

Table 1: Annual Respondent Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces Subparts AA and AAa) (Renewal)

| Burden Item | (A) | (B) | (C) |
|---|---------------------------------|---|---------------------------------------|
| | Respondent Hours per Occurrence | Number of Occurrences per Respondent per Year | Hours per Respondent per Year (A x B) |
| 1. Applications | N/A | | |
| 2. Survey and Studies | N/A | | |
| 3. Reporting Requirements | | | |
| A. Read and understand rule requirements | 1 | 1 | 1 |
| B. Required activities | | | |
| Initial Performance tests ^c | 364 | 1 | 364 |
| Repeat Performance tests ^c | 364 | 0.05 | 18.2 |
| Monitoring of operations and emissions ^{d, e} | | | ----- |
| D. Gather Existing Information | | | ----- |
| E. Write report | | | |
| Notification of construction/modification | 2 | 1 | 2 |
| Notification of actual startup | 2 | 1 | 2 |
| Notification of initial performance test | 2 | 1 | 2 |
| Reports of performance test results | | | ----- |
| Semiannual reports ^f | 16 | 2 | 32 |
| Subtotal for Reporting Requirements | | | |
| 4. Recording Requirements | | | |
| A. Read and understand rule requirements | | | ----- |
| B. Plan activities | | | ----- |
| C. Implement activities | | | ----- |
| D. Develop record system | N/A | | |
| E. Time to enter and transmit information: | | | |
| Records of daily monitoring of operations ^d | 0.75 | 350 | 262.5 |
| Records of daily emissions monitoring by a certified observer ^{e, h} | 0.5 | 350 | 175 |
| Records of COMS ^{g, i} | 0.5 | 350 | 175 |
| Records of BLDS ^{h, i} | 0.5 | 350 | 175 |
| Records of static pressure on furnace ^h | 0.5 | 350 | 175 |
| F. Time to train personnel | N/A | | |
| G. Time for audits | N/A | | |
| Subtotal for Recordkeeping Requirements | | | |
| Total Labor Burden and Cost (rounded) ^j | | | |
| Total Capital and O&M Cost (rounded) ^j | | | |
| Grand Total (rounded) ^j | | | |

Assumptions:

- ^a We have assumed that there are an annual average of 100.33 sources currently subject to the NSPS, subparts AA and the three-year period of this ICR (0.33 new respondents per year). Therefore, the average number of respondents per year.
- ^b This ICR uses the following labor rates: \$147.40 per hour for Executive, Administrative, and Managerial labor; \$117 from the United States Department of Labor, Bureau of Labor Statistics, June 2018, "Table 2. Civilian Workers, by Occupation." Rates have been increased by 110% to account for the benefit packages available to those employed by private industry.
- ^c We have assumed that existing sources are in compliance with initial rule requirements including the initial performance tests due to failure.
- ^d Daily monitoring of operations includes time and duration of each charge, time and duration of each tap, flow rate checks of the equipment (e.g., physical appearance, pressure sensors, dampers, damper switches).
- ^e Daily emissions monitoring includes stack emissions monitoring using a continuous opacity monitor if the source has a positive pressure baghouse and has not elected the alternative option. In addition, the source is required to conduct fugitive emissions monitoring using a certified visible emissions observer, if the source has an EAF equipped with a positive pressure baghouse.
- ^f Sources are required to provide semiannual reports of opacity observations and operational values (i.e., furnace static during the performance test, and of all shop opacity observations in excess of the emission limit).
- ^g We have assumed that the new source will equip its EAFs with a DEC system and use a positive pressure baghouse.
- ^h We have assumed that approximately 51.7 percent of the respondents (or 52.04 respondents) will choose to comply with the alternative option of daily opacity shop observations (BLDS) and 48.3 percent (48.62 respondents) will choose the alternative option of daily opacity shop observations (BLDS).
- ⁱ We have assumed that approximately 40 percent of respondents use negative pressure baghouses. Of these, 66.6 percent (26.67 respondents) have elected to use the alternative option of using BLDS monitoring couple with visible emissions observations.
- ^j Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

