |  |  |  |
| **3. ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS** | | | | | |  |  |  |  |  |  |  |  |  |
| **4. REPORT REQUIREMENTS** | | | | | |  |  |  |  |  |  |  |  |  |
|  | **A1. Read Rule, Instructions, Guidance Documents for Subpart C** 1,2,3 | | | | | 5.00 | 1 | 5.00 | 2,155 | 10,775.0 |  |  |  | $713,844 |
|  | **A2. Read Rule, Instructions, Guidance Documents for Subpart A** 2,3,4 | | | | | 2.00 | 1 | 2.00 | 2,155 | 4,310.0 |  |  |  | $285,538 |
|  | **B. Required Activities** | | | | |  |  |  |  |  |  |  |  |  |
|  | |  | *Activity covering Tier 1 Methodology* | | |  |  |  |  |  |  |  |  |  |
|  | |  |  | Conduct annual review of company records to determine mass or volume of fuel combusted 2,5,6 | | 5.00 | 1.0 | 5.00 | 1,458 | 7,290.0 |  |  |  | $482,963 |
|  | |  | *Activity covering Tier 3 Methodology* | | |  |  |  |  |  |  |  |  |  |
|  | |  |  | Conduct annual review of company records to determine mass or volume of fuel combusted 5,7 | | 5.00 | 1.0 | 5.00 | 87 | 435.0 |  |  |  | $28,819 |
|  | |  | *Activity covering Tier 1 Methodology* | | |  |  |  |  |  |  |  |  |  |
|  | |  |  | Conduct annual review of billing records to determine natural gas consumption in therms or mmBtu 2,5,6 | | 5.00 | 1.0 | 5.00 | 1,458 | 7,290.0 |  |  |  | $482,963 |
|  | |  | *Activity covering Tier 2 Methodology* | | |  |  |  |  |  |  |  |  |  |
|  | |  |  | Conduct annual review of billing records to determine natural gas consumption in therms or mmBtu 5,8 | | 5.00 | 1.0 | 5.00 | 974 | 4,870.0 |  |  |  | $322,638 |
|  | |  | *Tier 1 Methodology for combustion emissions reported under subpart C* | | |  |  |  |  |  |  |  |  |  |
|  | |  |  | Perform engineering calculation to determine CO2 emissions using Eq C-1, C-1a, or C-1b, using default high heat values and/or default emission factors 6,9,10 | | 0.17 | 0.5 | 0.08 | 1,458 | 121.5 |  |  |  | $8,049 |
|  | |  |  | Perform engineering calculation to determine CH4 and N2O emissions using Eq C-8, Eq C-8a, or Eq C-8b 6,11,12 | | 0.33 | 0.5 | 0.17 | 1,458 | 243.0 |  |  |  | $16,099 |
|  | |  | *Tier 2 Methodology for combustion emissions reported under subpart C* | | |  |  |  |  |  |  |  |  |  |
|  | |  |  | Conduct sampling to determine high heat value for each type of fuel or fuel mixture 8,13 | |  | 4.1 |  | 974 |  |  |  |  |  |
|  | |  |  |  | Daily measurements 14,15 | 182.50 | 0.2 | 43.68 | 58 | 2,514.1 |  |  |  | $166,558 |
|  | |  |  |  | Hourly measurements 16,17 | 4,380.00 | 0.0 | 163.80 | 9 | 1,473.1 |  |  |  | $97,593 |
|  | |  |  |  | Monthly measurements 18,19 | 6.00 | 3.2 | 19.49 | 781 | 15,221.2 |  |  |  | $1,008,402 |
|  | |  |  |  | Quarterly measurements 20,21 | 2.00 | 0.2 | 0.45 | 54 | 24.2 |  |  |  | $1,604 |
|  | |  |  |  | Semiannual measurements 22,23 | 1.00 | 0.2 | 0.24 | 58 | 13.8 |  |  |  | $913 |
|  | |  |  |  | Weekly measurements 24,25 | 26.00 | 0.1 | 1.60 | 15 | 23.8 |  |  |  | $1,577 |
|  | |  |  | Perform engineering calculation to determine CO2 emissions using Eq C-2a, along with Eq C-2b or Eq C-2c. 9,13 | | 0.17 | 4.1 | 0.68 | 974 | 657.5 |  |  |  | $43,556 |
