

## SUPPORTING STATEMENT

### NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) FOR ALUMINUM, COPPER, AND OTHER NONFERROUS FOUNDRIES (40 CFR PART 63, SUBPART ZZZZZZ) (FINAL RULE)

#### PART A

##### 1.0 Identification of the Information Collection

(a) *Title and Number of the Information Collection.*

“NESHAP for Aluminum, Copper, and Other Nonferrous Foundries.” This is a new information collection request (ICR) and the EPA tracking number is 2332.02.

(b) *Short Characterization.*

This ICR covers information collection requirements in the final area source NESHAP for aluminum, copper, and other nonferrous foundries (40 CFR Part 63, Subpart ZZZZZZ). Potential respondents are owners or operators of a new or existing melting operation located at an aluminum, copper, or other nonferrous foundry that is an area source of hazardous air pollutants (HAP) emissions, melts 600 tons per year (tpy) of aluminum, copper, or other nonferrous metal or greater, and uses material that contains or has the potential to emit HAP for which the source category was listed. Research and laboratory facilities are not covered by the final rule. Foundries covered by the rule would not be required to obtain a title V operating permit. The owner or operator of an existing melting operation would be required to comply with the rule requirements by 2 years after promulgation; new sources would be required to comply at promulgation or startup, whichever is later.

The owner or operator of an aluminum foundry, copper foundry, and other nonferrous foundry subject to the area source NESHAP would be required to prepare and operate by a written management practices plan. The owner or operator of a copper foundry or other nonferrous foundry that melts 6,000 tpy of copper or other nonferrous (excluding aluminum) metal or greater would also be required to comply with a PM emission limit of 0.015 grains per dry standard cubic foot or a PM performance standard of 95 percent reduction as a surrogate for HAP metal emissions. A performance test would be required for affected sources subject to the emission standards; existing sources would be allowed to demonstrate initial compliance based

on previous test data provided the test meets certain criteria. The final rule requires periodic visible emissions (VE) observations of the control device for existing melting operations subject to the PM limit. Bag leak detection systems would be required for new melting operations subject to the emission standards.

Owners or operators would be required to submit a one-time initial notification and notification of compliance status report, prepare a performance test plan (if applicable); comply with requirements for startup, shutdown, and malfunction plans/reports; and submit a compliance report in the event of a deviation from the rule requirements. Records would be required to demonstrate compliance with the 6,000 tpy threshold, management practices plan, and control device monitoring requirements. Recordkeeping requirements would also apply to facilities that use bag leak detection systems. The information requirements for these area source foundries are listed in Attachment 1.

## **2. Need For and Use of the Collection**

### *(a) Need/Authority for the Collection.*

Section 112 of the Clean Air Act (CAA) requires EPA to establish NESHAP for both major and area sources of HAP that are listed for regulation under CAA section 112(c). An area source is a stationary source that is not a major source (i.e., an area source does not emit and does not have the potential to emit more than 10 tons per year of any single HAP or more than 25 tons per year of any combination of HAP). Requirements for area sources in CAA sections 112(c)(3) and 112(k) direct EPA to (1) identify at least 30 air toxics that present the greatest potential health threat in the largest number of urban areas and (2) to identify sufficient area source categories to ensure that sources representing 90 percent or more of the of the emissions of the 30 “listed” HAP are subject to regulation. EPA implements these requirements through the Integrated Urban Air Toxics Strategy (64 FR 38715, July 19, 1999). Aluminum, copper, and other nonferrous foundries are included on the Integrated Urban Air Toxics Strategy Area Source Category List based on emissions of HAP metals (beryllium, cadmium, chromium, lead compounds, manganese, and nickel depending on the category). We are issuing this standard in response to a court-ordered deadline that requires EPA to issue standards for these three source categories listed pursuant to section 112(c)(3) and (k) by June 15, 2009 (Sierra Club v. Johnson, No. 01-1537, D.D.C., March 2006).