3 and Argon Oxygen Decarburization Vessels (40 CFR Part 60,

| (D) | (E) | (F) | (G) | (H) |
|---|----------------------------------|--------------------------------------|---------------------------------|---|
| Number of Respondents per Year ^a | Technical Hours per Year (C x D) | Management Hours per Year (E x 0.05) | Clerical Hours per Year (Ex0.1) | Total Labor Costs per Year, \$ ^b |
| | | | | |
| | | | | |
| 100.66 | 100.66 | 5.033 | 10.066 | \$13,185.65 |
| | | | | |
| 0.33 | 121.212 | 6.0606 | 12.1212 | \$15,877.80 |
| 0.33 | 6.0606 | 0.30 | 0.61 | \$793.89 |
| -----See 4E----- | | | | |
| See 3B and 4E----- | | | | |
| | | | | |
| 0.33 | 0.666 | 0.0333 | 0.0666 | \$87.24 |
| 0.33 | 0.666 | 0.0333 | 0.0666 | \$87.24 |
| 0.33 | 0.666 | 0.0333 | 0.0666 | \$87.24 |
| -----See 3B----- | | | | |
| 100.66 | 3221.12 | 161.056 | 322.112 | \$421,940.95 |
| | | 3,969 | | \$452,060 |
| -----See 3A----- | | | | |
| -----See 3B----- | | | | |
| -----See 3B----- | | | | |
| | | | | |
| | | | | |
| 100.66 | 26423.25 | 1321.1625 | 2642.325 | \$3,461,234.36 |
| 48.62 | 8508.2865 | 425.41 | 850.83 | \$1,114,517.47 |
| 26.82 | 4692.7692 | 234.64 | 469.28 | \$614,715.22 |
| 13.45 | 2353.4308 | 117.67 | 235.34 | \$308,280.61 |
| 52.04 | 9107.2135 | 455.36 | 910.72 | \$1,192,972.11 |
| | | | | |
| | | | | |
| | | 58,748 | | \$6,691,720 |
| | | 62,700 | | \$7,140,000 |
| | | | | \$207,000 |
| | | | | \$7,350,000 |

| |
|------------|
| Labor F |
| Management |
| Technical |
| Clerical |

AAa. We have further assumed that one minimill will become subject to the standard over
ar is estimated to be 100.66.

.92 per hour for Technical labor, and \$57.02 per hour for Clerical labor. These rates are
cupational and Industry group.” The rates are from column 1, “Total Compensation.” The

nce test and notification requirements. We have assumed that 5 percent of the sources

ta and pressure data. In addition, sources are required to conduct monthly operational status

; an EAF equipped with a direct shell evacuation system (DEC) and uses a negative
ssions monitoring using a furnace static pressure monitoring device or by electing to
a DEC.

pressure, fan motor amperes) that exceed or are below (i.e, flow rates) those established

ise, and therefore, will not be required to install a continuous opacity monitor (COMS).

with the fugitive emissions monitoring requirements by measuring the furnace static pressure
; by a certified visible emission observer couple with the use of bag leak detection systems

ent (26.82 respondents) use COMS to measure stack emissions and 33.3 percent (13.45
ations instead of using COMS.

| |
|----------|
| rates: |
| \$147.40 |
| \$117.92 |
| \$57.02 |

responses
hr/response

Table 2: Average Annual EPA Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces (40 CFR Part 60, Subparts AA and AAa) (Renewal)

| Activity | (A) | (B) | (C) | (D) |
|---|--------------------------|--|--------------------------|------------------------------|
| | EPA Hours per Occurrence | Number of Occurrences per Plant Per Year | EPA Hours per Year (AxB) | Plants per Year ^a |
| Notification of construction/modification | 2 | 1 | 2 | 0.33 |
| Notification of actual startup | 1 | 1 | 1 | 0.33 |
| Notification of performance test ^c | 0.5 | 1.05 | 0.525 | 0.33 |
| Initial performance test | 24 | 1 | 24 | 0.33 |
| Repeat Performance test ^c | 24 | 0.05 | 1.2 | 0.33 |
| Review Performance Test results ^c | 8 | 1.05 | 8.4 | 0.33 |
| Notification of COMS Demonstration | 0.5 | 1 | 0.5 | 0.33 |
| Semiannual reports | 8 | 2 | 16 | 100.66 |
| TOTAL (rounded)^d | | | | |

Assumptions

^a We have assumed that there are an annual average of 100.33 sources currently subject to the NSPS, subparts AA and AAa become subject to the standard over the three-year period of this ICR (0.33 new respondents per year). Therefore, the total number of plants is 100.66.

