SUPPORTING STATEMENT
ENVIRONMENTAL PROTECTION AGENCY

NESHAP for Ferroalloys Production: Ferromanganese and Silicomanganese
(40 CFR Part 63, Subpart XXX) (Proposed Rule)

1. Identification of the Information Collection

1(a) Title of the Information Collection

NESHAP for Ferroalloys Production: Ferromanganese and Silicomanganese (40 CFR Part 63, Subpart XXX), EPA ICR Number 2448.01, OMB Control Number 2060-NEW.

1(b) Short Characterization/Abstract

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for the regulations published at 40 CFR subpart XXX were proposed on August 4, 1998, promulgated on May 20, 1999, and amended most recently on March 22, 2001. The purpose of this information collection request is to document the expected impacts of proposed addition of proposed changes to subpart XXX that are being developed as part of the risk and technology review process of the current subpart XXX. Subpart XXX would continue to apply to new and existing ferroalloys production facilities that manufacture ferromanganese and silicomanganese, and that are either major sources of hazardous air pollutants (HAPs) emissions or are co-located at major sources of HAPs. The following affected facilities at ferroalloy production plants are subject to this NESHAP rule: submerged arc furnaces; casting operations, metal oxygen refining (MOR) process; crushing and screening operations; and fugitive dust sources. New sources include those that commenced construction or reconstruction after the date of proposal. This information is being collected to assure compliance with 40 CFR part 63, subpart XXX.

Compared to existing subpart XXX, the proposed changes would increase the number of pollutants and sources regulated and add requirements for continuous monitoring and periodic testing. In addition, the proposed rule would eliminate the startup, shutdown and malfunction (SSM) exemption, remove the SSM plan requirement, add provisions to provide an affirmative defense against civil penalties for exceedances of emission standards caused by malfunctions and add a requirement for electronic submittal of performance tests.

In general, all NESHAP standards require initial notifications, performance tests, monitoring and periodic reports by the owners/operators of the affected facilities. These notifications, reports, and records are essential in determining compliance, and are required of all affected facilities subject to NESHAP.

Any owner/operator subject to the provisions of this part shall maintain a file of these measurements, and retain the file for at least years following the date of such measurements,

maintenance reports, and records. All reports are sent to the delegated state or local authority. In the event that there is no such delegated authority, the reports are sent directly to the United States Environmental Protection Agency (EPA) regional office.

Over the next 3 years, an average of two respondents per year will be subject to the standard, and no additional respondents per year will become subject to the standard. Based on our consultations with industry representatives, there are two plants that are currently subject to subpart XXX and both would be subject to the proposed revisions to XXX. The facilities subject to this rule have the ability to comply with the reporting requirements electronically.

The burden to respondents is calculated in Tables 1, 2, and 3 of Attachment 1: Annual Respondent Burden and Cost of Reporting and Recordkeeping for Ferroalloys Production: Ferromanganese and Silicomanganese. Since this regulation only affects the ferroalloys production industry, the burden to the “Federal Government” is attributed entirely to work performed by Federal employees or government contractors. This burden is calculated in Tables 5, 6, and 7 of Attachment 1: Annual Burden and Cost to the Federal Government for Ferroalloys Production: Ferromanganese and Silicomanganese.

2. Need for and Use of the Collection

2(a) Need/Authority for the Collection

Section 112 of the Clean Air Act (CAA) requires the EPA to establish NESHAP for both major and area sources of HAP that are listed for regulation under CAA section 112(c). A major source is a stationary source that emits or has the potential to emit more than 10 tons per year (tpy) of any single HAP or more than 25 tpy of any combination of HAP. 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 tpy of any single HAP and more than 25 tpy of any combination of HAP). For major sources, these technology-based standards must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts) and are commonly referred to as maximum achievable control technology (MACT) standards. Section 112(d)(6) requires the EPA to review these technology-based standards and to revise them “as necessary (taking into account developments in practices, processes, and control technologies)” no less frequently than every 8 years. In addition, section 112(f) of the CAA requires the EPA to determine for source categories subject to certain CAA section 112(d) standards whether the emissions limitations provide an ample margin of safety to protect public health. For MACT standards for HAP “classified as a known, probable, or possible human carcinogen" that "do not reduce lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than 1-in-1 million,” the EPA must promulgate residual risk standards for the source category (or subcategory) as necessary to provide an ample margin of safety to protect

public health. In doing so, the EPA may adopt standards equal to existing MACT standards, if the EPA determines that the existing standards are sufficiently protective. The EPA must also adopt more stringent standards, if necessary, to prevent an adverse environmental effect, but must consider cost, energy, safety, and other relevant factors in doing so.

Certain records and reports are necessary for the Administrator to confirm the compliance status of sources subject to NESHAP, 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. The recordkeeping and reporting requirements for title V permits are contained in 40 CFR 70.6 and 40 CFR 71.6. Under parts 63 and 70 or 71, the owner or operator must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

2(b) Practical Utility/Users of the Data

The recordkeeping and reporting requirements in the standards ensure compliance with the applicable regulations which where promulgated in accordance with the Clean Air Act. The collected information is also used for targeting inspections and as evidence in legal proceedings.

Performance tests for air pollution devices are required in order to determine an affected facility's initial capability to comply with the emission standards. Continuous emission monitors are used to ensure that the control equipment is operating properly and therefore, ensure compliance with the standards at all times. During the performance test, a record of the operating parameters under which compliance was achieved may be recorded and used to determine compliance in place of a continuous emission monitor.

The notifications required in the standards are used to inform the Agency or delegated authority when a source becomes subject to the requirements of the regulations. The reviewing authority may then inspect the source to ensure that the pollution control devices are properly installed and operated; that leaks are being detected and repaired; and that the standards are being met. The performance test may also be observed.

