

Cost Factor (in 2008\$)	Reference/Note
Advanced Combustion Controls (Linkageless Boiler Management System) -- cost is per boiler - TCI	
<p>\$</p> <p style="text-align: right; color: red;">19,127</p>	<p>LBMS costs are based on a 2008 quote provided to the U.S. Department of Energy. The installed cost for a LBMS on a 20 mmBtu/hr unit was are \$19,127. The DOE noted that costs are relatively fixed, regardless of the size of the unit.</p>
Activated Carbon Injection	
<p>Hospital/Medical/Infectious Waste Incinerators (HMIWI). [EPA-HQ-OAR-2006-0534]</p>	<p>Received spreadsheet of HMIWI model costs from Tom Holloway of RTI International.</p>
Fabric Filter	
<p>Hospital/Medical/Infectious Waste Incinerators (HMIWI). [EPA-HQ-OAR-2006-0534]</p>	<p>Received spreadsheet of HMIWI model costs from Tom Holloway of RTI International.</p>
Packed Scrubber	
<p>Hospital/Medical/Infectious Waste Incinerators (HMIWI). [EPA-HQ-OAR-2006-0534]</p>	<p>Received spreadsheet of HMIWI model costs from Tom Holloway of RTI International.</p>
Secondary Chamber/Afterburner Retrofit	
<p>Hospital/Medical/Infectious Waste Incinerators (HMIWI). [EPA-HQ-OAR-2006-0534]</p>	<p>Received spreadsheet of HMIWI model costs from Tom Holloway of RTI International.</p>
Selective Non-Catalytic Reduction	
<p>Hospital/Medical/Infectious Waste Incinerators (HMIWI). [EPA-HQ-OAR-2006-0534]</p>	<p>Received spreadsheet of HMIWI model costs from Tom Holloway of RTI International.</p>
Catalytic Oxidizer	

Used catalytic oxidizer costing for all sizes, though some fell outside the appropriate size-range for the equation.

Year of Costs



Assumed to represent \$2008, since that was the year the quote was obtained.



Originally \$2004



Originally \$2004



Originally \$2004



Originally \$2004



Originally \$2004



Originally \$2004

Monitoring Costs

Parameters/Costs	Equation	All model sizes							
		FF	WS	SNCR	Bag leak detector	CO CEMS	HCl CEMS	PM CEMS	
A. Parameters									
1. Recording lime/carbon flow, min/4-hr period									
2. Annual operating hours, hr/yr (H)									
3. Cost index									
a. 2008		575.4	575.4	575.4	575.4		575.4	575.4	
b. 2006		499.6	499.6	499.6	499.6		499.6	499.6	
c. 1997		386.5	386.5	386.5	386.5		386.5	386.5	
d. 1993		359.2	359.2	359.2	359.2		359.2	359.2	
e. 1992		358.2	358.2	358.2	358.2		358.2	358.2	
4. Operating labor wage rate, \$/hr (LR)		\$57.22	\$57.22	\$57.22	\$57.22		\$57.22	\$57.22	
5. Capital recovery factor, 20-yr equipment life, 7% interest (CRF)	$= [i \times (1 + i)^a] / [(1 + i)^a - 1]$, where i = interest rate, a = equipment life	0.09439	0.09439	0.09439	0.09439		0.09439	0.09439	
B. Total Capital Investment, \$ (TCI)									
1. Planning		\$700	\$700	\$700	\$800		\$4,000	\$3,300	\$900
2. Select type of equipment		\$400	\$400	\$400	\$4,500		\$10,000	\$16,100	\$12,200
3. Provide support facilities		\$1,500	\$1,500	\$1,500	\$500		\$20,600	\$20,600	\$500
4. Purchased equipment cost (PEC)		\$13,000	\$19,300	\$5,300	\$14,100		\$48,400	\$51,900	\$73,500
5. Install and check equipment		\$1,000	\$1,000	\$1,000	\$4,800		\$18,200	\$19,300	\$19,500
6. Perf. spec. tests (certif.)		\$700	\$700	\$700	\$0		\$15,700	\$12,800	\$35,500
7. Prepare QA/QC plan		\$700	\$700	\$700	\$800		\$17,500	\$17,500	\$15,400
8. Total capital cost	= Planning + selecting equipment + support facilities + PEC + installation + perf. spec. tests + QA/QC plan	\$18,000	\$24,300	\$10,300	\$25,500		\$134,000	\$142,000	\$158,000
C. Annual Costs, \$/yr									
1. Operating labor	$= (5 \text{ min to record lime/carbon flow/4-hr period}) \times (1 \text{ hr/60 min}) \times H \times LR$								
2. Maintenance materials	$= 0.02 \times TCI$	\$400	\$500	\$200					
3. Operation & maintenance	= Day-to-day activities + annual RATA + CGA + annual QA + O&M review and update				\$6,000		\$27,600	\$24,600	\$27,300
4. Recordkeeping and reporting	$= \$1,000 \times (525.4/386.5)$	\$1,500	\$1,500	\$1,500	\$200		\$1,200	\$1,600	\$6,300
5. Overhead	$= 0.6 \times (\text{labor} + \text{maintenance materials})$	\$200	\$300	\$100					
6. Property taxes, insurance, and administration	$= 0.04 \times TCI$	\$700	\$1,000	\$400					
7. Capital recovery	$= CRF \times TCI$	\$1,700	\$2,300	\$1,000	\$3,500		\$12,600	\$20,200	\$22,500
8. Total annual cost	= Operating labor + maintenance materials + recordkeeping and reporting + overhead + property taxes, insurance, and administration + capital recovery	\$4,500	\$5,600	\$3,200	\$9,700		\$41,400	\$46,400	\$56,100