^b This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for benefits: \$65.71 (GS-13, Step 5, \$41.07 + 60%), Technical rate of \$48.75 (GS-12, Step 1, \$30.47 + 60%), and Clerical rate of \$30.47 from the Office of Personnel Management (OPM) “2018 General Schedule” which excludes locality rates of pay.

^c We have assumed that 5 percent of the sources would repeat performance tests due to failure.

^dTotals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Furnaces and Argon Oxygen Decarburization

| (E) | (F) | (G) | (H) |
|---|---|--|---------------------------------|
| Technical Hours per Year (Cx _D) | Management Hours per Year (Ex _{0.05}) | Clerical Hours per Year (Ex _{0.1}) | Costs per Year, \$ ^b |
| 0.666 | 0.0333 | 0.0666 | \$36.41 |
| 0.333 | 0.02 | 0.03 | \$18.21 |
| 0.174825 | 0.01 | 0.02 | \$9.56 |
| 7.992 | 0.40 | 0.80 | \$436.95 |
| 0.3996 | 0.02 | 0.04 | \$21.85 |
| 2.7972 | 0.14 | 0.28 | \$152.93 |
| 0.1665 | 0.01 | 0.02 | \$9.10 |
| 1610.56 | 80.528 | 161.056 | \$88,054.95 |
| 1,870 | | | \$88,700 |

| Labor Rates: | |
|--------------|---------|
| Management | \$65.71 |
| Technical | \$48.75 |
| Clerical | \$26.38 |

AA and AAa. We have further assumed that one minimill will be, the average number of respondents per year is estimated to

ment for government overhead expenses: Managerial rate of rate of \$26.38 (GS-6, Step 3, \$16.49 + 60%). These rates are y.

| Capital/Startup vs. Operation and Maintenance (O&M) Costs | | | | |
|--|---|---------------------------|--|-------------------------------------|
| (A) | (B) | (C) | (D) | (E) |
| Continuous Monitoring Device | Capital/Startup Cost for One Respondent | Number of New Respondents | Total Capital/Startup Cost, (B X C) | Annual O&M Costs for One Respondent |
| Continuous Opacity Monitors | \$25,000 | 0 | \$0 | \$7,500 |
| Furnace Static Pressure Monitors | \$300 | 0.33 | \$99 | \$0 |
| Volumetric Flow Rate Monitor | \$18,000 | 0.33 | \$5,940 | \$0 |
| TOTAL | | | \$6,039 | |
| | Rounded | | \$6,040 | |

| Total Annual Responses | | | | |
|--|-----------------------|---------------------|--|-----------------------------------|
| (A) | (B) | (C) | (D) | (E) |
| Information Collection Activity | Number of Respondents | Number of Responses | Number of Existing Respondents That Keep Records But Do Not Submit Reports | Total Annual Responses E=(BxC) +D |
| Notification of actual startup | 0.33 | 1 | 0 | 0.33 |
| Notification of construction/ modification | 0.33 | 1 | 0 | 0.33 |
| Notification of performance test | 0.33 | 1 | 0 | 0.33 |
| Reports of performance test results | 0.33 | 1.05 | 0 | 0.35 |
| Semiannual reports | 100.66 | 2 | 0 | 201.3 |
| | | | Total | 203 |

| (F) | (G) |
|--------------------------------|-----------------------|
| Number of Respondents with O&M | Total O&M, (E X F) |
| 26.82 | \$201,119 |
| 52.04 | \$0 |
| 100.66 | \$0 |
| | \$201,119 |

\$201,000

\$207,158