The required semiannual compliance status reports and quarterly excess emissions reports are used to determine periods of excess emissions, identify problems at the facility, verify operation/maintenance procedures and for compliance determinations.

3. Non-duplication, Consultations, and Other Collection Criteria

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

3(a) Non-duplication

If the subject standards have not been delegated, the information is sent directly to the appropriate EPA regional office. Otherwise, the information is sent directly to the delegated state or local agency. If a state or local agency has adopted its own similar standards to implement the federal standards, a copy of the report submitted to the state or local agency can be sent to the Administrator in lieu of the report required by the federal standards. Therefore, no duplication exists.

3(b) Public Notice Required Prior to ICR Submission to OMB

The preamble to the proposed rule will provide public notice.

3(c) Consultations

The proposed rule amendments were developed using extensive consultation with individual companies and state agencies. Several of the key non-EPA persons consulted on the information collection activities are identified in Table 1. Additional meetings and contacts are documented in the project docket for this proposed rule, Docket No. EPA-HQ-OAR-2009-0734.

TABLE 1. PERSONS CONSULTED ON THE INFORMATION COLLECTION ACTIVITIES

Contact	Organization	Telephone Number
Jeffrey McKinney	Eramet Marietta, Inc.	740-374-1143
Paul Pigott	Felman Production	304-675-0079
James Robertson	West Virginia Department of Environmental Protection	304-926-0479
Christina Wieg	Ohio EPA	740-380-6490

3(d) Effects of Less Frequent Collection

Less frequent information collection would decrease the margin of assurance that facilities are continuing to meet the standards. Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards was collected less frequently, the proper operation and maintenance of control equipment and the

possibility of detecting violations would be less likely.

3(e) General Guidelines

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

3(f) Confidentiality

Any 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 (CBI) (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 40000, September 8, 1978; 43 FR 42251, September 20, 1978; 44 FR 17674, March 23, 1979).

3(g) Sensitive Questions

The reporting or recordkeeping requirements in the standard do not include sensitive questions.

4. The Respondents and the Information Requested

(a) Respondents/NAICS Codes

The respondents to the recordkeeping and reporting requirements are the owners or operators of all new and existing ferroalloys production facilities that are major sources or are co-located at major sources. The affected facilities produce either ferromanganese or silicomanganese. The North American Industry Classification System (NAICS) code is 331112, “Electrometallurgical Ferroalloy Product Manufacturing.”

There are two facilities that will be subject to the proposed amendments to the NESHAP. No new ferroalloys production facilities are expected during the 3-year period of this ICR.

4(b) Information Requested

i) Data Items

Attachment 2, Information Requirements, summarizes the data items, including recordkeeping and reporting requirements, for the Ferroalloys Production source category. The amendments to the NESHAP require that any performance tests performed after the effective date of the final rule be submitted electronically to EPA’s Central Data Exchange by using the Electronic Reporting Tool (ERT) for test methods that are compatible with ERT. This new requirement to submit the data to the ERT is in addition to the other existing submission requirements for this data.

(ii) Respondent Activities

The respondent activities that will be required by the proposed amendments to the Ferroalloys Production NESHAP are identified in Tables 1 through 3 of Attachment 1 and are introduced in section 6(a).

The EPA is including an estimate of the burden associated with performing an affirmative defense. The EPA is providing this as an illustrative example of the potential additional administrative burden a source may incur to assert in an Affirmative Defense in response to an action to enforce the standards set forth in the applicable subpart.

This illustrative estimate is not considered a duplicate estimate of cost under the General Duty to Minimize Emissions clause under §63.6(e)(1)(i), which states: "At all times, the owner and operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determining whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source."

To provide the public with an estimate of the relative magnitude of the burden associated with an assertion of the affirmative defense position adopted by a source, the EPA provides an administrative adjustment to this ICR that estimates the costs of the notification, recordkeeping and reporting requirements associated with the assertion of the affirmative defense. The EPA's estimate for the required notification, reports and records, including the root cause analysis, associated with a single incident totals approximately $3,141 and is based on the time and effort required of a source to review relevant data, interview plant employees, and document the events surrounding a malfunction that has caused an exceedance of an emission limit. The estimate also includes time to produce and retain the records and reports for submission to the EPA. The EPA provides this illustrative estimate of this burden because these costs are only incurred if there has been a violation and a source chooses to take advantage of the affirmative defense.

Of the number of excess emission events reported by source operators, only a small number would be expected to result from a malfunction, and only a subset of excess emissions caused by malfunctions would result in the source choosing to assert the affirmative defense. Thus we believe the number of instances in which source operators might be expected to avail themselves of the affirmative defense will be extremely small. For this reason, we estimate no more than 1 or 2 such occurrences for all sources within a given category over the 3-year period covered by this ICR. For the purpose of this estimate, we are adding one (1) instances of affirmative defense. We expect to gather information on such events in the future and will revise

this estimate as better information becomes available.

5. The Information Collected: Agency Activities, Collection Methodology, and Information Management

5(a) Agency Activities

The Agency activities associated with the proposed amendments to the Ferroalloys Production NESHAP are provided in Tables 5 through 7 of Attachment 1 and are introduced in section (6)(c).

5(b) Collection Methodology and Management

Following notification of startup, the reviewing authority might inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the Agency to discern a source's initial capability to comply with the emission standard. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The quarterly excess emissions reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations.

Information contained in the reports is entered into the EPA Air Facility Subsystem (AFS) which is operated and maintained by the EPA Office of Compliance. AFS is the EPA database for the collection, maintenance, and retrieval of compliance data for approximately 125,000 industrial and government-owned facilities. The EPA uses the AFS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. The EPA and its delegated Authorities can edit, store, retrieve and analyze the data.