Monitoring Costs

Parameters/Costs	Hg CEMS	Multi-metal CEMS	Dioxin or Hg sorbent trap biweekly monitoring	ACI
A. Parameters				
1. Recording lime/carbon flow, min/4-hr period				5
2. Annual operating hours, hr/yr (H)				6,000
3. Cost index				
a. 2008	575.4	575.4	575.4	575.4
b. 2006	499.6	499.6	499.6	499.6
c. 1997	386.5	386.5	386.5	386.5
d. 1993	359.2	359.2	359.2	359.2
e. 1992	358.2	358.2	358.2	358.2
4. Operating labor wage rate, \$/hr (LR)	\$57.22	\$57.22	\$57.22	\$57.22
5. Capital recovery factor, 20-yr equipment life, 7% interest (CRF)	0.09439	0.09439	0.09439	0.09439
B. Total Capital Investment, \$ (TCI)				
1. Planning	\$3,300			
2. Select type of equipment	\$16,100			
3. Provide support facilities	\$20,600			
4. Purchased equipment cost (PEC)	\$109,900			
5. Install and check equipment	\$21,500			
6. Perf. spec. tests (certif.)	\$42,300			
7. Prepare QA/QC plan	\$17,500			
8. Total capital cost	\$231,000	\$230,000	\$115,000	
C. Annual Costs, \$/yr				
1. Operating labor				\$7,200
2. Maintenance materials				
3. Operation & maintenance	\$78,100			
4. Recordkeeping and reporting	\$1,600			
5. Overhead				\$4,300
6. Property taxes, insurance, and administration				
7. Capital recovery	\$32,900			
8. Total annual cost	\$112,600	\$63,300	\$41,500	\$11,500

Recordkeeping and Reporting Costs

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
Burden item	Person-hours per occurrence	Number of occurrences per year	Technical person-hours per year (C = A x B)	Management person-hours per year (D = C x 0.05)	Clerical person-hours per year (E = C x 0.1)	Total person-hours per year (F = C + D + E)	Cost, \$
A. Applications	N/A						
B. Surveys and Studies	N/A						
C. Reporting Requirements							
1. Read instructions	1.0	1	1.0	0.05	0.1	1.2	\$65
2. Required activities							
a. Perf. spec. tests (certif.) for CMS	11	1	11	0.6	1.1	13	\$719
3. Write report							
a. Notification of initial performance test							
i. Pollutants, fugitive ash emissions	2.0	1	2.0	0.1	0.2	2.3	\$131
ii. Fugitive ash emissions	1.0	1	1.0	0.05	0.1	1.2	\$65
b. Notification of initial CMS demonstration	2.0	1	2.0	0.1	0.2	2.3	\$131
c. Report of initial performance test							
i. Pollutants, fugitive ash emissions	8.0	1	8.0	0.4	0.8	9.2	\$523
ii. Fugitive ash emissions	2.0	1	2.0	0.1	0.2	2.3	\$131
d. Report of initial CMS demonstration	Incl. in C2						
e. Annual report							
i. Results of performance tests conducted during the year	40	1	40	2.0	4.0	46	\$2,615
D. Recordkeeping Requirements							
1. Read instructions	Incl. in C1						
2. Plan activities	N/A						
3. Implement activities	N/A						
4. Develop record system	N/A						
5. Time to enter information							
a. Records of initial performance test	Incl. in C3						
b. Records of annual and any subsequent compliance tests	Incl. in C3						
E. Total Labor Burden and Cost			67	3.4	6.7	77	\$4,380

Notes:

- Person-hours per occurrence for CMS performance specification costs are based on the performance specification costs to certify CMS (\$700) divided by the composite hourly labor rate (\$66.41/hr).
- Control device inspection cost already accounted for under monitoring costs.
- Assume 8 hours for each facility to review the report of the initial performance test for pollutants and fugitive ash.
- Assume 2 hours for each facility to review the report of the initial performance test for fugitive ash.
- Assume 40 hours to review report of annual PM, CO, and HCl compliance reports.
- The average recurrent burden and cost in the first 3 years after promulgation for the sources with recurrent burden are equal to the person-hours added down each column for technical, management, and clerical and the sum of the cost column.

Sources:

- Bureau of Labor Statistics, Occupational Employment Statistics, May 2008 National Industry-Specific Occupational Employment and Wage Estimates.
- Hospital/Medical/Infectious Waste Incinerators (HMIWI) [EPA-HQ-OAR2006-0534] Testing and Monitoring Options and Costs Memo (IV-B-66).