|  | |  |  | Perform engineering calculation to determine CH4 and N2O emissions using Eq C-9a or Eq 9b 11,13 | | 0.33 | 4.1 | 1.35 | 974 | 1,314.9 |  |  |  | $87,112 |
|  | |  | *Tier 3 Methodology for combustion emissions reported under subpart C* | | |  |  |  |  |  |  |  |  |  |
|  | |  |  | Conduct sampling to determine carbon content for each type of fuel or fuel mixture 7,26 | |  | 7.1 |  | 87 |  |  |  |  |  |
|  | |  |  |  | Daily measurements 14,27 | 182.50 | 0.3 | 49.84 | 3 | 166.8 |  |  |  | $11,048 |
|  | |  |  |  | Hourly measurements 16,28 | 4,380.00 | 0.2 | 897.06 | 3 | 2,251.3 |  |  |  | $149,147 |
|  | |  |  |  | Monthly measurements 18,29 | 6.00 | 5.5 | 32.97 | 67 | 2,220.5 |  |  |  | $147,109 |
|  | |  |  |  | Quarterly measurements 20,30 | 2.00 | 0.3 | 0.55 | 3 | 1.8 |  |  |  | $121 |
|  | |  |  |  | Semiannual measurements 22,31 | 1.00 | 0.5 | 0.48 | 6 | 2.8 |  |  |  | $185 |
|  | |  |  |  | Weekly measurements 24,32 | 26.00 | 0.4 | 9.76 | 5 | 44.9 |  |  |  | $2,976 |
|  | |  |  | Determine annual volume of liquid or gaseous fuel using fuel flow meters 33,34,35 | | 0.50 | 5.3 | 2.66 | 53 | 140.7 |  |  |  | $9,322 |
|  | |  |  | Determine annual average molecular weight of gaseous fuel 33,36,37 | | 0.50 | 2.6 | 1.29 | 31 | 40.0 |  |  |  | $2,649 |
|  | |  |  | Perform engineering calculation to determine CO2 emissions using Eq C-3, Eq C-4, or Eq C-5. 7,9,26 | | 0.17 | 7.1 | 1.18 | 87 | 103.0 |  |  |  | $6,820 |
|  | |  |  | Perform engineering calculation to determine CH4 and N2O emissions using Eq C-8 11,26 | | 0.33 | 7.1 | 2.37 | 87 | 205.9 |  |  |  | $13,641 |
|  | |  | *Tier 4 Methodology for combustion emissions reported under subpart C* | | |  |  |  |  |  |  |  |  |  |
|  | |  |  | Gather CEMS data for e-GGRT reporting and QA 38,39 | | 20.00 | 4.0 | 80.00 | 73 | 5,840.0 |  |  |  | $386,900 |
|  | | **C. Create Information (Included in 4B)** | | | |  |  |  |  |  |  |  |  |  |
|  | | **D. Gather Existing Information (Included in 4E)** | | | |  |  |  |  |  |  |  |  |  |
|  | | **E. Write Report** | | | |  |  |  |  |  |  |  |  |  |
|  | |  |  | Annual Compliance Reporting through e-GGRT and data QA 3,40 | | 10.00 | 1.0 | 10.00 | 2,155 | 21,550.0 |  |  |  | $1,427,688 |
| **5. RECORDKEEPING REQUIREMENTS** | | | | | |  |  |  |  |  |  |  |  |  |
|  | | **A. Read Instructions (Included in 4A)** | | | |  |  |  |  |  |  |  |  |  |
|  | | **B. Plan Activities (Included in 4B)** | | | |  |  |  |  |  |  |  |  |  |
|  | | **C. Implement Activities (Included in 4B)** | | | |  |  |  |  |  |  |  |  |  |
|  | | **D. Recordkeeping** 3,41 | | | | 5.00 | 1.0 | 5.00 | 2,155 | 10,775.0 |  |  |  | $713,844 |
|  | | **E. Time to Transmit or Disclose Information (included in 4E)** | | | |  |  |  |  |  |  |  |  |  |
|  | | **F. Time to Train Personnel (included in 4A)** | | | |  |  |  |  |  |  |  |  |  |
|  | | **G. Time for Audits (Not Applicable)** | | | |  |  |  |  |  |  |  |  |  |