Under CAA section 112(d)(5), we may elect to promulgate HAP standards for area sources based on the use of generally available control technology (GACT) or management practices used by the sources. We can consider costs and economic impacts in determining GACT, which is particularly important when developing regulations for source categories that may have few establishments and many small businesses, or when determining whether additional control is needed for sources that are already well-controlled as a result of other air emissions standards. Facilities in these source categories are already well-controlled, and most are small entities, although a few are large facilities operated by equipment manufacturers such as automobile manufacturers. We have developed the final NESHAP based on GACT.

Certain records and reports are necessary for the Administrator to confirm the compliance status of area sources, identify any new or reconstructed sources subject to the standards, and confirm that the standards are being achieved on a continuous basis. These recordkeeping and reporting requirements are specifically authorized by section 114 of the Clean Air Act (42 U.S.C. 7414) and set out in the part 63 NESHAP General Provisions. Under part 63, the owner or operator must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

*(b) Use/Users of the Data.*

The information will be used by the delegated authority (State agency or Regional Administrator if there is no delegated State agency) to ensure that the emissions limits and other requirements are being achieved. Based on review of the recorded information at the site and the reported information, the delegated permitting authority can identify facilities that may not be in compliance and decide which plants, records, or processes may need inspection.

**3. Nonduplication, Consultations, and Other Collection Criteria**

*(a) Nonduplication.*

A computer search of EPA's ongoing ICR's revealed no duplication of information-gathering efforts.

*(b) Public Notice Required Prior to ICR Submission to OMB.*

Public notice of the ICR was provided in the preamble for the proposed rule.

*(c) Consultations.*

The final rule was developed in consultation with individual plants and trade associations. The non-EPA persons consulted on the information collection activities are identified in Table 1.

TABLE 1. PERSONS CONSULTED ON THE INFORMATION COLLECTION ACTIVITIES

Contact	Organization	Telephone Number
Leo Baran	American Foundry Society (AFS)	(800) 537-4237
James Mallory	Non-Ferrous Founders' Society	(847) 299-0950
Jeff Hannapel	The Policy Group (for AFS)	(202) 257-3756
Christian Richter	The Policy Group (for AFS)	(202) 257-0250

*(d) Effects of Less Frequent Collection.*

If the relevant information were collected less frequently, the delegated authority (State or EPA) would not be reasonably assured that a plant is in compliance with the standards.

*(e) General Guidelines.*

None of the guidelines in 5 CFR 1320.6 are being exceeded.

*(f) Confidentiality.*

All information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in Title 40, Chapter 1, Part 2, Subpart B -- Confidentiality of Business Information (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 39999, September 28, 1978; 43 FR 42251, September 28, 1978; 44 FR 17674, March 23, 1979).

*(g) Sensitive Questions.*

This section is not applicable because this ICR does not involve matters of a sensitive nature.

**4. The Respondents and the Information Requested**

*(a) Respondents/NAICS Codes.*

Potential respondents under Subpart ZZZZZZ are owners or operators of any existing or new aluminum foundry, copper foundry, or other nonferrous foundry that is an area source of HAP emissions, melts 600 tpy or greater of aluminum, copper, or other nonferrous metal, and uses materials that contain or have the potential to emit HAP for which the source category was listed. The North American Industry Classification System (NAICS) codes are 331524 (aluminum foundries except die casting), 331525 (copper foundries except die casting) and 331528 (other nonferrous foundries except die casting). We estimate that 318 (out of a total of 966 foundries) area source foundries would be subject to the rule requirements; no new area sources are projected during the 3-year period of this ICR.

*(b) Information Requested.*

*(i) Data Items, Including Recordkeeping Requirements.* Attachment 1, Source Data and Information Requirements, summarizes the data items, including recordkeeping and reporting requirements.

*(ii) Respondent Activities.* The respondent activities required by the final rule are identified in Table 2 and are introduced in section 6(a).

## **5. The Information Collected—Agency Activities, Collection Methodology, and Information Management**

*(a) Agency Activities.*

The Agency activities are provided in Table 3 and are introduced in section 6(c).