**Table 1.A - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements of the Emissions Guidelines
for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart Mmmm - Year 1, Fluidized Bed**

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non-Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Hours Per Respondent Per Year (C=A x B)	(E) Number of Respondents Per Year	(F) Technical Hours Per Year (CXD)	(G) Management Hours Per Year (E x 0.05)	(H) Clerical Hours Per Year (E x 0.1)	Total Labor Costs Per Year	Total Non-Labor Costs Per Year	Total Responses Per Year	Footnotes
1. Applications	N/A											
2. Surveys and Studies	N/A											
3. Reporting Requirements												
A. Read and Understand Rule Requirements	40	\$100	1	40	41	1,640	82	164	\$107,220	\$4,100	0	a,b,i,j
B. Required Activities												
1) Initial stack test and report	40	\$61,740	1	40	60	2,400	120	240	\$156,907	\$3,704,400	0	a
2) Annual stack test and test report	40	\$21,348	1	40	0	0	0	0	\$0	\$0	0	c,k
3) Operator training and qualification												
a) Establish and teach operator qualification course	64	\$0	1	64	41	2,624	131	262	\$171,552	\$0	0	a,b,j
b) Obtain operator qualification	72	\$0	1	72	41	2,952	148	295	\$192,996	\$0	0	a,b,j
c) Annual refresher course	12	\$0	1	12	0	0	0	0	\$0	\$0	0	c
d) Initial review of site-specific information	Incl. in a.											
e) Annual review of site-specific information	8	\$0	1	8	0	0	0	0	\$0	\$0	0	c
4) Establish operating parameters (maximum and minimum)	40	\$0	1	40	60	2,400	120	240	\$156,907	\$0	0	a
5) Continuous parameter monitoring (including CEMS)												
a) Initial capital costs	0	\$2,773	1	0	60	0	0	0	\$0	\$166,400	0	a,d
b) Annualized capital and O&M costs	11	\$667	1	11	60	660	33	66	\$43,150	\$40,000	0	c,e
C. Create Information	Incl. in 3.B											
D. Gather Information	Incl. in 3.E											
E. Report Preparation												
1) Notification of initial performance test	2	\$0	1	2	60	120	6	12	\$7,845	\$0	60	
2) Notification of initial CMS Demonstration	2	\$0	1	2	60	120	6	12	\$7,845	\$0	60	b,j
3) Final Control Plan	20	\$0	1	20	60	1,200	60	120	\$78,454	\$0	60	
4) Initial Compliance Report	40	\$0	1	40	60	2,400	120	240	\$156,907	\$0	60	
5) Report for site-specific parameter petition	14	\$0	1	14	0	0	0	0	\$0	\$0	0	a,f
6) Annual Compliance Report	40	\$0	1	40	0	0	0	0	\$0	\$0	0	
7) Status report for operators that are off-site for more than 2 weeks	8	\$0	1	8	5	40	2	4	\$2,615	\$0	5	g
8) Corrective action summary for operators that are off-site for more than 2 weeks	8	\$0	2	16	5	80	4	8	\$5,230	\$0	10	g
9) Semiannual Deviation Report	24	\$0	2	48	5	240	12	24	\$15,691	\$0	10	h
10) Affirmative Defense	30	\$0	1	30	0	0	0	0	\$0	\$0	0	L
Reporting Subtotal						16,876	844	1,688	\$1,103,320	\$3,748,500	265	
4. Recordkeeping Requirements												
A. Read Instructions	Incl. in 3.A											
B. Plan Activities	N/A											
C. Implement Activities	N/A											
D. Develop Record System	N/A											
E. Record Information												
1) Records of operating parameters	2	\$0	52	104	0	0	0	0	\$0	\$0	0	
2) Records of exceedances of the operating parameters	2	\$0	1	2	5	10	1	1	\$654	\$0	0	g
3) Records of stack tests	2	\$0	1	2	0	0	0	0	\$0	\$0	0	
4) Records of persons who have reviewed operating procedures	2	\$0	1	2	0	0	0	0	\$0	\$0	0	
5) Records of persons who have completed operator training	2	\$0	1	2	0	0	0	0	\$0	\$0	0	
6) Records of persons who meet operator qualification criteria	2	\$0	1	2	0	0	0	0	\$0	\$0	0	
7) Records of monitoring device calibration	2	\$0	1	2	0	0	0	0	\$0	\$0	0	
8) Records of site-specific documentation	24	\$0	1	24	0	0	0	0	\$0	\$0	0	
F. Personnel Training	Incl. in 3.B											
G. Time for Audits	N/A											
Recordkeeping Subtotal						10	0.5	1	\$654	\$0	0	
TOTAL:						16,886	844	1,689	\$1,103,974	\$3,748,500	265	
									Total Hours	Labor	Non-Labor	Total
									19,419	\$1,103,974	\$3,748,500	\$4,852,474
											\$170,500	
											\$3,748,500	

FOOTNOTES

- a One-time only costs.
- b Cost incurred by a facility regardless of the number of affected units at the plant.
- c Annual cost. Annual costs are not incurred until the second year of operation.
- d Based on the sum of the total capital costs for each monitoring system required for incinerators.
- e Based on the sum of the annualized capital costs for each monitoring system required for incinerators.
- f Assumed that none of the facilities will petition for site-specific parameters.
- g Assumed that 10 percent of the facilities would not have a qualified operator available for more than two weeks at least once a year. Assumed that this required only two corrective action summaries.
- h Assumed that 10 percent of the facilities would have an exceedance during the year.
- i Assumed \$100 for purchase of filing cabinet to house copy of rule, records and report copies.
- j 32 facilities have FB units; however one of these facilities also has a MH unit. Facility-specific costs are included for only 31 units here and the facility-specific costs for the facility have both unit types are incorporated into the MH tables.