| **TOTAL ANNUAL LABOR BURDEN AND COST** | | | | | |  |  |  |  | 99,919.6 |  |  |  | $6,619,676 |
|  | | | | | | | | | | | | | | |
| **ANNUAL TESTING COSTS (O&M)** | | | | | |  |  |  |  |  |  |  |  |  |
|  | | *Sampling costs for Tier 2 units* | | | |  |  |  |  |  |  |  |  |  |
|  | |  | Annual gas and liquid samples and analyses 42,43 | | |  | 4.1 |  | 974 |  |  |  |  | $1,577,880 |
|  | | | | | | | | | | | | | | |
| **ANNUALIZED CAPITAL COSTS** | | | | | |  |  |  |  |  |  |  |  |  |
|  | | *Flow meter costs for Tier 3 units* 44,45 | | | |  | 5.3 |  | 53 |  |  |  |  | $164,732 |
|  | | | | | | | | | | | | | | |
| **TOTAL ANNUAL COSTS (Labor, O&M, and annualized capital)** | | | | | |  |  |  |  |  |  |  |  | $8,362,288 |

# Appendix F-2. Footnotes Applicable to Appendix F-1

|  |
| --- |
| 1 Assumed 5 hours per reporter per year to read rule. |
| 2 Assumed activity occurs once per year per reporter. |
| 3 There are 2,155 facilities that reported only subpart C in RY2014. |
| 4 Assumed 2 hours per reporter per year to read rule. |
| 5 Assumed 5 hours per year to review company records. |
| 6 There are 1,458 facilities that reported only subpart C under Tier 1 in RY2014. |
| 7 There are 87 facilities that reported only subpart C under Tier 3 in RY2014. |
| 8 There are 974 facilities that reported only subpart C under Tier 2 in RY2014. |
| 9 Assumed 10 minutes per pollutant per fuel [1 pollutant]. |
| 10 Using RY2014 data, there are 0.4 fuels per facility using Eq C-1a; 0.01 fuels per facility using Eq C-1b; 0.49 fuels per facility using Eq. C-1. |
| 11 Assumed 10 minutes per pollutant per fuel [2 pollutants]. |
| 12 Using RY2014 data, there are 0 fuels per facility using Eq C-1a; 0.01 fuels per facility using Eq C-1b; 0.49 fuels per facility using Eq. C-1. |
| 13 Using RY2014 data, there are 4.1 fuels per respondent using Tier 2 methodology. |
| 14 Assumed 0.5 hour per fuel and 365 measurements per year. |
| 15 Using RY2014 data, 5.9% of Tier 2 fuels are measured daily. |
| 16 Assumed 0.5 hour per fuel and 8,760 measurements per year. |
| 17 Using RY2014 data, 0.9% of Tier 2 fuels are measured hourly. |
| 18 Assumed 0.5 hour per fuel and 12 measurements per year. |
| 19 Using RY2014 data, 80.2% of Tier 2 fuels are measured monthly. |
| 20 Assumed 0.5 hour per fuel and 4 measurements per year. |
| 21 Using RY2014 data, 5.5% of Tier 2 fuels are measured quarterly. |
| 22 Assumed 0.5 hour per fuel and 2 measurements per year. |
| 23 Using RY2014 data, 5.9% of Tier 2 fuels are measured semiannually. |
| 24 Assumed 0.5 hour per fuel and 52 measurements per year. |
| 25 Using RY2014 data, 1.5% of Tier 2 fuels are measured weekly. |
| 26 Using RY2014 data, there are 7.1 fuels per respondent using Tier 3 methodology. |
| 27 Using RY2014 data, 3.8% of Tier 3 fuels are measured daily. |
| 28 Using RY2014 data, 2.9% of Tier 3 fuels are measured hourly. |
| 29 Using RY2014 data, 77.4% of Tier 3 fuels are measured monthly. |
| 30 Using RY2014 data, 3.8% of Tier 3 fuels are measured quarterly. |
| 31 Using RY2014 data, 6.7% of Tier 3 fuels are measured semiannually. |