The records required by this regulation must be retained by the owner/operator for 5 years.

5(c) Small Entity Flexibility

For this source category, which has the NAICS code 331112 (i.e., Electrometallurgical ferroalloy product manufacturing), the Small Business Administration (SBA) small business size standard is 750 employees according to the SBA small business standards definitions. We have determined that there are no small businesses affected by this regulation at this time. The Agency considers the final rule requirements the minimum needed to ensure compliance with the standards.

5(d) Collection Schedule

The specific frequency for each information collection activity within this request is shown in Tables 1-3 of Attachment 1 for the Ferroalloys Production source category.

6. Estimating the Burden and Cost of the Collection

6(a) Estimating Respondent Burden

The annual burden estimates for the proposed amendments to the Ferroalloys Production NESHAP are shown in Tables 1 through 3 of Attachment 1. These numbers were derived from estimates based on the EPA's experience with other standards. No burden estimates are provided for new sources because no new facilities are expected to become affected sources during the 3-year period of this ICR.

6(b) Estimating Respondent Costs

(i) Estimating Labor Costs

We used May 2010 mean hourly labor rates from the Bureau of Labor Statistics for the Iron and Steel Mills and Ferroalloy Manufacturing (NAICS 331100).[1] Loading factors (i.e., fringe benefits and overhead rates) were calculated using methodologies referenced in promulgated regulations and their accompanying Information Collection Requests (ICRs), particularly those used in New Source Review (NSR) regulations. Fringe benefits are calculated as 29% of hourly earnings, and overhead is calculated using a standard 110% above hourly earnings. Table 2 presents the labor rates used in the cost analysis.

TABLE 2. 2010 LOADED LABOR RATES

	Hourly earnings [$2010]	Fringe	Overhead	Loaded 2010 Hourly Earnings ($)
Professional specialty and technical (environmental engineer)	41.15	1.29	2.10	$111.48
Installation, maintenance, repair	23.55	1.29	2.10	$63.80
Executive, admin, managerial (managers, all other)	48.74	1.29	2.10	$132.04
Admin support (office clerk)	15.41	1.29	2.10	$41.75

To estimate the costs of conducting the initial performance tests, we assumed that facilities would hire a contractor. We show these cost as one-time expense in the 3-year ICR

1 May 2010 National Industry-Specific Occupational Employment and Wage Estimates. Located http://www.bls.gov/oes/current/naics4_331100.htm#11-0000

period.

(ii) Estimating Capital/Startup and Operation and Maintenance Costs

The capital costs associated with the NESHAP include monitoring system initial costs; one-time costs when a facility becomes subject to the regulation. The annual operation and maintenance costs are the ongoing costs to maintain the monitors and conducting stack testing. We assumed that facilities would purchase and begin to operate all required monitoring systems in Year 2 of the ICR, which is also the year we assumed they would conduct their initial performance tests.

(iii) Capital/Startup vs. Operation and Maintenance (O&M) Costs

The estimated capital and O&M costs for the affected units for the first 3 years after promulgation are provided. For the two facilities, the total capital costs are $336,300. The total annualized capital and O&M costs are $1,040,640 million for an average of $346,880 per year.

(iv) Affirmative Defense, Root Cause Analysis and Malfunction Costs

The EPA's estimate for a affirmative defense and root cause analysis is based on general experience to calculate the time and effort required of a source to review relevant data, interview plant employees, and reconstruct the events prior to a malfunction in order to determine primary and contributing causes. The level of effort also includes time to produce and retain the report in document form so that the source will have it available should the EPA or state enforcement agencies ever request to review it.

6(c) Estimating Agency Burden and Cost

The only costs to the Agency are those costs associated with analysis of the reported information. The overall compliance and enforcement program of EPA includes activities such as the examination of records maintained by the respondents, periodic inspection of sources of emissions, and the publication and distribution of collected information.

The average annual Agency cost during the 3 years of the ICR is estimated to be $2,177.

The Agency labor rates are from the Office of Personnel Management (OPM) 2010 General Schedule, which excludes locality rates of pay. These rates can be obtained from Salary Table 2010-GS available on the OPM website, http://www.opm.gov/oca/10tables/pdf/gs_h.pdf.

Managerial $62.27 (GS-13, Step 5, $38.92+ 60%)
Technical $46.21 (GS-12, Step 1, $28.88+ 60%)
Clerical $25.01 (GS-6, Step 3, $15.63 + 60%)

These rates were increased by 60 percent to include fringe benefits and overhead

6(d) Estimating the Respondent Universe and Total Burden and Costs

There are two existing facilities that are subject to the proposed Ferroalloys Production NESHAP. No new sources are expected during the 3-year compliance period. No new facilities are expected to begin operation during the 3-year compliance period. Over the 3-year period, it is estimated that these two facilities will have 35 responses for an average of 12 per year.

6(e) Bottom Line Burden Hours Burden Hours and Cost Tables

(i) Respondent Tally

The bottom line respondent burden hours and costs, presented in Tables 1-3 of Attachment 1 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 recordkeeping and reporting requirements in the proposed amendments to subpart XXX for the two existing facilities that are subject to the Ferroalloys Production NESHAP is $384,000. This includes 483 annual labor hours. The detailed bottom line burden hours and cost calculations for the respondents and the Agency are shown in Tables 1, 2, and 3 of Attachment 1, respectively.