Table 1.B - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements of the Emissions Guidelines

for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart Mmmm - Year 2, Fluidized Bed

for Ex for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart Mmmm - Year 2, Fluidized Bed	(A)	(B)	(C)	(D)	(E)	(F)	(G)					
Footnotes	Respondent Hours per Occurrence (Technical hours)	Non-Labor Costs Per Occurrence	Number of Occurrences Per Respondent Per Year	Hours Per Respondent Per Year (C=A x B)	Number of Respondents Per Year	Technical Hours Per Year (CXD)	Management Hours Per Year (E x 0.05)	Clerical Hours Per Year (E x 0.1)	Total Labor Costs Per Year	Total Non-Labor Costs Per Year	Total Responses Per Year	Footnotes
1. Applications	N/A											
2. Surveys and Studies	N/A											
3. Reporting Requirements												
A. Read and Understand Rule Requirements	40	\$0	1	40	0	0	0	0	\$0	\$0	0	a,b,i
B. Required Activities												
1) Initial stack test and report	40	\$61,740	1	40	0	0	0	0	\$0	\$0	0	a
2) Annual stack test and test report	40	\$21,348	1	40	60	2,400	120	240	\$156,907	\$1,280,880	0	c,k
3) Operator training and qualification												
a) Establish and teach operator qualification course	64	\$0	1	64	0	0	0	0	\$0	\$0	0	a,b
b) Obtain operator qualification	72	\$0	1	72	0	0	0	0	\$0	\$0	0	a,b
c) Annual refresher course	12	\$0	1	12	41	492	25	49	\$32,166	\$0	0	c,j
d) Initial review of site-specific information	Incl. in a.											
e) Annual review of site-specific information	8	\$0	1	8	41	328	16	33	\$21,444	\$0	0	c,j
4) Establish operating parameters (maximum and minimum)	40	\$0	1	40	0	0	0	0	\$0	\$0	0	a
5) Continuous parameter monitoring (including CEMS)												
a) Initial capital costs	0	\$0	1	0	0	0	0	0	\$0	\$0	0	a,d
b) Annualized capital and O&M costs	11	\$667	1	11	60	660	33	66	\$43,150	\$40,000	0	c,e
C. Create Information	Incl. in 3.B											
D. Gather Information	Incl. in 3.E											
E. Report Preparation												
1) Notification of initial performance test	2	\$0	1	2	0	0	0	0	\$0	\$0	0	
2) Notification of initial CMS Demonstration	2	\$0	1	2	0	0	0	0	\$0	\$0	0	b,j
3) Final Control Plan	20	\$0	1	20	0	0	0	0	\$0	\$0	0	
4) Initial Compliance Report	40	\$0	1	40	0	0	0	0	\$0	\$0	0	
5) Report for site-specific parameter petition	14	\$0	1	14	0	0	0	0	\$0	\$0	0	a,f
6) Annual Compliance Report	40	\$0	1	40	60	2,400	120	240	\$156,907	\$0	60	
7) Status report for operators that are off-site for more than 2 weeks	8	\$0	1	8	5	40	2	4	\$2,615	\$0	5	g
8) Corrective action summary for operators that are off-site for more than 2 weeks	8	\$0	2	16	5	80	4	8	\$5,230	\$0	10	g
9) Semiannual Deviation Report	24	\$0	2	48	5	240	12	24	\$15,691	\$0	10	h
10) Affirmative Defense	30	\$0	1	30	0	0	0	0	\$0	\$0	0	L
Reporting Subtotal						6,640	332	664	\$434,110	\$1,320,880	85	
4. Recordkeeping Requirements												
A. Read Instructions	Incl. in 3.A											
B. Plan Activities	N/A											
C. Implement Activities	N/A											
D. Develop Record System	N/A											
E. Record Information												
1) Records of operating parameters	2	\$0	52	104	0	0	0	0	\$0	\$0	0	
2) Records of exceedances of the operating parameters	2	\$0	1	2	5	10	1	1	\$654	\$0	0	g
3) Records of stack tests	2	\$0	1	2	41	82	4	8	\$5,361	\$0	0	
4) Records of persons who have reviewed operating procedures	2	\$0	1	2	41	82	4	8	\$5,361	\$0	0	j
5) Records of persons who have completed operator training	2	\$0	1	2	41	82	4	8	\$5,361	\$0	0	j
6) Records of persons who meet operator qualification criteria	2	\$0	1	2	41	82	4	8	\$5,361	\$0	0	j
7) Records of monitoring device calibration	2	\$0	1	2	41	82	4	8	\$5,361	\$0	0	
8) Records of site-specific documentation	24	\$0	1	24	41	984	49	98	\$64,332	\$0	0	j
F. Personnel Training	Incl. in 3.B											
G. Time for Audits	N/A											
Recordkeeping Subtotal						1404	70.2	140.4	\$91,791	\$0	0	
TOTAL:						8,044	402	804	\$525,901	\$1,320,880	85	
							Total Hours	Labor	Non-Labor	Total		
							9,251	\$525,901	\$1,320,880	\$1,846,781		
									\$0			
									\$1,320,880			