| 32 Using RY2014 data, 5.3% of Tier 3 fuels are measured weekly. |
| 33 Assumed 0.5 hours per fuel to determine the annual volume of fuel or annual average molecular weight of gaseous fuel. |
| 34 Using RY2014 data, there are 5.3 liquid or gaseous fuels per respondent using Tier 3 methodology. |
| 35 Using RY2014 data, there are 53 facilities reporting only subpart C used liquid or gaseous fuel in RY2014. |
| 36 Using RY2014 data, there are 2.6 gaseous fuels per respondent using Tier 3 methodology. |
| 37 Using RY2014 data, there are 31 facilities reporting only subpart C used gaseous fuel in RY2014. |
| 38 Assumed 20 hours per quarter to gather and QA the CEMS data. |
| 39 Using RY2014 data, there are 73 facilities reporting only subpart C used Tier 4 in RY2014. |
| 40 Assumed 10 hours per reporter per year to submit report through e-GGRT and QA the data. |
| 41 Assumed 5 hours per reporter per year to maintain records. |
| 42 Number of occurrences per respondent based on average number of fuels reported by segment for Tier 2 units in RY2014. |
| 43 Assumed testing cost of $400 per fuel. |
| 44 Number of occurrences per respondent based on average number of fuels reported by segment for Tier 3 units in RY2014. |
| 45 Assumed capital cost of $2,400 per fuel per flow meter, which is an annualized cost of $585.34. |

# Appendix F-3. Detailed Unit Burden and Costs for GHGRP Reporters Subject to Subpart C Plus Another Subpart(s)—Year 1 through Year 3

| **Year 1 - Year 3** | | | | | (A) Hours per Occurrence | (B) Occurrences/ Respondent/Year | (C) Hours/ Respondent/  Year (A x B) | (D) Respondents/ Year | (E) Technical Hours/  Year  (C x D) | Legal Hours/Year | Clerical Hours/  Year | Manager Hours/  Year | (H) Cost/ Year |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1. APPLICATIONS (Not Applicable)** | | | | |  |  |  |  |  |  |  |  |  |
| **2. SURVEY AND STUDIES (Not Applicable)** | | | | |  |  |  |  |  |  |  |  |  |
| **3. ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS** | | | | |  |  |  |  |  |  |  |  |  |
| **4. REPORT REQUIREMENTS** | | | | |  |  |  |  |  |  |  |  |  |
|  | **A. Read Rule, Instructions, Guidance Documents** 1,2,3 | | | | 5.00 | 1.0 | 5.00 | 1,395 | 6,975.0 |  |  |  | $462,094 |
|  | **B. Required Activities** | | | |  |  |  |  |  |  |  |  |  |
|  |  | *Activity covering Tier 1 Methodology* | | |  |  |  |  |  |  |  |  |  |
|  |  |  | Conduct annual review of company records to determine mass or volume of fuel combusted 1,2,4 | | 5.00 | 1.0 | 5.00 | 891 | 4,455.0 |  |  |  | $295,144 |
|  |  | *Activity covering Tier 3 Methodology* | | |  |  |  |  |  |  |  |  |  |
|  |  |  | Conduct annual review of company records to determine mass or volume of fuel combusted 1,2,5 | | 5.00 | 1.0 | 5.00 | 79 | 395.0 |  |  |  | $26,169 |
|  |  | *Activity covering Tier 1 Methodology* | | |  |  |  |  |  |  |  |  |  |
|  |  |  | Conduct annual review of billing records to determine natural gas consumption in therms or mmBtu 1,2,4 | | 5.00 | 1.0 | 5.00 | 891 | 4,455.0 |  |  |  | $295,144 |
