

Table 1: Annual Respondent Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxy

| REPORTING/RECORDKEEPING REQUIREMENT   | (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 <sup>c</sup>  | 364                             | 1   | 364                                   |
| Repeat Performance tests <sup>c</sup>   | 364                             | 0.2   | 72.8                                  |
| Monitoring of operations and emissions <sup>d, e</sup>                        |                                 |   | -----                                 |
| 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 <sup>f</sup>   | 16                              | 2   | 32                                    |
| <b>Subtotal for Reporting Requirements</b>                                    |                                 |   |                                       |
| 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 <sup>d</sup>                        | 0.75                            | 350   | 262.5                                 |
| Records of daily emissions monitoring by a certified observer <sup>e, h</sup> | 0.5                             | 350   | 175                                   |
| Records of COMS <sup>g, i</sup>   | 0.5                             | 350   | 175                                   |
| Records of BLDS <sup>h, i</sup>   | 0.5                             | 350   | 175                                   |
| Records of static furnace <sup>h</sup>  | 0.5                             | 350   | 175                                   |
| F. Time to train personnel  | N/A                             |   |                                       |
| G. Time for audits  | N/A                             |   |                                       |
| <b>Subtotal for Recordkeeping Requirements</b>                                |                                 |   |                                       |
| <b>TOTAL LABOR BURDEN AND COST (rounded)<sup>j</sup></b>                      |                                 |   |                                       |
| <b>Total Capital/O&amp;M Costs (rounded)<sup>j</sup></b>                      |                                 |   |                                       |
| <b>Grand Total (Labor and Capital/O&amp;M Costs)(rounded)<sup>j</sup></b>     |                                 |   |                                       |

**Assumptions:**

<sup>a</sup> We have assumed that there are approximately 99.3 sources currently subject to the NSPS, subparts AA and AAa. Over a three year period of this ICR (0.3 new respondents per year). Therefore, the average number of respondents per year is 99.6.

<sup>b</sup> This ICR uses the following labor rates: Technical \$103.97 (\$49.51 + 110%); Managerial \$129.93 (\$61.87+ 110%); ; of Labor, Bureau of Labor Statistics, June 2014, “Table 2. Civilian Workers, by occupational and industry group.” The percent to account for the benefit packages available to those employed by private industry. This ICR assumes that Me Technical hours.

<sup>c</sup> We have assumed that existing sources are in compliance with initial rule requirements including the initial performance tests due to failure.

<sup>d</sup> Daily monitoring of operations includes time and duration of each charge, time and duration of each tap, flow rate and status checks of the equipment (e.g., physical appearance, pressure sensors, dampers, damper switches).

<sup>e</sup> 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. If the source has an EAF equipped with a positive pressure baghouse, it is required to perform shop opacity observations using a certified visible emissions observer, if the source has an EAF equipped with a positive pressure baghouse.

<sup>f</sup> Sources are required to provide semiannual reports of opacity observations and operational values (i.e., furnace static pressure, furnace temperature, and furnace gas flow rate) during the performance test, and of all shop opacity observations in excess of the emission limit.

<sup>g</sup> We have assumed that the new source will equip its EAFs with a DEC system and use a positive pressure baghouse.

<sup>h</sup> We have assumed that approximately 51.7 percent of the respondents (or 51.49 respondents) will choose to comply with the positive pressure baghouse option and 48.3 percent (48.11 respondents) will choose the alternative option of daily opacity shop observation systems (BLDS).

<sup>i</sup> We have assumed that approximately 40 percent of respondents use negative pressure baghouses. Of these, 66 percent will choose the alternative option of using BLDS monitoring coupled with visible emissions observations instead of using COMS.

<sup>j</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

en Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal)

103.97                      129.93                      51.79

| (D)   | (E)                              | (F)                                  | (G)                             | (H)   |
|---|----------------------------------|--------------------------------------|---------------------------------|---|
| Number of Respondents per Year <sup>a</sup> | 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, \$ <sup>b</sup> |
|   |                                  |                                      |                                 |   |
| 99.6  | 99.6                             | 4.98                                 | 9.96                            | \$11,518.29                                 |
|   |                                  |                                      |                                 |   |
| 0.3   | 109.2                            | 5.46                                 | 10.92                           | \$12,628.49                                 |
| 0.3   | 21.84                            | 1.09                                 | 2.18                            | \$2,525.70                                  |
| -----See 4E-----                            |                                  |                                      |                                 |   |
| See 3B and 4E-----                          |                                  |                                      |                                 |   |
|   |                                  |                                      |                                 |   |
| 0.3   | 0.6                              | 0.03                                 | 0.06                            | \$69.39                                     |
| 0.3   | 0.6                              | 0.03                                 | 0.06                            | \$69.39                                     |
| 0.3   | 0.6                              | 0.03                                 | 0.06                            | \$69.39                                     |
| -----See 3B-----                            |                                  |                                      |                                 |   |
| 99.6  | 3187.2                           | 159.36                               | 318.72                          | \$368,585.34                                |
|   | <b>3,933</b>                     |                                      |                                 | <b>\$395,466</b>                            |
| -----See 3A-----                            |                                  |                                      |                                 |   |
| -----See 3B-----                            |                                  |                                      |                                 |   |
| -----See 3B-----                            |                                  |                                      |                                 |   |
|   |                                  |                                      |                                 |   |
| 99.6  | 26145                            | 1307.25                              | 2614.5                          | \$3,023,551.60                              |
| 48.11                                       | 8419.25                          | 420.96                               | 841.93                          | \$973,648.38                                |
| 26.29                                       | 4600.75                          | 230.04                               | 460.08                          | \$532,056.03                                |
| 13.15                                       | 2301.25                          | 115.06                               | 230.13                          | \$266,129.21                                |
| 51.49                                       | 9010.75                          | 450.54                               | 901.08                          | \$1,042,052.69                              |
|   |                                  |                                      |                                 |   |
|   |                                  |                                      |                                 |   |
|   | <b>58,049</b>                    |                                      |                                 | <b>\$5,837,438</b>                          |
|   | <b>62,000</b>                    |                                      |                                 | <b>\$6,230,000</b>                          |
|   |                                  |                                      |                                 | <b>\$203,000</b>                            |
|   |                                  |                                      |                                 | <b>\$6,430,000</b>                          |

