

Table 1: Annual Respondent Burden and Cost – NSPS for Hospital/Medical/Infectious Waste Incineration

Burden item	(A) Person hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person hours per respondent per year (C=AxB)	(D) Respondents per year ^a
1. Applications	N/A			
2. Survey and Studies	N/A			
3. Reporting requirements				
A. Familiarization with the regulatory requirement	1	1	1	3
B. Required activities				
Perf spec tests (certif) for CMS	16	1	16	0
Repeat perf spec tests (certif) for CMS ^{c,d}	16	1	16	0
Development of operating information ^e	160	1	160	0
Annual update of operating information ^f	20	1	20	3
Review of operating information with each operator ^{g,h}	8	2	16	3
Initial control equipment inspection ⁱ	20	1	20	0
Annual control equipment inspection ⁱ	20	1	20	3
C. Create information	See 3B			
D. Gather existing information	See 3B			
E. Write reports				
Notification of intent to construct ^f	2	1	2	0
Notification of anticipated commencement of construction ^g	2	1	2	0
Notification of anticipated startup ^g	2	1	2	0
Notification of actual startup ^g	2	1	2	0
Notification of type(s) of waste to be combusted	2	1	2	0
Notification of HMIWI capacity	2	1	2	0
Notification of initial performance test ^h	2	1	2	0
Notification of initial CMS demonstration	2	1	2	0
Initial report for the site selection analysis ^j	460	1	460	0
Waste management plan ^k	160	1	160	0
Analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems ^l	40	1	40	0
Report of initial performance test ^m	8	1	8	0
Report of initial CMS demonstration ^m	See 3B			
Annual report				
CMS emissions/operation parameters ⁿ	32	1	32	3
Exceedances/ malfunctions/periods of which data not obtained ^{q,p}	48	1	48	0.6
Results of performance tests conducted during the year ^q	40	1	40	3
Report of no exceedances ^{q,p}	24	1	24	2.4
Report of annual control equipment inspection	See 3B			
Semiannual report of exceedances/ malfunctions/periods for which data not obtained ^{q,p,r}	48	1	48	0.6

Subtotal for Reporting Requirements				
4. Recordkeeping requirements				
A. Familiarize with regulatory requirement	See 3A			
B. Plan activities	N/A			
C. Implement activities	N/A			
D. Develop record system	N/A			
E. Time to enter information				
Documentation produced as a result of sitting requirements	See 3E			
Records of operators completing operator training requirements ^h	2	2	4	3
Records of operators that have been qualified as HMIWI operators ^h	2	2	4	3
Records of initial performance test	See 3E			
Records of startup, shutdown, or malfunction	1.5	52	78	3
Records of persons completing review of operating information ^h	2	2	4	3
Records of process and control device operating parameters	1.5	52	78	3
Records of CMS operation and maintenance ^g	0.03	365	9.13	3
Records of exceedances/malfunctions/periods for which data not obtained	1.5	52	78	3
Records of annual and any subsequent compliance tests	See 3E			
Records of annual control equipment inspections	See 3B			
Records of bag leak detection system alarms ⁱ	1.5	52	78	2
F. Time to train personnel ^j	40	1	40	3
G. Time for audits	N/A			
Subtotal for Recordkeeping Requirements				
Total Labor Burden and Costs (rounded) ^u				
Capital and O&M Cost (rounded) ^u				
GRAND TOTAL (rounded) ^u				

Assumptions:

^a We have assumed that the average number of sources that are subject to the standard will be 3, with no additional new sources

^b This ICR uses the following labor rates: Managerial \$172.41 (\$82.10+ 110%); Technical \$141.75 (\$67.50 + 110%); and Clerical \$109.50 (\$52.10 + 110%). The rates are increased by 110 percent to account for varying industry wage rates and the additional overhead business costs of business expenses associated with hiring, training, and equipping their employees.

^c We assume that performance specification to certify CMS is expected to take approximately 16 hours.

^d We assume no failures of the initial CMS demonstrations; includes CO CEMS.

^e We assume it will take 160 hours to develop the operating information.

^f We assume that it will take 20 hours to update the operating information each year.

^g We assume that it will take 8 hours to review the operating information with each operator.

^h We assume that it will take 2 operators per facility to enter information.

ⁱ We assume that annual control equipment inspection will occur for all sources.

^j We assume that it will take 460 hours to develop the site selection analysis.

^k We assume that it will take 160 hours to develop the waste management plan.