|  |  | *Activity covering Tier 2 Methodology* | | |  |  |  |  |  |  |  |  |  |
|  |  |  | Conduct annual review of billing records to determine natural gas consumption in therms or mmBtu 1,2,6 | | 5.00 | 1.0 | 5.00 | 674 | 3,370.0 |  |  |  | $223,263 |
|  |  | *Tier 1 Methodology for combustion emissions reported under subpart C* | | |  |  |  |  |  |  |  |  |  |
|  |  |  | Perform engineering calculation to determine CO2 emissions using Eq C-1, C-1a, or C-1b, using default high heat values and/or default emission factors 4,7,8 | | 0.17 | 4.7 | 0.79 | 891 | 702.4 |  |  |  | $46,534 |
|  |  |  | Perform engineering calculation to determine CH4 and N2O emissions using Eq C-8, Eq C-8a, or Eq C-8b 4,8,9 | | 0.33 | 4.7 | 1.58 | 891 | 1,404.8 |  |  |  | $93,069 |
|  |  | *Tier 2 Methodology for combustion emissions reported under subpart C* | | |  |  |  |  |  |  |  |  |  |
|  |  |  | Conduct sampling to determine high heat value for each type of fuel or fuel mixture 6,10 | |  | 3.4 |  | 674 |  |  |  |  |  |
|  |  |  |  | Daily measurements 11,12 | 182.50 | 0.2 | 44.70 | 49 | 2,170.7 |  |  |  | $143,809 |
|  |  |  |  | Hourly measurements 13,14 | 4,380.00 | 0.1 | 421.82 | 19 | 8,053.0 |  |  |  | $533,510 |
|  |  |  |  | Monthly measurements 15,16 | 6.00 | 2.7 | 16.30 | 539 | 8,783.5 |  |  |  | $581,907 |
|  |  |  |  | Quarterly measurements 17,18 | 2.00 | 0.0 | 0.08 | 7 | 0.6 |  |  |  | $37 |
|  |  |  |  | Semiannual measurements 19,20 | 1.00 | 0.3 | 0.25 | 50 | 12.5 |  |  |  | $829 |
|  |  |  |  | Weekly measurements 21,22 | 26.00 | 0.1 | 1.36 | 10 | 14.1 |  |  |  | $935 |
|  |  |  | Perform engineering calculation to determine CO2 emissions using Eq C-2a, along with Eq C-2b or Eq C-2c. 6,7,10 | | 0.17 | 3.4 | 0.57 | 674 | 381.9 |  |  |  | $25,303 |
|  |  |  | Perform engineering calculation to determine CH4 and N2O emissions using Eq C-9a or Eq 9b 6,9,10 | | 0.33 | 3.4 | 1.13 | 674 | 763.9 |  |  |  | $50,606 |
|  |  | *Tier 3 Methodology for combustion emissions reported under subpart C* | | |  |  |  |  |  |  |  |  |  |
|  |  |  | Conduct sampling to determine carbon content for each type of fuel or fuel mixture 5,23 | |  | 6.8 |  | 79 |  |  |  |  |  |
|  |  |  |  | Daily measurements 11,24 | 182.50 | 0.4 | 80.67 | 5 | 414.2 |  |  |  | $27,442 |
|  |  |  |  | Hourly measurements 13,25 | 4,380.00 | 0.0 | 0.00 | 0 | - |  |  |  | $0 |
|  |  |  |  | Monthly measurements 15,26 | 6.00 | 5.6 | 33.46 | 65 | 2,167.3 |  |  |  | $143,582 |
|  |  |  |  | Quarterly measurements 17,27 | 2.00 | 0.3 | 0.61 | 4 | 2.2 |  |  |  | $144 |
|  |  |  |  | Semiannual measurements 19,28 | 1.00 | 0.0 | 0.03 | 0 | 0.0 |  |  |  | $1 |
|  |  |  |  | Weekly measurements 21,29 | 26.00 | 0.4 | 11.49 | 5 | 59.0 |  |  |  | $3,910 |
|  |  |  | Determine annual volume of liquid or gaseous fuel using fuel flow meters 30,31,32 | | 0.50 | 4.5 | 2.25 | 24 | 54.0 |  |  |  | $3,578 |
|  |  |  | Determine annual average molecular weight of gaseous fuel 30,33,34 | | 0.50 | 2.6 | 1.30 | 16 | 20.8 |  |  |  | $1,378 |