We have further assumed that one minimill will become subject to the standard over the estimated to be 99.6 (rounded).

and Clerical \$51.79 (\$24.66 + 110%). These rates are from the United States Department of Labor rates are from column 1, "Total compensation." The rates have been increased by 110 percent. Management hours are 5 percent of Technical hours, and Clerical hours are 10 percent of

nce test and notification requirements. We have assumed that 20 percent of the sources

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

s an EAF equipped with a direct shell evacuation system (DEC) and uses a negative  
issions 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  
ervations by a certified visible emission observer couple with the use of bag leak detection

it (26.29) use COMS to measure stack emissions and 33 percent (13.15) have elected to use

hr/response

**Table 2: Average Annual EPA Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces and Air**

| REPORTING/RECORDKEEPING REQUIREMENT                       | (A)                      | (B)                                      | (C)                      | (D)                          |
|---|--------------------------|--|--------------------------|------------------------------|
|   | EPA Hours per Occurrence | Number of Occurrences per Plant Per Year | EPA Hours per Year (AxB) | Plants per Year <sup>a</sup> |
| Notification of construction/modification                 | 2                        | 1  | 2                        | 0.3                          |
| Notification of actual startup                            | 1                        | 1  | 1                        | 0.3                          |
| Notification of performance test <sup>c</sup>             | 0.5                      | 1.2                                      | 0.6                      | 0.3                          |
| Initial performance test                                  | 24                       | 1  | 24                       | 0.3                          |
| Repeat Performance test <sup>c</sup>                      | 24                       | 0.2                                      | 4.8                      | 0.3                          |
| Review Performance Test results <sup>c</sup>              | 8                        | 1.2                                      | 9.6                      | 0.3                          |
| Notification of COMS Demonstration                        | 0.5                      | 1  | 0.5                      | 0.3                          |
| Semiannual reports  | 8                        | 2  | 16                       | 99.6                         |
| <b>TOTAL ANNUAL BURDEN and COST (rounded)<sup>d</sup></b> |                          |  |                          |                              |

Assumptions

<sup>a</sup> We have assumed that there are approximately 99.3 sources currently subject to the NSPS, Subparts AA and L, subject to the standard over the three year period of this ICR (0.3 new respondents per year). Therefore, the average number of plants per year is 99.6 (rounded).

<sup>b</sup> This cost is based on the average hourly labor rate as reported in the OPM, 2012 General Schedule, which excludes locality rates of pay. The rates are: Technical \$19.07 (GS-12, Step 1, \$15.78 + 60%), Clerical \$25.25 (GS-6, Step 3, \$15.78 + 60%). This ICR assumes that Managerial hours are 5 percent of Techn hours. These rates are from the OPM, 2012 General Schedule, which excludes locality rates of pay. The rates are rounded to the nearest cent.

<sup>c</sup> We have assumed that 20 percent of the sources would repeat performance tests due to failure.

<sup>d</sup>Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

**Iron Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal)**

46.67                  62.9                  25.25

| (E)   | (F)  | (G)  | (H)                             |
|---|--|--|---------------------------------|
| Technical Hours per Year (Cx <sub>D</sub> ) | Management Hours per Year(Ex <sub>0.05</sub> ) | Clerical Hours per Year (Ex <sub>0.1</sub> ) | Costs per Year, \$ <sup>b</sup> |
| 0.6   | 0.03   | 0.06   | \$31.40                         |
| 0.3   | 0.02   | 0.03   | \$15.70                         |
| 0.18  | 0.01   | 0.02   | \$9.42                          |
| 7.2   | 0.36   | 0.72   | \$376.85                        |
| 1.44  | 0.07   | 0.14   | \$75.37                         |
| 2.88  | 0.14   | 0.29   | \$150.74                        |
| 0.15  | 0.01   | 0.02   | \$7.85                          |
| 1593.6                                      | 79.68  | 159.36                                       | \$83,409.02                     |
| <b>1,850</b>                                |  |  | <b>\$84,100</b>                 |

AAa. We have further assumed that one minimill will become average number of respondents per year is estimated to be 99.6

Management hours (Ex<sub>0.05</sub>), step 3, \$30.02 = 0.07, and Clerical hours, and Clerical hours are 10 percent of Technical hours, and Clerical hours have been increased by 60 percent to account for the benefit