ICR Summary Information

Hours Per Response	85
Number of Respondents	2
Total Estimated Burden Hours	1,610
Total Estimated Costs	$645,000
Annualized Capital O&M	$424,000
Form Number	Not Applicable

Table 1: Annual Respondent Burden and Cost – NESHAP for Ferroalloys Production: Ferr

Burden Item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year
1. Reporting Requirements		
A. Familiarize with Regulatory Requirements	4	1
B. Required activities		
a. Initial performance test (PM, HCl, Hg, PAH, Formaldehyde) - Furnace, capture systems - Fabric Filter [c]	15	3
b. Initial performance test (PM, HCl, Hg, PAH, Formaldehyde) - Furnace, capture systems - Scrubber [c]	15	2
c. Initial performance test (PM) - Local ventilation, Metal Oxygen Refining (MOR) process, crushing and screening [d]	20	4
d. Periodic performance tests for submerged arc furnace control devices		
i. Annual wet scrubber PM tests (furnace) [e]	15	2.5
ii. Annual Hg tests for wet scrubber, fabric filter, and vent stacks [e] (furnace)		
iii. Annual PAH tests for wet scrubber, fabric filter, and vent stacks (ferromanganese furnaces) [e,f]		
iv. PM tests for fabric filters every five years (furnace) [g]	15	0.5
v. HCl test every five years (furnace) [g]		
vi. Formaldehyde test every five years (furnace) [g]		
vii. Capture system test every five years (furnace) [g]		
viii. Local ventilation test every five years [g]	20	0.5
ix. MOR process test every five years [g]		
x. Crushing and screening equipment test every five years [g]		
e. Non-furnace baghouse observations and inspections [h]		
i. Daily visible emissions observations	0.5	350
ii. Weekly confirmation of dust removal	0.1	50
iii. Monthly check of bag cleaning mechanisms	0.1	12
iv. Quarterly baghouse integrity checks	0.1	4
v. Semiannual baghouse inspections	0.1	2
f. Furnace baghouse bag leak detection system (annual O&M) [i]	4	2
g. Pressure drop/liquid flow rate CPMS-scrubber (annual O&M) [j]	2	1
h. Weekly Method 9 (Opacity) [k]	2	156
i. Ductwork flowrate monitoring (annual O&M) [l]	2	1
j. Furnace capture system inspection (Quarterly) [m]	2	4
C. Create information	See 1B	
D. Gather information	See 1B	
E. Report preparation		

a. Initial Notifications	N/A	
b. Notification of construction/reconstruction	N/A	
c. Notification of compliance status	4	1
d. Notification of performance test	2	1
e. Notification of opacity observations	2	1
f. Notification of change in information already provided [n]	2	0.33
g. Report of performance tests, opacity observations	5	1
h. Process fugitive emissions ventilation plan		
i. Develop and submit plan [o]	80	1
ii. Report deviations from plan [p]	See 1.E.o	
iii. Update plan [q]	See 1.E.o	
i. Outdoor fugitive dust control plan		
i. Develop and submit plan [o]	10	1
ii. Report deviations from plan [p]	See 1.E.o	
j. Bag leak detection system		
i. Develop plan [o]	20	1
ii. Report alarms and actions taken in response [p]	See 1.E.o	
k. Monitoring SOP manual for baghouses controlling process vents, process fugitive, or outdoor fugitive dust		
i. Develop and submit manual [o]	10	1
ii. Report deviations from plan [p]	See 1.E.o	
l. Report deviations from established parameters for pressure drop and flow rate in scrubbers controlling PM	See 1.E.o	
m. Report shop building capture system monitoring and deviations [p]	See 1.E.o	
n. Reports of the results of quarterly inspections of the furnace capture system	4	4
o. Reports of deviations, alarms, actions taken, malfunctions, and exceedances [p,r]	10	1
p. Annual compliance certification [s]	10	1
Subtotal for Reporting Requirements		
2. Recordkeeping Requirements		
A. Familiarize with Regulatory Requirements	See 1A	
B. Implement activities	See 1B	
C. Develop record system	NA	
E. Records of information required by standards		
a. Bag leak detection system: output, alarms, corrective actions	1	1
b. Baghouses without leak detection systems: inspection and maintenance records	2	20
c. Wet scrubbers: pressure drop, water flow rate, deviations, corrective actions	2	1
d. Shop building capture system: monitoring, deviations, corrective actions	2	1
e. Inspections of the furnace capture system (quarterly)	2	4
f. Records of startup and/or shutdown.	1	1
g. Records of malfunctions and exceedances	2	1
h. Deviations from process fugitive emissions ventilation plan	1	1
i. Deviations from outdoor fugitive dust control plan	1	1

j. Deviations from monitoring SOP manual for baghouses	1	1
k. Records of performance tests	2	2.5
F. Personnel training	20	1
G. Time for audits	NA	
Subtotal for Recordkeeping Requirements		
TOTAL LABOR BURDEN AND COST (rounded) [t]		
TOTAL CAPITAL AND O&M COSTS (rounded) [t]		
GRAND TOTAL (rounded) [t]		