|  |  |  | Perform engineering calculation to determine CO2 emissions using Eq C-3, Eq C-4, or Eq C-5. 5,7,35 | | 0.17 | 6.8 | 1.13 | 79 | 89.5 |  |  |  | $5,932 |
|  |  |  | Perform engineering calculation to determine CH4 and N2O emissions using Eq C-8 5,9,35 | | 0.33 | 6.8 | 2.27 | 79 | 179.1 |  |  |  | $11,863 |
|  |  | *Tier 4 Methodology for combustion emissions reported under subpart C* | | |  |  |  |  |  |  |  |  |  |
|  |  |  | Gather CEMS data for e-GGRT reporting 36,37 | | 20.00 | 4.0 | 80.00 | 34 | 2,720.0 |  |  |  | $180,200 |
|  | **C. Create Information (Included in 4B)** | | | |  |  |  |  |  |  |  |  |  |
|  | **D. Gather Existing Information (Included in 4E)** | | | |  |  |  |  |  |  |  |  |  |
|  | **E. Write Report** | | | |  |  |  |  |  |  |  |  |  |
|  |  |  | Annual Compliance Reporting through e-GGRT and QA 3,38 | | 10.00 | 1.0 | 10.00 | 1,395 | 13,950.0 |  |  |  | $924,188 |
| **5. RECORDKEEPING REQUIREMENTS** | | | | |  |  |  |  |  |  |  |  |  |
|  | **A. Read Instructions (Included in 4A)** | | | |  |  |  |  |  |  |  |  |  |
|  | **B. Plan Activities (Included in 4B)** | | | |  |  |  |  |  |  |  |  |  |
|  | **C. Implement Activities (Included in 4B)** | | | |  |  |  |  |  |  |  |  |  |
|  | **D. Recordkeeping** 3,39 | | | | 5.00 | 1.0 | 5.00 | 1,395 | 6,975.0 |  |  |  | $462,094 |
|  | **E. Time to Transmit or Disclose Information (included in 4E)** | | | |  |  |  |  |  |  |  |  |  |
|  | **F. Time to Train Personnel (included in 4A)** | | | |  |  |  |  |  |  |  |  |  |
|  | **G. Time for Audits (Not Applicable)** | | | |  |  |  |  |  |  |  |  |  |
| **TOTAL ANNUAL LABOR BURDEN AND COST** | | | | |  |  |  |  | 68,568.5 |  |  |  | $4,542,662 |
|  | | | | | | | | | | | | | |
| **ANNUAL TESTING COSTS (O&M)** | | | | |  |  |  |  |  |  |  |  |  |
|  | *Sampling costs for Tier 2 units* | | | |  |  |  |  |  |  |  |  |  |
|  |  | Annual gas and liquid samples and analyses 40,41 | | |  | 3.4 |  | 674 |  |  |  |  | $916,640 |
|  | | | | | | | | | | | | | |
| **ANNUALIZED CAPITAL COSTS** | | | | |  |  |  |  |  |  |  |  |  |
|  | *Flow meter costs for Tier 3 units* 42,43 | | | |  | 4.5 |  | 24 |  |  |  |  | $63,216 |
|  | | | | | | | | | | | | | |
| **TOTAL ANNUAL COSTS (Labor, O&M, and annualized capital)** | | | | |  |  |  |  |  |  |  |  | $5,522,519 |

# 

# Appendix F-4. Footnotes Applicable to Appendix F-3

|  |
| --- |
| 1 Assumed 5 hours per reporter per year to read rule. |
| 2 Assumed activity occurs once per year per reporter. |
| 3 There are 1,395 facilities that reported subpart C plus another subpart(s) in RY2014. |
| 4 There are 891 facilities that reported subpart C plus another subpart(s) used Tier 1 in RY2014. |
| 5 There are 79 facilities that reported subpart C plus another subpart(s) used Tier 1 and/or Tier 3 in RY2014. No duplicates are included. |
| 6 There are 674 facilities that reported subpart C plus another subpart(s) used Tier 2 in RY2014. |
| 7 Assumed 10 minutes per pollutant per fuel [1 pollutant]. |