¹ We assume that it will take 40 hours to develop the bag leak detection system analysis and 1.5 hours to record bag leak detection. These activities are assumed to be evenly distributed among small, medium, and large sources and only new large and medium sources (i.e. two-thirds of the affected sources).

^m We assume that it will take 8 hours for each facility to review the report of the initial performance test for pollutants and fugitive emissions.

ⁿ Person-hours per occurrence are assumed to be 32 hours.

^o We have assumed that it will take 48 hours and 24 hours per report per affected facility to report monitoring exceedances and non-exceedances. Monitoring requirements focus primarily on three pollutants (PM, CO, and HCl), assume three pollutants.

^p Assume 20 percent of respondents report monitoring exceedances and 80 percent report no excess emissions.

^q Assume 40 hours to review report of annual compliance test.

^r Because the semiannual report coincides once each year with the annual report and both reports include information on exceedances and non-exceedances obtained, the frequency of the semiannual report is shown in the table as only once per year to avoid double-counting.

^s We assume that this activity will be recorded daily.

^t We assumed that it will take 40 hours once per year to train one person to perform the Method 9 and Method 22 tests. The labor cost is \$100/hr/d for 5 d/yr.

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

Operators (40 CFR Part 60, Subpart Ec)

(E) Technical person- hours per year (E=CxD)	(F) Management person hours per year (Ex0.05)	(G) Clerical person hours per year (Ex0.1)	(H) Total Cost Per year b
3	0.15	0.30	\$472.52
0	0.00	0.00	\$0.00
0	0	0	\$0
0	0	0	\$0.00
60	3	6	\$9,450.39
48	2.4	4.8	\$7,560.31
0	0	0	\$0.00
60	3	6	\$9,450.39
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
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
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
0	0	0	\$0.00
96	4.8	9.6	\$15,120.62
28.8	1.44	2.88	\$4,536.19
120	6	12	\$18,900.78
57.6	2.88	5.76	\$9,072.37
28.8	1.44	2.88	\$4,536.19

Labor Rates	
Management	\$172.41
Technical	\$141.75
Clerical	\$71.36

578			\$79,100
12	0.60	1.20	\$1,890.08
12	0.60	1.20	\$1,890.08
234	11.7	23.4	\$36,856.52
12	0.6	1.2	\$1,890.08
234	11.70	23.4	\$36,856.52
27.38	1.37	2.74	\$4,311.74
234	11.7	23.4	\$36,856.52
156	7.80	15.60	\$24,571.01
120	6	12	\$18,900.78
1,198			\$164,023
1,780			\$243,000
			\$177,000
			\$420,000

Hrs/resp 1,780
 106

projected over the next 3 years.

cal \$71.36 (\$33.98 + 110%). These rates are from the United try group.” The rates are from column 1, “Total compensation.” employing workers beyond their wages and benefits, including

ion system alarms. We assume the total number of sources will
ffected sources) will install baghouses.

ive ash.

o excess emissions, respectively. Because testing and

lances, malfunctions, and periods for which data were not

or requirements to train the personnel were estimated to be 8

Table 2: Average Annual EPA Burden and Cost – NSPS for Hospital/Medical/Infectious Waste Inci

Activity	(A) EPA Person hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person hours per respondent per year (C=AxB)	(D) Respondents per year ^a
1. Attend initial performance test ^c	32	1	32	0
2. Repeat initial performance test				
A. Retesting preparation ^d	12	1	12	0
B. Attend retesting ^e	32	1	32	0
3. Litigation ^f	N/A			
4. Excess emissions - enforcement activities ^g	32	1	32	0.03
5. Report review				
Review notification of intent to construct	2	1	2	0
Review notification of anticipated commencement of construction	2	1	2	0
Review notification of anticipated startup	2	1	2	0
Review notification of actual startup	2	1	2	0
Review notification of type(s) of waste to be combusted	2	1	2	0
Review notification of HMIWI capacity	2	1	2	0
Review notification of initial performance test	2	1	2	0
Review notification of initial CMS demonstration	2	1	2	0
Review notification addressing siting requirements	24	1	24	0
Review waste management plan	8	1	8	0
Review analysis for bag leak detection systems ^h	8	1	8	0
Review report of initial performance test ⁱ	54	1	54	0
Review report of initial CMS demonstration	N/A			
Review annual report				
CMS emissions/operating parameters ^j	6	1	6	3
Exceedances/malfunctions/periods for which data not obtained ^k	8	1	8	0.6
Results of performance test conducted during the year ^l				
PM, CO, HCl	18	1	18	3
Fugitive ash emissions	6	1	6	3
Report of no exceedances ^m	2	1	2	2.4
Report of annual control equipment inspection ⁿ	4	1	4	3
Review semiannual report of exceedances/malfunctions/periods for which data not obtained ^{k,o}	8	1	8	0.6
TOTAL (rounded) ^p				

Assumptions:

^a We have assumed that the average number of sources that will be subject to the standard is 3.