Assumptions:

[a] There are two ferroalloy production facilities currently subject to the standard. We assume no additional respondent

[b] This ICR uses the following labor rates: Managerial $172.41 ($82.10+ 110%); Technical $141.75 ($67.50 + 110%); Bureau of Labor Statistics, December 2023, "Table 2. Civilian workers by occupational and industry group." The rate varying industry wage rates and the additional overhead business costs of employing workers beyond their wages and

[c] There are a total of six operating furnaces at these two sources. Four furnaces are controlled with fabric filters and tv furnaces are required to have bag leak detection systems.

[d] There are a total of seven local ventilation, MOR process, and crushing/screening operations controlled by baghouse

[e] There are six operating furnaces at these two sources controlled by five control devices (four fabric filters and one s

[f] We assume that all six ferromanganese furnaces have demonstrated compliance with the PAH standard in four conse

[g] This testing is done every five years. We assume these tests will be done simultaneously with the annual test. This r

[h] Each source has non-furnace operations (crushing and screening, MOR process, building ventilation) that are contro

[i] At the two sources, there are a total of four arc furnaces each controlled by a single baghouse. These baghouses use l

[j] One source operates a scrubber controlling two arc furnaces.

[k] We assume each respondent will perform weekly opacity readings on three non-furnace facilities. (3 x 52 = 156)

[l] The ductwork flowrate monitoring is for determining compliance with the shop building opacity standard at 40 CFR

[m] The capture systems collecting emissions from the six arc furnaces are inspected for proper functioning annually.

[n] We assume sources will make changes to information previously reported once every three years.

[o] These plans and manuals were developed and submitted during the first year after the most recent amendments were

[p] We assume that both respondents will report deviations from these plans and parameters each year during the three-

[q] Respondents are required to update the process fugitive emissions ventilation plan every 5 years.

[r] We assume that 2 respondents per year will need to submit a Report of Exceedance.

[s] Each respondent is required to submit an Annual Compliance Certification each year.

[t] Totals have been rounded to 3 significant values. Figures may not add exactly due to rounding.

ɔmanganese and Silicomanganese (40 CFR Part 63, Subpart XXX) (Renewal)

(C)	(D)	(E)	(F)	(G)	(H)
Person-hours per respondent per year (C=AxB)	**Respondents per year [a]**	**Technical person-hours per year (E=CxD)**	**Management person-hours per year (F=Ex0.05)**	**Clerical person-hours per year (G=Ex0.1)**	**Cost ($) [b]**
4	2	8	0.4	0.8	$1,260.05
45	0	0	0	0	$0.00
30	0	0	0	0	$0.00
80	0	0	0	0	$0.00
37.5	2	75	3.75	7.5	$11,812.99
		0	0	0	$0.00
		0	0	0	$0.00
7.5	2	15	1	2	$2,362.60
		0	0	0.0	$0.00
		0.0	0	0.00	$0.00
		0	0	0	$0.00
10	2	20	1	2	$3,150.13
		0	0	0	$0.00
		0	0	0	$0.00
		0	0	0	$0.00
175	2	350	17.5	35	$55,127.28
5	2	10	0.5	1	$1,575.07
1.2	2	2	0.12	0	$378.02
0.4	2	1	0.04	0	$126.01
0.2	2	0	0.02	0	$63.00
8	2	16	0.8	2	$2,520.10
2	1	2	0.1	0	$315.01
312	2	624	31.2	62	$98,284.06
2	2	4	0.2	0	$630.03
8	2	16	0.8	2	$2,520.10
		0	0	0	$0.00
		0	0	0	$0.00
		0	0	0	$0.00