*(b) Collection Methodology and Management.*

Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs of the delegated authority. The monitoring reports submitted to the delegated authority are used for problem identification, as a check on source operation and maintenance, and for compliance determinations. EPA is the delegated authority until the State agency is delegated authority to implement the final rule. Therefore, information contained in the reports submitted to the Regional Administrator will be entered into the Air Facility System (AFS), which is operated and maintained by EPA's Office of Compliance. AFS is EPA's database for the collection, maintenance, and retrieval of compliance data for approximately 125,000 industrial and government-owned facilities. EPA uses the AFS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA

regional offices and EPA headquarters. EPA and its delegated authorities can edit, store, retrieve and analyze the data.

*(c) Small Entity Flexibility.*

A small entity for this industry is defined by the Small Business Administration as a firm having no more than 500 employees. Ninety-eight percent (98 percent) of the aluminum foundries, 100% of the copper foundries, and 100 percent of the other nonferrous foundries are small entities. The final rule excludes two thirds (648) of the 966 foundries from regulation. Only the largest copper and other nonferrous foundries (23 total) would be subject to emission standards; approximately 318 foundries would be required to comply with management practices. Of the 318 foundries that would be subject to the rule, approximately 307 (97 percent) are small entities. The final rule provides the maximum degree of operational flexibility for small entities and the ICR requirements are the minimum necessary to demonstrate compliance. Our analyses show that the final NESHAP will not result in a significant economic impact on a substantial number of small entities because the only new requirements will be compliance provisions. The total annual cost for each of the affected small entities is less than 0.05 percent of company sales revenues.

*(d) Collection Schedule.*

The specific frequency for each information collection activity within this request is shown in Tables 2 and 3.

## **6. Estimating the Burden and Cost of the Collection**

*(a) Estimating Respondent Burden.*

The annual burden estimates for the final NESHAP are shown in Table 2. These numbers were derived from estimates based on EPA's experience with other standards. No burden estimates are provided for new area sources because no new facilities are expected during the 3-year period of this ICR. These estimates represent the maximum burden that would be imposed by the rule based on foundries melting 600 tons per year or more of aluminum, copper, or other nonferrous metal and 6,000 tpy of copper or other nonferrous metal melted for applicability of PM emission standards to copper and other nonferrous foundries.

*(b) Estimating Respondent Costs.*

The information collection activities for the final NESHAP are presented in Table 2.

(i) *Estimating Labor Costs.* Labor rates and associated costs are based on the Bureau of Labor Statistics (BLS) data. Technical, management, and clerical average hourly rates for private industry workers in the foundry industry (NAICS 331500) were taken from the United States Department of Labor, Bureau of Labor Statistics, May 2007 available at <http://www.bls.gov>. Wages for occupational groups are used as the basis for the labor rates with a total compensation of \$37.00/hour for technical, \$48.08/hour for managerial, and \$16.41/hour for clerical. These rates represent salaries plus fringe benefits and do not include the cost of overhead. An overhead rate of 60 percent is used to account for these costs. The fully-burdened hourly wage rates used to represent respondent labor costs are: technical at \$59.20, management at \$76.93, and clerical at \$26.26.

(ii) *Estimating Capital and Operations and Maintenance (O&M) Costs.* As shown in Table 2, no capital costs or operation and maintenance costs would be incurred because the final rule requires visual inspections instead of automated monitoring equipment at existing affected sources.

(iii) *Capital/Startup vs. O&M Costs.* As shown in Table 2, no capital/startup costs or O&M costs would be incurred over the 3-year period of this ICR.

(iv) *Annualizing Capital Costs.* Table 2 shows an estimate of the annualized cost of capital to be \$0 per year.

(c) *Estimating Agency Burden and Cost.*

Because the information collection requirements were developed as an incidental part of standards development, no costs can be attributed to the development of the information collection requirements. Because reporting and recordkeeping requirements on the part of the respondents are required under the part 63 NESHAP General Provisions, no operational costs would be incurred by the Federal Government. Publication and distribution of the information are part of the Compliance Data System, with the result that no Federal costs can be directly attributed to the ICR. Examination of records to be maintained by the respondents will occur incidentally as part of the periodic inspection of sources that is part of EPA's overall compliance and enforcement program, and, therefore, is not attributable to the ICR. The only costs that the

Federal government will incur are user costs associated with the analysis of the reported information, as presented in Table 3.