(ii) The Agency Tally

The average annual Federal Government cost is $2,177 for 48 hours for the proposed amendments to subpart XXX. The bottom line Agency burden hours and costs presented in Tables 5 through 7 of Attachment 1 are calculated by adding person-hours per year down each column for technical, managerial, and clerical staff, and by adding down the cost column.

6(f) Reasons for Change in Burden

We are requesting an increase in burden of 1,450 hours and $1,152,604 over the full 3-year program due to implementation of these proposed changes to the regulation.

6(g) Burden Statement

The average annual respondent burden for the proposed amendments to the Ferroalloys Production NESHAP is estimated at 242 hours per facility or 40 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 valid OMB Control Number. The OMB Control Numbers for the EPA regulations are listed at 40 CFR part 9 and 48 CFR chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, the EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2010-0895, or in person viewing at the Air and Radiation Docket and Information Center in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742. An electronic version of the public docket is available at http://www.regulations.gov. This site can be used to submit or view public comments, access the index listing of the contents of the public docket and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention Desk Officer for EPA. Please include the relevant Docket ID Number (EPA-HQ-OAR-2010-0895) in any correspondence.

Part B of the Supporting Statement

This part is not applicable because no statistical methods were used in collecting this information.

ATTACHMENT 1

Burden Estimate Tables 1 through 8

Tables 1 through 3:	Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements of the Proposed Standard , Years 1 through 3
Table 4:	Summary of Annual Respondent Burden and Cost of Recordkeeping and Reporting of the Proposed Standard
Tables 5 through 7:	Annual Burden and Cost to the Federal Government of the Proposed Standard, Years 1 through 3
Table 8:	Summary of Annual Burden and Cost to the Federal Government of the Proposed Standard

TABLE 1. YEAR 1 ANNUAL RESPONDENT BURDEN AND COST OF REPORTING AND RECORDKEEPING REQUIREMENTS FOR FERROALLOYS PRODUCTION: FERROMANGANESE AND SILICOMANGANESE

	(A) Person-hours per occurrence	(B) Stack testing cost per occurrence	(C) Other non-labor costs per occurrence	(D) No. of occurrences per respondent per year	(E) Person-hours per respondent per year (AxD)	(F) Respondents per year	(G) Technical person-hours per year (ExF)	(H) Management person-hours per year (Gx0.05)	(I) Clerical person-hours per year (Gx0.1)	(J) Total labor costs per year	(K) Total non-labor costs per year ((B+C)xDxF)	(L) Total number of responses per year (DxF)
1. Applications	N/A											
2. Survey and Studies	N/A											
3. Reporting Requirements												
A. Read instructions (b)	20.00			1.0	20.0	2.0	40.0	0.4	4.0	$4,679	$0	2
B. Required activities												
a. Initial Compliance test (PM, HCl, Hg, PAH, formaldehyde) - PP FF (c)	15.00	$200,000		3.0	45.0	0.0	0.0	0.0	0.0	$0	$0	0
b. Initial Compliance test (PM, HCl, Hg, PAH, formaldehyde) - NP FF/Scrbr (c)	15.00	$52,000		2.0	30.0	0.0	0.0	0.0	0.0	$0	$0	0
c. Initial Compliance test (PM) -- NP FF(c)	20.00	$10,000		4.5	90.0	0.0	0.0	0.0	0.0	$0	$0	0
d. Initial Method 9 (c)	4.00	$2,000		1.5	6.0	0.0	0.0	0.0	0.0	$0	$0	0
e. Manganese ore sampling	2.00		$200	3.0	6.0	0.0	0.0	0.0	0.0	$0	$0	0
f. Daily VE check (5 control devices)	0.25			365.0	91.3	0.0	0.0	0.0	0.0	$0	$0	0
g. Daily VE check (8 control devices)	0.40			365.0	146.0	0.0	0.0	0.0	0.0	$0	$0	0
h. Pressure drop/liquid flow rate CPMS-scrubber												
Initial Capital	2.00		$50,000	1.0	2.0	0.0	0.0	0.0	0.0	$0	$0	0
Annual (O&M)	2.00		$18,000	1.0	2.0	0.0	0.0	0.0	0.0	$0	$0	0
I. Carbon injection rate CPMS												
Initial Capital	2.00		$20,000	1.0	2.0	0.0	0.0	0.0	0.0	$0	$0	0
Annual (O&M)	2.00		$6,200	1.0	2.0	0.0	0.0	0.0	0.0	$0	$0	0
J. Bag Leak Detection System												
Initial Capital	4.00		$265,000	0.5	2.0	0.0	0.0	0.0	0.0	$0	$0	0
Annual (O&M)	4.00		$94,000	0.5	2.0	0.0	0.0	0.0	0.0	$0	$0	0
k. Differential pressure monitor												
Initial Capital	2.00		$2,300	2.0	4.0	0.0	0.0	0.0	0.0	$0	$0	0
Annual (O&M)	2.00		$230	2.0	4.0	0.0	0.0	0.0	0.0	$0	$0	0
C. Create information	See 3B										$0	
D. Gather existing information	See 3B										$0	
E. Write report											$0	
a. Initial Notification	N/A											
b. Notification of Compliance Status	4.00			1.0	4.0	0.0	0.0	0.0	0.0	$0	$0	0
c. Annual Compliance Certification (d)	10.00			1.0	10.0	0.0	0.0	0.0	0.0	$0	$0	0
d. Report of Exceedences (e)	10.00			1.0	10.0	0.0	0.0	0.0	0.0	$0	$0	0
e. Develop process fugives ventilation plan	80.00			1.0	80.0	2.0	160.0	1.0	16.0	$18,637	$0	2
f. Update fugitive dust control plan	10.00			1.0	10.0	2.0	20.0	1.0	2.0	$2,445	$0	2
g. Update baghouse monitoring plan	10.00			1.0	10.0	2.0	20.0	1.0	2.0	$2,445	$0	2
h. Develop bagleak detection system SOP	20.00			1.0	20	2.0	40	1	4	$4,758	$0	2
I. Affirmative Defense	30.00			1.0	30.0	0.0	0.0	0.0	0.0	$0	$0	0
Reporting Subtotal				762.0	628.3	10.0	280.0	4.4	28.0	$32,964	$0	10
4. Recordkeeping Requirements												
A. Read instructions	See 3A										$0	0
B. Implement activities	N/A										$0	0
C. Develop record system	N/A										$0	0
D. Time to enter information												
E. Records of all info. required by standards (f)	1.00			60.0	60.0	0.0	0.0	0.0	0.0	$0	$0	0
F. Time to train personnel	20.00			1.0	20.0	2.0	40.0	1.0	4.0	$4,758	$0	0
G. Time for audits	N/A							0.0	0.0	$0	$0	0
Recordkeeping Subtotal				61.0	80.0	2.0	40.0	1.0	4.0	$4,758	$0	0
TOTAL				823.0	708.3	12.0	320.0	5.4	32.0	$37,723	$0	10.0