^b This cost is based on the average hourly labor rate as follows: Managerial \$76.91 (GS-13, Step 5, \$48.07 + 60%); Technical \$6, Step 3, \$19.30+ 60%). This ICR assumes that Managerial hours are 5 percent of Technical hours, and Clerical hours are 10 percent of Managerial hours. The rates are based on the Office of Personnel Management (OPM), 2024 General Schedule, which excludes locality, rates of pay. The rates have been increased by 6 percent to reflect inflation for government employees.

^c We assume EPA personnel attend 8 percent of the initial performance tests.

^d We assume that 20 percent will fail the initial performance test, and will have to repeat the performance test.

^e We assume 10 percent of initial performance re-tests are attended by EPA personnel.

^f This ICR does not account for litigation costs.

^g We assume 10 percent of the affected facilities are required to re-test as a result of excess emissions, and that EPA personnel attend 8 percent of the re-tests.

^h We assume only new large and medium sources (i.e. two-thirds of the affected sources) will install baghouses.

ⁱ We assume 6 person-hours per report per pollutant. For the three new HMIWI in the three-year period, nine pollutants are required to be reported.

^j We assume 1 person-hour per report per CMS. For HMIWI, assume each uses six CMS (flue gas temperature, secondary chamber temperature, baghouse pressure drop, baghouse dust emission rate, liquor flow, and scrubber energy input).

^k We assume 20 percent of the affected facilities with recurrent burden will report monitoring exceedances.

^l We assume 6 person-hours per report per pollutant. For annual tests, there are three pollutants (PM, CO, and HCl) for all HMIWI.

^m We assume 80 percent of the affected facilities with recurrent burden will report no excess emissions.

ⁿ We assume it will take 4 hours to review the annual control equipment inspection report.

^o Because the semiannual report coincides once each year with the annual report and both reports include information on exceedances, the frequency of semiannual report is shown in the table as only once per year to avoid double-counting.

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

nerators (40 CFR Part 60, Subpart Ec)

(E) Technical person- hours per year (E=CxD)	(F) Management person hours per year (Ex0.05)	(G) Clerical person hours per year (Ex0.1)	(H) Total Cost Per year ^b
0.00	0.00	0.00	\$0.00
0.00	0.00	0.00	\$0.00
0.00	0.00	0.00	\$0.00
0.96	0.048	0.096	\$61.44
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
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
0	0	0	\$0.00
0	0	0	\$0.00
18	0.9	1.8	\$1,152.06
4.8	0.24	0.48	\$307.22
54	2.7	5.4	\$3,456.19
18	0.9	1.8	\$1,152.06
4.8	0.24	0.48	\$307.22
12	0.6	1.2	\$768.04
4.8	0.24	0.48	\$307.22
135			\$7,510

Labor Rates:	
Management	76.91
Technical	57.07
Clerical	30.88

57.07 (GS-12, Step 1, \$35.67 + 60%); and Clerical \$30.88 (GS-
percent of Technical hours. These rates are from the Office of
y 60 percent to account for the benefit packages available to

attend 10 percent of these tests.

ired to be tested.

umber temperature, charge weight, scrubber liquor pH, scrubber

IWI.

dances, malfunctions, and periods for which data were not

ICR Summary Information

Hours per Response	106
Number of Respondents	3
Total Estimated Burden Hours	1,780
Total Estimated Costs	\$420,000
Annualized Capital O&M	\$177,000
Total Annual Responses	17
Form Number	Not Applicable

Capital/Startup vs. Operation and Maintenance (			
(A)	(B)	(C)	(D)
Continuous Monitoring Device	Capital/Startup Cost for One Respondent ¹	Number of New Respondents	Total Capital/Startup Cost, (B X C)
DIFF/WS ²	\$1,869	0	\$0
DIFF ²	\$1,465	0	\$0
WS ²	\$1,869	0	\$0
SNCR ³	\$2,122	0	\$0
CO CEMS ⁴	\$26,520	0	\$0
BLD ⁵	\$1,565	0	\$0
ACI ⁶	\$0	0	\$0
Testing ⁷	\$102,227	0	\$0
Filing Cabinets ⁸	\$152	0	\$0
Photocopying ⁸	\$0	0	\$0
Postage ⁸	\$0	0	\$0
Totals (rounded) ⁹			\$0

¹ Costs have been updated to 2024 dollars using the annual Chemical Engineering Plant Cost Index (CEPCI) value of 796.2/525.4).