The Agency labor rates are from the Office of Personnel Management (OPM) 2007 General Schedule which excludes locality rates of pay. These rates can be obtained from Salary Table 2008-GS available on the OPM website, [http://www.opm.gov/oca/06tables/html/gs\\_h.asp](http://www.opm.gov/oca/06tables/html/gs_h.asp). The government employee labor rates are \$14.96/hour for clerical (GS-6, Step 3), \$27.65 for technical (GS-12, Step 1), and \$37.27/hr for management (GS-13, Step 5). These rates were increased by 60 percent to include fringe benefits and overhead. The fully-burdened wage rates used to represent Agency labor costs are: clerical at \$ 23.94; technical at \$44.24, and management at \$59.63.

*(d) Estimating the Respondent Universe and Total Burden and Costs.*

There are 318 existing aluminum, copper, and nonferrous foundries that would be subject to the rule requirements. No new sources are expected during the next 3 years. Consequently, the average number of respondents during the 3-year period of this ICR is 106.

The only components of the total annual responses attributable to this ICR are two one-time initial notifications for each facility. Foundries required to conduct a performance test must submit a notification and prepare a test plan. Other foundries would prepare and follow management practices plans. All foundries subject to the rule would comply with requirements for startup, shutdown, and malfunction plans/reports. Foundries would submit a startup, shutdown or malfunction report only if the emission standard were exceeded and a compliance report in the event of a deviation from the rule requirements during the semiannual reporting period. The number of total annual responses for Subpart ZZZZZZ is estimated as: (106 annual average respondents × 1 notification) + (106 annual average respondents × 1 notification) + (3.8 annual average respondents × 1 performance test notification) + (3.8 annual average respondents × 1 test plan) + (106 annual average respondents × 1 management practices plan) + (106 annual average respondents × 1 startup, shutdown, and malfunction plan). Therefore, the number of total annual responses for Subpart ZZZZZZ is 432.



(e) *Bottom Line Burden Hours and Cost Tables.*

(i) *Respondent tally.* The bottom line respondent burden hours and costs, presented in Table 2 are calculated by adding person-hours per year down each column for technical, managerial, and clerical staff, and by adding down the cost column.

The average annual burden for the monitoring, recordkeeping, and reporting requirements in Subpart ZZZZZZ is 7,160 person hours with an annual average cost of \$408,855 with no capital and O&M costs.

(ii) *The Agency tally.* The total annual Federal Government cost is \$26,306 for 610 total annual hours. The bottom line Agency burden hours and costs presented in Table 3 are calculated by adding person-hours per year down each column for technical, managerial, and clerical staff, and by adding down the cost column.

(iii) *Variations in the annual bottom line.* This section does not apply since no significant variation is anticipated.

(f) *Reasons for Change in Burden.*

This burden requested under this ICR covers information collection requirements in the final area source NESHAP for aluminum, copper, and other nonferrous foundries (40 CFR Part 63, Subpart ZZZZZZ).

(g) *Burden Statement*

The average annual respondent burden for the final NESHAP for aluminum, copper and nonferrous foundry area sources is estimated at 17 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR part 63 are listed in 40 CFR part 9.

**PART B**

This section is not applicable because statistical methods are not used in data collection associated with the final rule.