	Total Hours	Labor Cost	Non-Labor	Total
Summary of respondent burden	357	$37,723	$0	$ 37,723
Initial capital and startup			$0	
Annualized Capital/startup and O&M			$0	

N/A = Not Applicable.

(a) Costs are based on the following hourly rates: technical at $111.48, management at $132.04, and clerical at $41.75, except the daily VE and Method 22s are $63.80.

(b) One-time activity. There are an estimated 2 existing ferroalloys production facilities and no new facilities are expected.

(c) Occurs every 5 years, initial tests estimated to occur in Year 2 of ICR. Assume the facilities hire a contractor. Costs based on estimates provided by EPA Emissions Measurement Group.

(d) The 2 existing plants would be required to submit an Annual Compliance Certification at the end of Year 2 of the ICR and each year thereafter.

(e) Assumes that 2 facilities per year would have to submit a Report of exceedence.

(f) Recordkeeping requirements begin in Year 2 of ICR clearance period for all existing plants.

(g) Transmittals would include Initial Notifications for 2 plants, Notifications of Compliance Status for 2 plants, Annual Compliance Certifications for 10 plants (combined with exceedence Reports), for an average of (2+2+2)/3 = 2 for each year of the 3-yr ICR clearance period.

TABLE 2. YEAR 2 ANNUAL RESPONDENT BURDEN AND COST OF REPORTING AND RECORDKEEPING REQUIREMENTS FOR FERROALLOYS PRODUCTION: FERROMANGANESE AND SILICOMANGANESE

	(A) Person-hours per occurrence	(B) Stack testing cost per occurrence	(C) Other non-labor costs per occurrence	(D) No. of occurrences per respondent per year	(E) Person-hours per respondent per year (AxD)	(F) Respondents per year	(G) Technical person-hours per year (ExF)	(H) Management person-hours per year (Gx0.05)	(I) Clerical person-hours per year (Gx0.1)	(J) Total labor costs per year	(K) Total non-labor costs per year ((B+C)xDxF)	(L) Total number of responses per year (DxF)
1. Applications	N/A											
2. Survey and Studies	N/A											
3. Reporting Requirements												
A. Read instructions (b)	20.00			1.0	20.0	0.0	0.0	0.0	0.0	$0	$0	0
B. Required activities												
a. Initial Compliance test (PM, HCl, Hg, PAH, formaldehyde) - PP FF (c)	15.00	$200,000		3.0	45.0	1.0	45.0	0.5	4.5	$5,270	$600,000	3
b. Initial Compliance test (PM, HCl, Hg, PAH, formaldehyde) - NP FF/Scrbr (c)	15.00	$52,000		2.0	30.0	1.0	30.0	0.5	3.0	$3,536	$104,000	2
c. Initial Compliance test (PM) -- NP FF(c)	20.00	$10,000		4.5	90.0	2.0	180.0	1.0	18.0	$20,950	$90,000	9
d. Initial Method 9 (c)	4.00	$2,000		1.5	6.0	2.0	12.0	1.0	1.2	$1,520	$6,000	3
e. Manganese ore sampling	2.00		$200	3.0	6.0	2.0	12.0	1.0	1.2	$1,520	$1,200	0
f. Daily VE check (5 control devices)	0.25			365.0	91.3	1.0	91.3	0.5	9.1	$6,269	$0	0
g. Daiily VE check (8 control devices)	0.40			365.0	146.0	1.0	146.0	0.5	14.6	$676	$0	0
h. Pressure drop/liquid flow rate CPMS-scrubber												
Initial Capital	2.00		$50,000	1.0	2.0	1.0	2.0	0.5	0.2	$297	$50,000	0
Annual (O&M)	2.0		$18,000	1.0	2.0	1.0	2.0	0.5	0.2	$297	$18,000	0
i. Carbon injection rate CPMS												
Initial Capital	2.0		$20,000	1.0	2.0	1.0	2.0	0.5	0.2	$297	$20,000	0
Annual (O&M)	2.0		$6,200	1.0	2.0	1.0	2.0	0.5	0.2	$297	$6,200	0
j. Bag Leak Detection System												
Initial Capital	4.0		$265,000	0.5	2.0	2.0	4.0	1.0	0.4	$595	$265,000	0
Annual (O&M)	4.0		$94,000	0.5	2.0	2.0	4.0	1.0	0.4	$595	$94,000	0
k. Differential pressure monitor												
Initial Capital	2.0		$2,300	2.0	4.0	2.0	8.0	1.0	0.8	$1,057	$9,200	0
Annual (O&M)	2.0		$230	2.0	4.0	2.0	8.0	1.0	0.8	$1,057	$920	0
C. Create information	See 3B										$0	
D. Gather existing information	See 3B										$0	
E. Write report											$0	
a. Initial Notification	N/A											
b. Notification of Compliance Status	4.0			1.0	4.0	0.0	0.0	0.0	0.0	$0	$0	0
c. Annual Compliance Certification (d)	10.0			1.0	10.0	2.0	20.0	1.0	2.0	$2,445	$0	2
d. Report of Exceedences (e)	10.0			1.0	10.0	2.0	20.0	1.0	2.0	$2,445	$0	2
e. Develop process fugives ventilation plan	80.0			1.0	80.0	0.0	0.0	0.0	0.0	$0	$0	0
f. Update fugitive dust control plan	10.0			1.0	10.0	0.0	0.0	0.0	0.0	$0	$0	0
g. Update baghouse monitoring plan	10.0			1.0	10.0	0.0	0.0	0.0	0.0	$0	$0	0
h. Develop bagleak detection system SOP	20.0			1.0	20	0.0	0	0	0	$0	$0	0
I. Affirmative Defense	30.0			1.0	30.0	0.0	0.0	0.0	0.0	$0	$0	0
Reporting Subtotal				762.0	628.3	26.0	588.3	13	58.8	$49,124	$920,320	21
4. Recordkeeping Requirements												
A. Read instructions	See 3A										$0	0
B. Implement activities	N/A										$0	0
C. Develop record system	N/A										$0	0
D. Time to enter information												
E. Records of all info. required by standards (f)	1.0			60.0	60.0	0.0	0.0	0.0	0.0	$0	$0	0
F. Time to train personnel	20.0			1.0	20.0	2.0	40.0	1.0	4.0	$4,758	$0	0
G. Time for audits	N/A							0.0	0.0		$0	0
Recordkeeping Subtotal				61.0	80.0	2.0	40.0	1.0	4.0	$4,758	$0	0
TOTAL				823.0	708.3	28.0	628.3	14.0	62.8	$53,882	$920,320	21.0