		0	0	0	$0.00
		0	0	0	$0.00
4	0	0	0	0	$0.00
2	2	4	0.2	0	$630.03
2	2	4	0.2	0	$630.03
0.66	2	1	0.066	0	$207.91
5	2	10	0.5	1	$1,575.07
		0	0	0	$0.00
80	0	0	0	0	$0.00
		0	0	0	$0.00
		0	0	0	$0.00
		0	0	0	$0.00
10	0	0	0	0	$0.00
		0	0	0	$0.00
		0	0	0	$0.00
20	0	0	0	0	$0.00
		0	0	0	$0.00
		0	0	0	$0.00
10	0	0	0	0	$0.00
		0	0	0	$0.00
		0	0	0	$0.00
		0	0	0	$0.00
16	2	32	1.6	3	$5,040.21
10	2	20	1	2	$3,150.13
10	2	20	1	2	$3,150.13
		1,420			**$194,508**
1	2	2	0.1	0.2	$315.01
40	2	80	4	8	$12,600.52
2	1	2	0.1	0.2	$315.01
2	2	4	0.2	0.4	$630.03
8	2	16	0.8	1.6	$2,520.10
1	2	2	0.1	0.2	$315.01
2	2	4	0.2	0.4	$630.03
1	2	2	0.1	0.2	$315.01
1	2	2	0.1	0.2	$315.01

1	2	2	0.1	0.2	$315.01
5	2	10	0.5	1	$1,575.07
20	2	40	2	4	$6,300.26
		191			**$26,146**
		1,610			**$221,000**
					$424,000
					$645,000

ts will become subject to this regulation in the three-year period of this ICR.

; and Clerical $71.36 ($33.98 + 110%). These rates are from the United States Department of Labor,
's are from column 1, "Total compensation." The rates are increased by 110 percent to account for
benefits, including business expenses associated with hiring, training, and equipping their employees.

wo furnaces are controlled with a single venturi scrubber. The fabric filter baghouses controlling the arc

es at these two sources.

crubber (5/2=2.5)). Each furnace is tested annually.

ecutive tests and have petitioned the operating authority to reduce testing frequency to an annual basis.

ow calculates the average cost per year over five years (five furnace control systems will be tested at
olled by baghouses. These observations, inspections, and maintenance get performed on the schedule

bag leak detection systems.

63.1623 and 63.1626(h).

e promulgated.

year period of this ICR.

Labor Rates	
Technical	$141.75
Management	$172.41
Clerical	$71.36

Responses	Hr/Response
19	85

Table 2: Average Annual EPA Burden and Cost – NESHAP for Ferroalloys Production: Ferrom

Activity	(A) EPA person-hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person-hours per plant-year (C=AxB)	(D) Plants per year [a]	(E) Technical person- hours per year (E=CxD)
Report reviews					
Notification of performance test	1	1	1	2	2
Notification of opacity observations	1	1	1	2	2
Notification of change in information already provided	1	0.33	0.3	2	1
Report of performance tests, opacity observations	5	1	5	2	10
Reports of the results of quarterly inspections of the furnace capture system	2	4	8	2	16
Reports of deviations, alarms, actions taken, malfunctions, and exceedances	14	1	14	2	28
Annual compliance certification	2	1	2	2	4
TOTAL (rounded) [i]					

Assumptions:

[a] There are two ferroalloy production facilities currently subject to the standard. We assume no additional respondents will period of this ICR.

[b] This cost is based on the average hourly labor rate as follows: Managerial $76.91 (GS-13, Step 5, $48.07 + 60%); Techni Clerical $30.88 (GS-6, Step 3, $19.30+ 60%). This ICR assumes that Managerial hours are 5 percent of Technical hours, ar These rates are from the Office of Personnel Management (OPM), 2024 General Schedule, which excludes locality, rates o to account for the benefit packages available to government employees.

[c] Totals have been rounded to 3 significant values. Figures may not add exactly due to rounding.

anganese and Silicomanganese (40 CFR

(F)	(G)	(H)
Management person-hours per year (F=Ex0.05)	**Clerical person-hours per year (G=Ex0.1)**	**Cost ($) [b]**
0.1	0.2	$128.01
0.1	0.2	$128.01
0.03	0.1	$42.24
0.5	1	$640.06
0.8	1.6	$1,024.09
1.4	2.8	$1,792.16
0.2	0.4	$256.02
72		**$4,010**

Labor Rates	
Managerial	$76.91
Technical	$57.07
Clerical	$30.88

become subject to this regulation in the three-year

cal $57.07 (GS-12, Step 1, $35.67 + 60%); and
ıd Clerical hours are 10 percent of Technical hours.
f pay. The rates have been increased by 60 percent