FOOTNOTES

- a One-time only costs.
- b Cost incurred by a facility regardless of the number of affected units at the plant.
- c Annual cost. Annual costs are not incurred until the second year of operation.
- d Based on the sum of the total capital costs for each monitoring system required for incinerators.
- e Based on the sum of the annualized capital costs for each monitoring system required for incinerators.
- f Assumed that none of the facilities will petition for site-specific parameters.
- g Assumed that 10 percent of the facilities would not have a qualified operator available for more than two weeks at least once a year. Assumed that this required only two corrective action summaries.
- h Assumed that 10 percent of the facilities would have an exceedance during the year.
- i Assumed \$100 for purchase of filing cabinet to house copy of rule, records and report copies.
- j 32 facilities have FB units; however one of these facilities also has a MH unit. Facility-specific costs are included for only 31 units here and the facility-specific costs for the facility have both unit types are incorporated into the MH tables.

Table 1.C - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements of the Emissions Guidelines

for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart Mmmm - Year 3, Fluidized Bed

for Exor Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart Mmmm - Year 3, Fluidized Bed	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non-Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Hours Per Respondent Per Year (C=A x B)	(E) Number of Respondents Per Year	(F) Technical Hours Per Year (CXD)	(G) Management Hours Per Year (E x 0.05)	(H) Clerical Hours Per Year (E x 0.1)	Total Labor Costs Per Year	Total Non-Labor Costs Per Year	Total Responses Per Year	Footnotes	
1. Applications	N/A												
2. Surveys and Studies	N/A												
3. Reporting Requirements													
A. Read and Understand Rule Requirements	40	\$0	1	40	0	0	0	0	\$0	\$0	0	a,b,i	
B. Required Activities													
1) Initial stack test and report	40	\$61,740	1	40	0	0	0	0	\$0	\$0	0	a	
2) Annual stack test and test report	40	\$21,348	1	40	60	2,400	120	240	\$156,907	\$1,280,880	0	c,k	
3) Operator training and qualification													
a) Establish and teach operator qualification course	64	\$0	1	64	0	0	0	0	\$0	\$0	0	a,b	
b) Obtain operator qualification	72	\$0	1	72	0	0	0	0	\$0	\$0	0	a,b	
c) Annual refresher course	12	\$0	1	12	41	492	25	49	\$32,166	\$0	0	c,j	
d) Initial review of site-specific information	Incl. in a.												
e) Annual review of site-specific information	8	\$0	1	8	41	328	16	33	\$21,444	\$0	0	c,j	
4) Establish operating parameters (maximum and minimum)	40	\$0	1	40	0	0	0	0	\$0	\$0	0	a	
5) Continuous parameter monitoring (including CEMS)													
a) Initial capital costs	0	\$0	1	0	0	0	0	0	\$0	\$0	0	a,d	
b) Annualized capital and O&M costs	11	\$667	1	11	60	660	33	66	\$43,150	\$40,000	0	c,e	
C. Create Information	Incl. in 3.B												
D. Gather Information	Incl. in 3.E												
E. Report Preparation													
1) Notification of initial performance test	2	\$0	1	2	0	0	0	0	\$0	\$0	0		
2) Notification of initial CMS Demonstration	2	\$0	1	2	0	0	0	0	\$0	\$0	0	b,j	
3) Final Control Plan	20	\$0	1	20	0	0	0	0	\$0	\$0	0		
4) Initial Compliance Report	40	\$0	1	40	0	0	0	0	\$0	\$0	0		
5) Report for site-specific parameter petition	14	\$0	1	14	0	0	0	0	\$0	\$0	0	a,f	
6) Annual Compliance Report	40	\$0	1	40	60	2,400	120	240	\$156,907	\$0	60		
7) Status report for operators that are off-site for more than 2 weeks	8	\$0	1	8	5	40	2	4	\$2,615	\$0	5	g	
8) Corrective action summary for operators that are off-site for more than 2 weeks	8	\$0	2	16	5	80	4	8	\$5,230	\$0	10	g	
9) Semiannual Deviation Report	24	\$0	2	48	5	240	12	24	\$15,691	\$0	10	h	
10) Affirmative Defense	30	\$0	1	30	0	0	0	0	\$0	\$0	0	L	
Reporting Subtotal						6,640	332	664	\$434,110	\$1,320,880	85	0	
4. Recordkeeping Requirements													
A. Read Instructions	Incl. in 3.A												
B. Plan Activities	N/A												
C. Implement Activities	N/A												
D. Develop Record System	N/A												
E. Record Information													
1) Records of operating parameters	2	\$0	52	104	0	0	0	0	\$0	\$0	0		
2) Records of exceedances of the operating parameters	2	\$0	1	2	5	10	1	1	\$654	\$0	0	g	
3) Records of stack tests	2	\$0	1	2	41	82	4	8	\$5,361	\$0	0		
4) Records of persons who have reviewed operating procedures	2	\$0	1	2	41	82	4	8	\$5,361	\$0	0	j	
5) Records of persons who have completed operator training	2	\$0	1	2	41	82	4	8	\$5,361	\$0	0	j	
6) Records of persons who meet operator qualification criteria	2	\$0	1	2	41	82	4	8	\$5,361	\$0	0	j	
7) Records of monitoring device calibration	2	\$0	1	2	41	82	4	8	\$5,361	\$0	0		
8) Records of site-specific documentation	24	\$0	1	24	41	984	49	98	\$64,332	\$0	0	j	
F. Personnel Training	Incl. in 3.B												
G. Time for Audits	N/A												
Recordkeeping Subtotal						1404	70.2	140.4	\$91,791	\$0	0		
TOTAL:						8,044	402	804	\$525,901	\$1,320,880	85		
Summary of Respondent Burden Initial Capital and Startup									9,251	\$525,901	\$1,320,880	\$1,846,781	
Annualized Capital/Start-up and O & M										\$0	\$1,320,880		