		Total Hours	Labor Cost	Non-Labor	Total
Summary of respondent burden		705	$53,882	$920,320	$ 974,202
Initial capital and startup				$344,200	
Annualized Capital/startup and O&M				$920,320	

N/A = Not Applicable.

(a) Costs are based on the following hourly rates: technical at $111.48, management at $132.04, and clerical at $41.75, except the daily VE and Method 22s are $63.80.

(b) One-time activity. There are an estimated 2 existing ferroalloys production facilities and no new facilities are expected.

(c) Occurs every 5 years, initial tests estimated to occur in Year 2 of ICR. Assume the facilities hire a contractor. Costs based on estimates provided by EPA Emissions Measurement Group.

(d) The 2 existing plants would be required to submit an Annual Compliance Certification at the end of Year 2 of the ICR and each year thereafter.

(e) Assumes that 2 facilities per year would have to submit a Report of exceedence.

(f) Recordkeeping requirements begin in Year 2 of ICR clearance period for all existing plants.

(g) Transmittals would include Initial Notifications for 2 plants, Notifications of Compliance Status for 2 plants, Annual Compliance Certifications for 10 plants (combined with exceedence Reports), for an average of (2+2+2)/3 = 2 for each year of the 3-yr ICR clearance period.

TABLE 3. YEAR 3 ANNUAL RESPONDENT BURDEN AND COST OF REPORTING AND RECORDKEEPING REQUIREMENTS FOR FERROALLOYS PRODUCTION: FERROMANGANESE AND SILICOMANGANESE