**TABLE 2. ANNUAL RESPONDENT BURDEN AND COSTS**

<b>Burden item</b>	<b>(A) Person-hours per occurrence</b>	<b>(B) No. of occurrences per respondent</b>	<b>(C) Person-hours per respondent (C=A*B)</b>	<b>(D) Respondents per year</b>	<b>(E) Technical person-hours per year (E=C*D)</b>	<b>(F) Management person-hours per year (E*0.05)</b>	<b>(G) Clerical person-hours per year (E*0.1)</b>	<b>(H) Cost<sup>a</sup>, \$</b>
1. Applications	N/A							
2. Surveys and Studies	N/A							
3. Acquisition, Installation, and Utilization of Technology and Systems	N/A							
4. Reporting Requirements								
A. Read instructions	4	1	4	106 <sup>b</sup>	424	21.2	42.4	\$27,855
B. Required activities								
Prepare management practices plan	4	1	4	106 <sup>b</sup>	424	21.2	42.4	\$27,855
Initial performance tests	40	1	40	3.8 <sup>c</sup>	153	7.7	15.3	\$10,070
Daily VE (30 days) then weekly VE	0.1	78 <sup>d</sup>	8	7.7 <sup>e</sup>	62	3.1	6.2	\$4,072
C. Create information	See 4B							
D. Gather existing information	See 4B							
E. Write report	See 4B							
Initial notification of applicability	4	1	4	106 <sup>b</sup>	424	21.2	42.4	\$27,855
Notification of compliance status	4	1	4	106 <sup>b</sup>	424	21.2	42.4	\$27,855
Notification of construction/reconstruction	N/A							
Notification of anticipated startup	N/A							
Notification of actual startup	N/A							
Notification of special compliance requirements	N/A							
Request for compliance extension	N/A							
Notification of performance test <sup>d</sup>	1	1	1	3.8 <sup>c</sup>	4	0.2	0.4	\$252
Site specific test plan	4	1	4	3.8 <sup>c</sup>	15	0.8	1.5	\$1,007
Notification of performance evaluation	N/A							
Quality assurance plan for	N/A							

<b>Burden item</b>	<b>(A) Person-hours per occurrence</b>	<b>(B) No. of occurrences per respondent</b>	<b>(C) Person-hours per respondent (C=A*B)</b>	<b>(D) Respondents per year</b>	<b>(E) Technical person-hours per year (E=C*D)</b>	<b>(F) Management person-hours per year (E*0.05)</b>	<b>(G) Clerical person-hours per year (E*0.1)</b>	<b>(H) Cost<sup>a</sup>, \$</b>
CEMS/COMS								
NESHAP waiver request	N/A							
Startup, shutdown, and malfunction plan/reports	4	1	4	106 <sup>b</sup>	424	21.2	42.4	\$27,855
Semiannual compliance reports <sup>d</sup>	N/A							
5. Recordkeeping Requirements								
A. Read instructions	See 4A							
B. Plan activities	See 4A							
C. Implement activities	See 4A							
D. Develop record system	4	1	4	106 <sup>b</sup>	424	21.2	42.4	\$27,855
E. Time to enter information	0.5	52	26	106 <sup>b</sup>	2,757	138	276	\$181,059
F. Time to transmit or disclose information	0.25	2	1	106 <sup>b</sup>	53	2.7	5.3	\$3,482
G. Time to adjust existing ways	2	1	2	106 <sup>b</sup>	212	10.6	21.2	\$13,928
F. Time to train personnel	4	1	4	106 <sup>b</sup>	424	21.2	42.4	\$27,855
G. Time for audits	N/A							
<b>TOTAL LABOR BURDEN AND COST</b>							<b>7,160 hours</b>	<b>\$408,855</b>
Annualized cost of capital <sup>f</sup>								<b>\$0</b>
Operation and maintenance (O&M) <sup>f</sup>								<b>\$0</b>
Total (capital recovery plus O&M) <sup>f</sup>								<b>\$0</b>

<sup>a</sup>This ICR uses the following labor rates: Technical, management, and clerical average hourly rates for private industry workers in the foundry industry (NAICS 331500) were taken from the United States Department of Labor, Bureau of Labor Statistics, May 2007 available at <http://www.bls.gov>: technical (environmental engineer) \$37.00, management at \$48.08, and clerical at \$16.41. The rates have been increased by 60% to account for overhead. The fully-burdened hourly wage rates used to represent respondent labor costs are: technical at \$59.20, management at \$76.93, and clerical at \$26.26.

<sup>b</sup>We estimate 318 foundries will be subject to the rule and will perform these activities over the 3-year term of the ICR (318/3 = 106 respondents per year).

<sup>c</sup>Approximately 23 foundries will be subject to the PM emission limit, and half of these must conduct a performance test over the 3-year term of the ICR (11.5/3 = 3.8 respondents per year).