FOOTNOTES

- a One-time only costs.
- b Cost incurred by a facility regardless of the number of affected units at the plant.
- c Annual cost. Annual costs are not incurred until the second year of operation.
- d Based on the sum of the total capital costs for each monitoring system required for incinerators.
- e Based on the sum of the annualized capital costs for each monitoring system required for incinerators.
- f Assumed that none of the facilities will petition for site-specific parameters.
- g Assumed that 10 percent of the facilities would not have a qualified operator available for more than two weeks at least once a year. Assumed that this required only two corrective action summaries.
- h Assumed that 10 percent of the facilities would have an exceedance during the year.
- i Assumed \$100 for purchase of filing cabinet to house copy of rule, records and report copies.
- j 32 facilities have FB units; however one of these facilities also has a MH unit. Facility-specific costs are included for only 31 units here and the facility-specific costs for the facility have both unit types are incorporated into the MH tables.
- k Facilities may test every three years if certain requirements are met, thus annual testing is divided by three to give a per year cost. It is assumed most facilities would meet the requirements.

Table 1.D - Summary of Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements of the Emissions Guidelines for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart MMMM - Fluidized Bed

Year	Technical Hours	Management Hours	Clerical Hours	Total Hours	Labor Costs	Non-Labor (Annualized Capital/Startup and O&M) Costs	Total Costs
1	16,886	844	1,689	19,419	\$1,103,974	\$3,748,500	\$4,852,474
2	8,044	402	804	9,251	\$525,901	\$1,320,880	\$1,846,781
3	8,044	402	804	9,251	\$525,901	\$1,320,880	\$1,846,781
Total	32,974	1,649	3,297	37,920	\$2,155,776	\$6,390,260	\$8,546,036
Average	10,991	550	1,099	12,640	\$718,592	\$2,130,087	\$2,848,679

Table 2.A - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements of the Emissions Guidelines

for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart MMMM - Year 1, Multiple Hearth