	(A) Person-hours per occurrence	(B) Stack testing cost per occurrence	(C) Other non-labor costs per occurrence	(D) No. of occurrences per respondent per year	(E) Person-hours per respondent per year (AxD)	(F) Respondents per year	(G) Technical person-hours per year (ExF)	(H) Management person-hours per year (Gx0.05)	(I) Clerical person-hours per year (Gx0.1)	(J) Total labor costs per year	(K) Total non-labor costs per year ((B+C)xDxF)	(L) Total number of responses per year (DxF)
1. Applications	N/A											
2. Survey and Studies	N/A											
3. Reporting Requirements												
A. Read instructions (b)	20.00			1.0	20.0	0.0	0.0	0.0	0.0	$0	$0	0
B. Required activities												
a. Initial Compliance test (PM, HCl, Hg, PAH, formaldehyde) - PP FF (c)	15.00	$200,000		3.0	45.0	0.0	0.0	0.0	0.0	$0	$0	0
b. Initial Compliance test (PM, HCl, Hg, PAH, formaldehyde) - NP FF/Scrbr (c)	15.00	$52,000		2.0	30.0	0.0	0.0	0.0	0.0	$0	$0	0
c. Initial Compliance test (PM) -- NP FF(c)	20.00	$10,000		4.5	90.0	0.0	0.0	0.0	0.0	$0	$0	0
d. Initial Method 9 (c)	4.00	$2,000		1.5	6.0	0.0	0.0	0.0	0.0	$0	$0	0
e. Manganese ore sampling	2.00		$200	3.0	6.0	2.0	12.0	1.0	1.2	$1,520	$1,200	0
f. Daily VE check (5 control devices)	0.25			365.0	91.3	1.0	91.3	0.5	9.1	$6,269	$0	0
g. Daily VE check (8 control devices)	0.40			365.0	146.0	1.0	146.0	0.5	14.6	$676	$0	0
h. Pressure drop/liquid flow rate CPMS-scrubber												
Initial Capital	2.00		$50,000	1.0	0.0	0.0	0.0	0.0	0.0	$0	$0	0
Annual (O&M)	2.0		$18,000	1.0	2.0	1.0	2.0	0.5	0.2	$297	$18,000	0
i. Carbon injection rate CPMS												
Initial Capital	2.0		$20,000	1.0	0.0	0.0	0.0	0.0	0.0	$0	$0	0
Annual (O&M)	2.0		$6,200	1.0	2.0	1.0	2.0	0.5	0.2	$297	$6,200	0
j. Bag Leak Detection System												
Initial Capital	4.0		$265,000	0.5	0.0	0.0	0.0	0.0	0.0	$0	$0	0
Annual (O&M)	4.0		$94,000	0.5	2.0	2.0	4.0	1.0	0.4	$595	$94,000	0
k. Differential pressure monitor												
Initial Capital	2.0		$2,300	2.0	0.0	0.0	0.0	0.0	0.0	$0	$0	0
Annual (O&M)	2.0		$230	2.0	4.0	2.0	8.0	1.0	0.8	$1,057	$920	0
C. Create information	See 3B										$0	
D. Gather existing information	See 3B										$0	
E. Write report											$0	
a. Initial Notification	N/A											
b. Notification of Compliance Status	4.0			1.0	4.0	0.0	0.0	0.0	0.0	$0	$0	0
c. Annual Compliance Certification (d)	10.0			1.0	10.0	2.0	20.0	1.0	2.0	$2,445	$0	2
d. Report of Exceedences (e)	10.0			1.0	10.0	2.0	20.0	1.0	2.0	$2,445	$0	2
e. Develop process fugives ventilation plan	80.0			1.0	80.0	0.0	0.0	0.0	0.0	$0	$0	0
f. Update fugitive dust control plan	10.0			1.0	10.0	0.0	0.0	0.0	0.0	$0	$0	0
g. Update baghouse monitoring plan	10.0			1.0	10.0	0.0	0.0	0.0	0.0	$0	$0	0
h. Develop bagleak detection system SOP	20.0			1.0	20.0	0.0	0	0	0	$0	$0	0
I. Affirmative Defense	30.0			1.0	30.0	0.0	0.0	0.0	0.0	$0	$0	0
Reporting Subtotal				762.0	618.3	14.0	306.3	7	30.5	$15,601	$120,320	4
4. Recordkeeping Requirements												
A. Read instructions	See 3A										$0	0
B. Implement activities	N/A										$0	0
C. Develop record system	N/A										$0	0
D. Time to enter information												
E. Records of all info. required by standards (f)	1.0			60.0	60.0	0.0	0.0	0.0	0.0	$0	$0	0
F. Time to train personnel	20.0			1.0	20.0	2.0	40.0	1.0	4.0	$4,758	$0	0
G. Time for audits	N/A							0.0	0.0		$0	0
Recordkeeping Subtotal				61.0	80.0	2.0	40.0	1.0	4.0	$4,758	$0	0
TOTAL				823.0	698.3	16.0	345.3	8.0	34.5	$20,359	$120,320	4.0

	Total Hours	Labor Cost	Non-Labor	Total
Summary of respondent bur	388	$20,359	$120,320	$ 140,679
Initial capital and startup			$0	
Annualized Capital/startup and O&M			$120,320	

N/A = Not Applicable.

(a) Costs are based on the following hourly rates: technical at $111.48, management at $132.04, and clerical at $41.75, except the daily VE and Method 22s are $63.80.

(b) One-time activity. There are an estimated 2 existing ferroalloys production facilities and no new facilities are expected.

(c) Occurs every 5 years, initial tests estimated to occur in Year 2 of ICR. Assume the facilities hire a contractor. Costs based on estimates provided by EPA Emissions Measurement Group.

(d) The 2 existing plants would be required to submit an Annual Compliance Certification at the end of Year 2 of the ICR and each year thereafter.

(e) Assumes that 2 facilities per year would have to submit a Report of exceedence.

(f) Recordkeeping requirements begin in Year 2 of ICR clearance period for all existing plants.

(g) Transmittals would include Initial Notifications for 2 plants, Notifications of Compliance Status for 2 plants, Annual Compliance Certifications for 10 plants (combined with exceedence Reports), for an average of (2+2+2)/3 = 2 for each year of the 3-yr ICR clearance period.

TABLE 4. SUMMARY OF ANNUAL RESPONDENT BURDEN AND COST OF REPORTING AND RECORDKEEPING REQUIREMENTS FOR FERROALLOYS PRODUCTION: FERROMANGANESE AND SILICOMANGANESE

Year	Technical Hours	Clerical Hours	Management Hours	Total Labor Hours	Labor Cost	Non-Labor (annualized Capital/Startup and O&M) Costs	Total Costs
1	320	32	5	357	$37,723	$0	$37,723
2	628	63	14	705	$53,882	$920,320	$974,202
3	345	35	8	388	$20,359	$120,320	$140,679
Total	1,294	129	27	1,450	$111,964	$1,040,640	$1,152,604
Average	431	43	9	483	$37,321	$346,880	$384,201

TABLE 5. YEAR 1 ANNUAL BURDEN AND COST TO THE FEDERAL GOVERNMENT FOR FERROALLOYS PRODUCTION: FERROMANGANESE AND SILICOMANGANESE