Capital/Startup vs. Operation and Maintenance (O&M) Costs					
(A)	(B)	(C)	(D)	(E)	(F)
Continuous Monitoring Device	Capital/Startup Cost for One Respondent	Number of New Respondents	Total Capital/Startup Cost, (B X C)	Annual O&M Costs for One Respondent	Number of Respondents with O&M
Initial Compliance test (PM, HCl, Hg, PAH, Formaldehyde) - Furnace PP FF	$200,000	0	$0		
Initial Compliance test (PM, HCl, Hg, PAH, Formaldehyde) - Furnace NP FF/Scrubber	$52,000	0	$0		
Initial Compliance test (PM) Building Ventilation/#12 casting/misc. sources NP/FF	$5,000	0	$0		
Pressure Drop/Liquid Flow Rate C	$50,000	0	$0	$18,000	1
Bag Leak Detection System [b]	$269,148	0	$0	$109,539	2
Ductwork Flow Rate Monitoring [c]	$41,400	0	$0	$2,070	2
Annual furnace control device tests: PM, Hg, PAH [d]				$5,000	5
Five-year furnace control device tests: HCl, formaldehyde, capture system [e]				$126,000	1.2
Five-year local ventilation test [f]				$5,000	0.6
Five-year crushing and screening equipment test [g]				$5,000	0.6
Five-year metal oxygen refining (MOR) process test [h]				$5,000	0.2
Totals (rounded) [i]			$0		

Assumptions:

[a] One respondent uses a single venturi scrubber to control emissions from two furnaces.

[b] Four furnaces are each controlled with fabric filters and are equipped with bag leak detection systems (BLDS).

[c] There are five furnace capture systems that require quarterly examinations of the ductwork to insure proper operation.

[d] The control devices on furnaces are tested annually. A wet scrubber is tested for PM, Hg, and PAH, while fabric filters Hg and PAH. We assume that respondents operating ferromanganese furnaces have applied for and received permission t PAH on a yearly basis.

[e] The control devices on furnaces are required to be tested for HCl, formaldehyde, and their capture system every five ye repeat of the initial performance testing that cost a total of $756,000 for 6 furnace tests, or an average of $126,000 per tes 2 of ICR 2448.02.) The cost shown is the five-year average. (6 furnaces/5 years = 1.2 per year)

[f] The shop building ventilation systems controlled by baghouses require testing every five years. There are a total of thre buildings that require testing. Testing costs are taken from Table 2 Year 2 of ICR 2448.02 for initial testing for 'Initial Co (PM) - Bldg. Vent./#12 casting/misc. sources NP FF'. The cost shown is the five-year average. (3 systems/5 years = 0.6/y

[g] The crushing/screening operations controlled by baghouses require testing every five years. There are a total of three crushing/screening operations that require testing. Testing costs are taken from Table 2 Year 2 of ICR 2448.02 for initial 'Initial Compliance test (PM) - Bldg. Vent./#12 casting/misc. sources NP FF'. The cost shown is the five-year average. (3 years = 0.6/year)

[h] Only one respondent has a metal oxygen refining (MOR) process. This will be tested every five years. Testing costs ar
Table 2 Year 2 of ICR 2448.02 for initial testing for 'Initial Compliance test (PM) - Bldg. Vent./#12 casting/misc. source
cost shown is the five-year average. (1 MOR process/5 years = 0.2/year)

[i] Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

(G)
Total O&M, (E x F)
$18,000
$219,078
$4,140
$25,000
$151,200
$3,000
$3,000
$1,000
$424,000

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Number of Responde			
	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports
	(A)	(B)	(C)
Year	Number of New Respondents [1]	Number of Existing Respondents	Number of Existing Respondents that keep records but do not submit reports
1	0	2	0
2	0	2	0
3	0	2	0
Average	0	2	0

[1] New respondents include sources with constructed, reconstructed and modified affected facilities.

nts	
(D)	(E)
Number of Existing Respondents That Are Also New Respondents	Number of Respondents (E=A+B+C-D)
0	2
0	2
0	2
0	2

Total Annual Responses				
(A)	(B)	(C)	(D)	(E)
Information Collection Activity	Number of Respondents	Number of Responses	Number of Existing Respondents That Keep Records But Do Not Submit Reports	Total Annual Responses E=(BxC)+D
Initial Notifications	0	0	0	0
Notification of construction/reconstruction	0	0	0	0
Notification of compliance status	0	1	0	0
Notification of performance test	2	1	0	2
Notification of opacity observations	2	1	0	2
Notification of change in information already provided	2	0.33	0	0.66
Report of performance tests, opacity observations	2	1	0	2
Reports of the results of quarterly inspections of the furnace capture system	2	4	0	8
Report of deviations, alarms, actions taken, malfunctions, and exceedances	2	1	0	2
Annual compliance certification	2	1	0	2
		Total (rounded)		**19**