for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart MM	(A)	(B)	(C)	(D)	(E)	(F)	(G)						
Footnotes	Respondent Hours per Occurrence (Technical hours)	Non-Labor Costs Per Occurrence	Number of Occurrences Per Respondent Per Year	Hours Per Respondent Per Year (C=A x B)	Number of Respondents Per Year	Technical Hours Per Year (CXD)	Management Hours Per Year (E x 0.05)	Clerical Hours Per Year (E x 0.1)	Total Labor Costs Per Year	Total Non-Labor Costs Per Year	Total Responses Per Year		Footnotes
Burden Item													
1. Applications	N/A												
2. Surveys and Studies	N/A												
3. Reporting Requirements													
A. Read and Understand Rule Requirements	40	\$100	1	40	69	2,760	138	276	\$180,443	\$6,900	0		a,b,i
B. Required Activities													
1) Initial stack test and report	40	\$61,740	1	40	144	5,760	288	576	\$376,578	\$8,890,560	0		a
2) Annual stack test and test report	40	\$23,302	1	40	0	0	0	0	\$0	\$0	0		c,j
3) Operator training and qualification													
a) Establish and teach operator qualification course	64	\$0	1	64	69	4,416	221	442	\$288,709	\$0	0		a,b
b) Obtain operator qualification	72	\$0	1	72	69	4,968	248	497	\$324,798	\$0	0		a,b
c) Annual refresher course	12	\$0	1	12	0	0	0	0	\$0	\$0	0		c
d) Initial review of site-specific information	Incl. in a.												
e) Annual review of site-specific information	8	\$0	1	8	0	0	0	0	\$0	\$0	0		c
4) Establish operating parameters (maximum and minimum)	40	\$0	1	40	144	5,760	288	576	\$376,578	\$0	0		a
5) Continuous parameter monitoring (including CEMS)													
a) Initial capital costs	0	\$1,688	1	0	144	0	0	0	\$0	\$243,000	0		a,d
b) Annualized capital and O&M costs	11	\$389	1	11	144	1,584	79	158	\$103,559	\$56,000	0		c,e
C. Create Information	Incl. in 3.B												
D. Gather Information	Incl. in 3.E												
E. Report Preparation													
1) Notification of initial performance test	2	\$0	1	2	144	288	14	29	\$18,829	\$0	144		
2) Notification of initial CMS Demonstration	2	\$0	1	2	144	288	14	29	\$18,829	\$0	144		b,j
3) Final Control Plan	20	\$0	1	20	144	2,880	144	288	\$188,289	\$0	144		
4) Initial Compliance Report	40	\$0	1	40	144	5,760	288	576	\$376,578	\$0	144		
5) Report for site-specific parameter petition	14	\$0	1	14	0	0	0	0	\$0	\$0	0		a,f
6) Annual Compliance Report	40	\$0	1	40	0	0	0	0	\$0	\$0	0		
7) Status report for operators that are off-site for more than 2 weeks	8	\$0	1	8	7	56	3	6	\$3,661	\$0	7		g
8) Corrective action summary for operators that are off-site for more than 2 weeks	8	\$0	2	16	7	112	6	11	\$7,322	\$0	14		g
9) Semiannual Deviation Report	24	\$0	2	48	7	336	17	34	\$21,967	\$0	14		h
10) Affirmative Defense	30	\$0	1	30	0	0	0	0	\$0	\$0	0		k
Reporting Subtotal						34,968	1,748	3,497	\$2,286,140	\$8,953,460	611		
4. Recordkeeping Requirements													
A. Read Instructions	Incl. in 3.A												
B. Plan Activities	N/A												
C. Implement Activities	N/A												
D. Develop Record System	N/A												
E. Record Information													
1) Records of operating parameters	2	\$0	52	104	0	0	0	0	\$0	\$0	0		
2) Records of exceedances of the operating parameters	2	\$0	1	2	7	14	1	1	\$915	\$0	0		g
3) Records of stack tests	2	\$0	1	2	0	0	0	0	\$0	\$0	0		
4) Records of persons who have reviewed operating procedures	2	\$0	1	2	0	0	0	0	\$0	\$0	0		
5) Records of persons who have completed operator training	2	\$0	1	2	0	0	0	0	\$0	\$0	0		
6) Records of persons who meet operator qualification criteria	2	\$0	1	2	0	0	0	0	\$0	\$0	0		
7) Records of monitoring device calibration	2	\$0	1	2	0	0	0	0	\$0	\$0	0		
8) Records of site-specific documentation	24	\$0	1	24	0	0	0	0	\$0	\$0	0		
F. Personnel Training	Incl. in 3.B												
G. Time for Audits	N/A												
Recordkeeping Subtotal						14	0.7	1.4	\$915	\$0	0		
TOTAL:						34,982	1,749	3,498	\$2,287,055	\$8,953,460	611		
									Total Hours	Labor	Non-Labor	Total	
									40,229	\$2,287,055	\$8,953,460	\$11,240,515	
											\$249,900		
											\$8,953,460		

FOOTNOTES

- a One-time only costs.
- b Cost incurred by a facility regardless of the number of affected units at the plant.
- c Annual cost. Annual costs are not incurred until the second year of operation.
- d Based on the sum of the total capital costs for each monitoring system required for incinerators.
- e Based on the sum of the annualized capital costs for each monitoring system required for incinerators.
- f Assumed that none of the facilities will petition for site-specific parameters.
- g Assumed that 10 percent of the facilities would not have a qualified operator available for more than two weeks at least once a year. Assumed that this required only two corrective action summaries.
- h Assumed that 10 percent of the facilities would have an exceedance during the year.
- i Assumed \$100 for purchase of filing cabinet to house copy of rule, records and report copies.
- j Facilities may test every three years if certain requirements are met, thus annual testing is divided by three to give a per year cost. It is assumed most facilities would meet the requirements.
- k Assumed no affirmative defense claims would be filed in the first three years after promulgation. If a source were to meet the notification, reporting, and recordkeeping requirements of affirmative defense, it would be approximately 30 hours or \$3,100 in labor burden.