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year (C=AxB)	(D) Plants per year	(E) Technical person-hours per year	(F) Management person-hours per year	(G) Clerical person-hours per year (Ex0.1)	(H) Cost,$ (a)
Report Review								
Initial Notification (b)	1.0	1.0	1.0	0.7	0.7	0.0	0.1	$35
Notification of Compliance Status (c)	10.0	1.0	10.0	0.7	6.7	0.3	0.7	$345
Annual Compliance Certification (d)	2.0	1.0	2.0	2.0	4.0	0.2	0.4	$207
Report of Exceedence (e)	2.0	1.0	2.0	2.0	4.0	0.2	0.4	$207
Review compliance monitoring plans prepared by plants	10.0	0.0	0.0	2.0	0.0	0.0	0.0	$0
TOTAL BURDEN AND COST (SALARY)					15.3	0.8	1.5	$795

(a) Costs are based on the following hourly rates: technical at $46.21, management at $62.27, and clerical at $25.01.
Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.
(b) The affected 2 plants will submit the initial notification, leading to an average annual burden of 0.7 plants/yr in Year 1.
(c) The affected 2 plants will submit the notification of compliance status, leading to an average annual burden of 0.7 plants/yr in Year 1.
(d) The affected 2 plants will submit an annual compliance certification each year.
(e) Assumes that 2 facilities per year would have to submit an exceedance report per year.
N/A = Not applicable.

TABLE 6. YEAR 2 ANNUAL BURDEN AND COST TO THE FEDERAL GOVERNMENT FOR FERROALLOYS PRODUCTION: FERROMANGANESE AND SILICOMANGANESE

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year (C=AxB)	(D) Plants per year	(E) Technical person-hours per year	(F) Management person-hours per year	(G) Clerical person-hours per year (Ex0.1)	(H) Cost,$ (a)
Report Review								
Initial Notification (b)	1.0	1.0	1.0	0.7	0.7	0.0	0.1	$35
Notification of Compliance Status (c)	10.0	1.0	10.0	0.7	6.7	0.3	0.7	$345
Annual Compliance Certification (d)	2.0	1.0	2.0	2.0	4.0	0.2	0.4	$207
Report of Exceedence (e)	2.0	1.0	2.0	2.0	4.0	0.2	0.4	$207
Review compliance monitoring plans prepared by plants	10.0	4.0	40.0	2.0	80.0	4.0	8.0	$4,146
TOTAL BURDEN AND COST (SALARY)					95.3	4.8	9.5	$4,940

(a) Costs are based on the following hourly rates: technical at $46.21, management at $62.27, and clerical at $25.01.
Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.
(b) The affected 2 plants will submit the initial notification, leading to an average annual burden of 0.7 plants/yr in Year 1.
(c) The affected 2 plants will submit the notification of compliance status, leading to an average annual burden of 0.7 plants/yr in Year 1.
(d) The affected 2 plants will submit an annual compliance certification each year.
(e) Assumes that 2 facilities per year would have to submit an exceedance report per year.
N/A = Not applicable.

TABLE 7. YEAR 3 ANNUAL BURDEN AND COST TO THE FEDERAL GOVERNMENT FOR FERROALLOYS PRODUCTION: FERROMANGANESE AND SILICOMANGANESE

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant per year (C=AxB)	(D) Plants per year	(E) Technical person-hours per year	(F) Management person-hours per year	(G) Clerical person-hours per year (Ex0.1)	(H) Cost,$ (a)
Report Review								
Initial Notification (b)	1.0	1.0	1.0	0.7	0.7	0.0	0.1	$35
Notification of Compliance Status (c)	10.0	1.0	10.0	0.7	6.7	0.3	0.7	$345
Annual Compliance Certification (d)	2.0	1.0	2.0	2.0	4.0	0.2	0.4	$207
Report of Exceedence (e)	2.0	1.0	2.0	2.0	4.0	0.2	0.4	$207
Review compliance monitoring plans prepared by plants	10.0	0.0	0.0	2.0	0.0	0.0	0.0	$0
TOTAL BURDEN AND COST (SALARY)					15.3	0.8	1.5	$795

(a) Costs are based on the following hourly rates: technical at $46.21, management at $62.27, and clerical at $25.01.
Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.
(b) The affected 2 plants will submit the initial notification, leading to an average annual burden of 0.7 plants/yr in Year 1.
(c) The affected 2 plants will submit the notification of compliance status, leading to an average annual burden of 0.7 plants/yr in Year 1.
(d) The affected 2 plants will submit an annual compliance certification each year.
(e) Assumes that 2 facilities per year would have to submit an exceedance report per year.
N/A = Not applicable.

TABLE 8. SUMMARY OF ANNUAL BURDEN AND COST TO THE FEDERAL GOVERNMENT FOR FERROALLYS PRODUCTION: FERROMANGANES AND SILICOMANGANESE

Year	Technical Hours	Clerical Hours	Management Hours	Total Labor Hours	Labor Cost
1	15	2	1	18	$795
2	95	10	5	110	$4,940
3	15	2	1	18	$795
Total	126	13	6	145	$6,530
Average	42	4	2	48	$2,177

Attachment 2. Information Requirements – Amendments to the Ferroalloys Production NESHAP

Requirement	Citation for Existing Sources	Citation for New Sources	General Provisions Citation
Emission standards	§§63.1623, 63.1652	§§63.1623, 63.1652	
Operational and work practice standards	§§63.1624, 63.1654	§§63.162463.1654	
Performance tests	§§63.1625, 63.1656	§§63.1625, 63.1656	§63.7
Monitoring	§§63.1626, 63.1657	§§63.1626, 63.1657	§63.8
Reports of Malfunctions that result in an exceedance of the standard for the purpose of affirmative defense	§§63.1627, 63.1662	§§63.1627, 63.1662	
Notification	§§63.1628, 63.1658	§§63.1628, 63.1658	§63.9
Recordkeeping and reporting	§§63.1629, 63.1659, 63.1660	§§63.1629, 63.1659, 63.1660	§63.10