² Per the October 6, 2009 final rule (74 FR 51378), assume capital/startup costs of \$1,233 and annual operation and maintenance costs of \$967 for a scrubber with fabric filter followed by wet scrubber, and capital/startup costs of \$967 and \$2,733 per dry scrubber.

³ Per the October 6, 2009 final rule, assume capital/startup costs of \$1,400 and annual operation and maintenance costs of \$1,400.

⁴ Per the October 6, 2009 final rule, assume capital/startup costs of \$17,500 and annual operation and maintenance costs of \$17,500 for activities, RATA, CGA, and annual QA and review.

⁵ Per the October 6, 2009 final rule, assume capital/startup costs of \$1,033 and annual operation and maintenance costs of \$1,033.

⁶ Per the October 6, 2009 final rule, assume annual operation and maintenance costs of \$3,367 per facility for liming.

⁷ Per the October 6, 2009 final rule, assumes combined initial testing costs of \$67,458 per facility.

⁸ Assumes an initial purchase cost of \$100 for filing cabinets, and annual facility costs of \$199 for photocopying.

⁹ Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

O&M) Costs		
(E)	(F)	(G)
Annual O&M Costs for One Respondent¹	Number of Respondents with O&M	Total O&M, (E X F)
\$7,172	3	\$21,517
\$4,142	3	\$12,425
\$1,717	3	\$5,151
\$455	3	\$1,364
\$38,037	3	\$114,111
\$1,920	3	\$5,760
\$5,102	3	\$15,307
\$0	3	\$0
\$0	3	\$0
\$302	3	\$905
\$141	3	\$423
		\$177,000

\$177,000

ies for 2024 and 2007. (Costs = Costs from 2009 final rule x

nd maintenance costs of \$4,733 per facility for each wet scrubber or dry
er with fabric filter.

costs of \$300 per facility using SCNR for control.

costs of \$25,100 per facility using CO CEMS, including daily

costs of \$1,267 per facility using a bag leak detection system.
e/carbon flow monitoring.

and \$93 for postage.

2024 CEPCI CE Index	796.2
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2007 CEPCI CE Index	525.4
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CEPCI CE Adjustment factor	1.52
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Total Annual Responses				
(A)	(B)	(C)	(D)	(E)
Information Collection Activity	Number of Respondents	Number of Responses	Number of Existing Respondents That Keep Records But Do Not Submit Reports	Total Annual Responses E=(BxC)+D
Notification of intent to construct	0	1	0	0
Notification of anticipated commencement of construction	0	1	0	0
Notification of anticipated startup	0	1	0	0
Notification of actual startup	0	1	0	0
Notification of type(s) of waste to be combusted	0	1	0	0
Notification of HMIWI capacity	0	1	0	0
Notification of initial performance test	0	1	0	0
Notification of initial CMS demonstration	0	1	0	0
Initial report for the site selection analysis	0	1	0	0
Waste management plan	0	1	0	0
Analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems ¹	0	1	0	0
Report of initial performance test	0	1	0	0
Report of initial CMS demonstration	0	1	0	0
Annual reports				
CMS emissions and operating parameters	3	1	0	3
Exceedances, malfunctions, and periods for which data not obtained ²	0.6	1	0	0.6
Results of performance tests conducted during the year	3	1	0	3
Report of no exceedances ²	2.4	1	0	2.4
Report of annual control equipment inspection	3	1	0	3
Semiannual report of exceedances, malfunctions, and periods for which data not obtained ²	2.4	2	0	4.8
			Total	16.8

¹ Assume the total number of sources will be evenly distributed among small, medium, and large sources and only new large and medium sources are required to submit a waste management plan.

² Assume 20 percent of respondents report monitoring exceedances and 80 percent report no excess emissions.

edium sources (i.e. two-thirds of the affected sources) will install baghouses.

Number of Respondents				
	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports	
	(A)	(B)	(C)	(D)
Year	Number of New Respondents ^a	Number of Existing Respondents	Number of Existing Respondents that keep records but do not submit reports	Number of Existing Respondents That Are Also New Respondents
1	0	3	0	0
2	0	3	0	0
3	0	3	0	0
Average	0	3	0	0

^a New respondents include sources with constructed and reconstructed affected facilities.

(E)
Number of Respondents (E=A+B+C-D)
3
3
3
3