| 8 Using RY2014 data, there are 1.47 fuels per facility using Eq C-1a; 1.26 fuels per facility using Eq C-1b; 2.0 fuels per facility using Eq. C-1. |
| 9 Assumed 10 minutes per pollutant per fuel [2 pollutants]. |
| 10 Using RY2014 data, there are 2.4 fuels per facility using C-2a; 1 fuel using C-2c. |
| 11 Assumed 0.5 hours per fuel and 365 measurements per year. |
| 12 Using RY2014 data, 7.2% of Tier 2 fuels are measured daily. |
| 13 Assumed 0.5 hours per fuel and 8,760 measurements per year. |
| 14 Using RY2014 data, 2.8% of Tier 2 fuels are measured hourly. |
| 15 Assumed 0.5 hours per fuel and 12 measurements per year. |
| 16 Using RY2014 data, 79.9% of Tier 2 fuels are measured monthly. |
| 17 Assumed 0.5 hours per fuel and 4 measurements per year. |
| 18 Using RY2014 data, 1.1% of Tier 2 fuels are measured quarterly. |
| 19 Assumed 0.5 hours per fuel and 2 measurements per year. |
| 20 Using RY2014 data, 7.4% of Tier 2 fuels are measured semiannually. |
| 21 Assumed 0.5 hours per fuel and 52 measurements per year. |
| 22 Using RY2014 data, 1.5% of Tier 2 fuels are measured weekly. |
| 23 Using RY2014 data, there are 2.3 fuels using C-3; 1.9 fuels using C-4, and 2.6 fuels using C-5. |
| 24 Using RY2014 data, 6.5% of Tier 3 fuels are measured daily. |
| 25 Using RY2014 data, 0% of Tier 3 fuels are measured hourly. |
| 26 Using RY2014 data, 82.0% of Tier 3 fuels are measured monthly. |
| 27 Using RY2014 data, 4.5% of Tier 3 fuels are measured quarterly. |
| 28 Using RY2014 data, 0.5% of Tier 3 fuels are measured semiannually. |
| 29 Using RY2014 data, 6.5% of Tier 3 fuels are measured weekly. |
| 30 Assumed 0.5 hours per fuel to determine the annual volume of fuel or annual average molecular weight of gaseous fuel. |
| 31 Using RY2014 data, there are 1.9 fuels using C-4 (liquid fuels), and 2.6 fuels using C-5 (gaseous fuels). |
| 32 There are 24 facilities reporting subpart C plus another subpart(s) that reported liquid or gaseous fuel use in RY2014. |
| 33 Using RY2014 data, there are 2.6 fuels using C-5 (equation is only for gaseous fuels). |
| 34 There are 16 facilities reporting subpart C plus another subpart(s) that reported gaseous fuel use in RY2014. |
| 35 Using RY2014 data, there are 2.3 fuels using C-3; 1.9 fuels using C-4, and 2.6 fuels using C-5. |
| 36 Assumed 20 hours per quarter to gather and QA the CEMS data. |
| 37 There are 34 facilities reporting subpart C plus another subpart(s) that used Tier 4 methodology in RY2014. |
| 38 Assumed 10 hours per reporter per year to submit report through e-GGRT and QA the data. |
| 39 Assumed 5 hours per reporter per year to maintain records. |
| 40 Number of occurrences per respondent based on average number of fuels reported by segment for Tier 2 units in RY2014. |
| 41 Assumed testing cost of $400 per fuel. |
| 42 Number of occurrences per respondent based on average number of fuels reported by segment for Tier 3 units in RY2014. |
| 43 Assumed capital cost of $2,400 per fuel per flow meter, which is an annualized cost of $585.34. |