<sup>d</sup>Based on daily VE for 30 days and weekly thereafter (30 + 335/7 = 78).

<sup>e</sup>We estimate that all of the 23 foundries subject to the PM emission limit must perform the visible emissions observations over the 3-year term of the ICR (23/3 = 7.7 respondents per year).

<sup>f</sup>There are no capital costs associated with the final rule.

**TABLE 3. ANNUAL BURDEN AND COST TO THE AGENCY**

<b>Burden Item</b>	<b>(A) Person hours per occurrence</b>	<b>(B) Occurrences per respondent</b>	<b>(C) Plants per year</b>	<b>(D) Technical hours/year (D=A*B*C)</b>	<b>(E) Management hours/year (E=0.05*D)</b>	<b>(F) Clerical-hours/year (F=0.1*D)</b>	<b>(G) Cost<sup>a</sup>, \$</b>
Report Review:							
Initial notification of applicability	1	1	106 <sup>b</sup>	106	5.3	10.6	\$5,261
Deviation reports	N/A						
Startup, shutdown, malfunction plan/report	2	1	106 <sup>b</sup>	212	10.6	21.2	\$10,522
Notification of compliance status	2	1	106 <sup>b</sup>	212	10.6	21.2	\$10,522
Semiannual excess emissions report	N/A						
<b>TOTAL BURDEN AND COST</b>				<b>610 hours</b>			<b>\$26,306</b>

<sup>a</sup> This ICR uses the following average hourly labor rates: 59.63 for managerial (GS-13, Step 5, \$37.27 x 1.6), \$44.24 (GS-12, Step 1, \$27.65 x 1.6) for technical and \$23.94 (GS-6, Step 3, \$14.96 x 1.6) for clerical. These rates are from the Office of Personnel Management (OPM) "A2008 General Schedule", which excludes locality rates of pay.

<sup>b</sup> We estimate 318 foundries will be subject to the rule and will perform these activities over the 3-year term of the ICR (318/3 = 106 respondents per year).

**ATTACHMENT 1. INFORMATION REQUIREMENTS**

<b>Requirement for new and existing sources</b>	<b>Rule citation</b>	<b>Citation for NESHAP general provisions</b>
Management practices plan for aluminum, copper, and other nonferrous foundries	§63.11550(a)	NA
Performance test for copper foundries and other nonferrous foundries of 6,000 tpy or greater of metal melt production	§63.11551(a)	40 CFR 63.7
Records to document compliance with management practices plan	§63.11552(a)	NA
Periodic VE observations of fabric filter exhausts for existing melting operations subject to the PM limit; BLDS for fabric filters for new melting operations subject to a PM limit	§63.11552(b) §63.11552(c)	NA
Notification of applicability	§63.11553(a)	40 CFR 63.9(b)(2)
Notification of construction/ reconstruction <sup>1</sup>	NA	40 CFR 63.9(b)(5)
Notification of special compliance requirements <sup>1</sup>	NA	40 CFR 63.9(d)
Notification of performance test	Table 1	40 CFR 63.9(c)
Notification of opacity observations	NA	40 CFR 63.9(f)
Additional CMS notifications	NA	40 CFR 63.9(g)
Notification of compliance status	§63.11553(b)	40 CFR 63.9(h)(1)
Notification of changes in information <sup>1</sup>	NA	40 CFR 63.9(j)
Startup, shutdown, and malfunction plan/reports	Table 1	40 CFR 63.6(e)(3)
Performance test plan	Table 1	40 CFR 63.7(c)(2)
CMS quality control plan	NA	40 CFR 63.8(d)
CMS performance evaluation test plan/report	NA	40 CFR 63.8(e)
Records to support notifications	§63.11553(c)(1)	40 CFR 63.10(b)(2)
Records of monitoring data	§63.11553(c)(2)	NA
Records of metal melt production for copper and nonferrous foundries greater than 6,000 tpy	§63.11553(c)(3)	NA
Compliance report if deviation occurs	§63.11553(e)	40 CFR 63.10(e)(3)

<sup>1</sup> Requirement is not expected to occur during the 3-year term of this ICR