Table 2.B - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements of the Emissions Guidelines

for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart Mmmm - Year 2, Multiple Hearth

Footnotes	for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart Mmmm - Year 2, Multiple Hearth	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non-Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Hours Per Respondent Per Year (C=A x B)	(E) Number of Respondents Per Year	(F) Technical Hours Per Year (CXD)	(G) Management Hours Per Year (E x 0.05)	(H) Clerical Hours Per Year (E x 0.1)	Total Labor Costs Per Year	Total Non-Labor Costs Per Year	Total Responses Per Year	Footnotes
	1. Applications	N/A											
	2. Surveys and Studies	N/A											
	3. Reporting Requirements												
	A. Read and Understand Rule Requirements	40	\$0	1	40	0	0	0	\$0	\$0	0	a,b,i	
	B. Required Activities												
	1) Initial stack test and report	40	\$61,740	1	40	0	0	0	\$0	\$0	0	a	
	2) Annual stack test and test report	40	\$23,302	1	40	144	5,760	288	\$376,578	\$3,355,488	0	c,j	
	3) Operator training and qualification												
	a) Establish and teach operator qualification course	64	\$0	1	64	0	0	0	\$0	\$0	0	a,b	
	b) Obtain operator qualification	72	\$0	1	72	0	0	0	\$0	\$0	0	a,b	
	c) Annual refresher course	12	\$0	1	12	69	828	41	\$54,133	\$0	0	c	
	d) Initial review of site-specific information	Incl. in a.											
	e) Annual review of site-specific information	8	\$0	1	8	69	552	28	\$36,089	\$0	0	c	
	4) Establish operating parameters (maximum and minimum)	40	\$0	1	40	0	0	0	\$0	\$0	0	a	
	5) Continuous parameter monitoring (including CEMS)												
	a) Initial capital costs	0	\$0	1	0	0	0	0	\$0	\$0	0	a,d	
	b) Annualized capital and O&M costs	11	\$389	1	11	144	1,584	79	\$103,559	\$56,000	0	c,e	
	C. Create Information	Incl. in 3.B											
	D. Gather Information	Incl. in 3.E											
	E. Report Preparation												
	1) Notification of initial performance test	2	\$0	1	2	0	0	0	\$0	\$0	0		
	2) Notification of initial CMS Demonstration	2	\$0	1	2	0	0	0	\$0	\$0	0	b,j	
	3) Final Control Plan	20	\$0	1	20	0	0	0	\$0	\$0	0		
	4) Initial Compliance Report	40	\$0	1	40	0	0	0	\$0	\$0	0		
	5) Report for site-specific parameter petition	14	\$0	1	14	0	0	0	\$0	\$0	0	a,f	
	6) Annual Compliance Report	40	\$0	1	40	144	5,760	288	\$376,578	\$0	144		
	7) Status report for operators that are off-site for more than 2 weeks	8	\$0	1	8	7	56	3	\$3,661	\$0	7	g	
	8) Corrective action summary for operators that are off-site for more than 2 weeks	8	\$0	2	16	7	112	6	\$7,322	\$0	14	g	
	9) Semiannual Deviation Report	24	\$0	2	48	7	336	17	\$21,967	\$0	14	h	
	10) Affirmative Defense	30	\$0	1	30	0	0	0	\$0	\$0	0	k	
	Reporting Subtotal						14,988	749	\$979,886	\$3,411,488	179		
	4. Recordkeeping Requirements												
	A. Read Instructions	Incl. in 3.A											
	B. Plan Activities	N/A											
	C. Implement Activities	N/A											
	D. Develop Record System	N/A											
	E. Record Information												
	1) Records of operating parameters	2	\$0	52	104	0	0	0	\$0	\$0	0		
	2) Records of exceedances of the operating parameters	2	\$0	1	2	7	14	1	\$915	\$0	0	g	
	3) Records of stack tests	2	\$0	1	2	69	138	7	\$9,022	\$0	0		
	4) Records of persons who have reviewed operating procedures	2	\$0	1	2	69	138	7	\$9,022	\$0	0		
	5) Records of persons who have completed operator training	2	\$0	1	2	69	138	7	\$9,022	\$0	0		
	6) Records of persons who meet operator qualification criteria	2	\$0	1	2	69	138	7	\$9,022	\$0	0		
	7) Records of monitoring device calibration	2	\$0	1	2	69	138	7	\$9,022	\$0	0		
	8) Records of site-specific documentation	24	\$0	1	24	69	1,656	83	\$108,266	\$0	0		
	F. Personnel Training	Incl. in 3.B											
	G. Time for Audits	N/A											
	Recordkeeping Subtotal						2360	118	\$154,292	\$0	0		
	TOTAL:						17,348	867	\$1,134,178	\$3,411,488	179		
								Total Hours	Labor	Non-Labor	Total		
								19,950	\$1,134,178	\$3,411,488	\$4,545,666		
										\$0			
										\$3,411,488			

FOOTNOTES

- a One-time only costs.
- b Cost incurred by a facility regardless of the number of affected units at the plant.
- c Annual cost. Annual costs are not incurred until the second year of operation.
- d Based on the sum of the total capital costs for each monitoring system required for incinerators.
- e Based on the sum of the annualized capital costs for each monitoring system required for incinerators.
- f Assumed that none of the facilities will petition for site-specific parameters.
- g Assumed that 10 percent of the facilities would not have a qualified operator available for more than two weeks at least once a year. Assumed that this required only two corrective action summaries.
- h Assumed that 10 percent of the facilities would have an exceedance during the year.
- i Assumed \$100 for purchase of filing cabinet to house copy of rule, records and report copies.
- j Facilities may test every three years if certain requirements are met, thus annual testing is divided by three to give a per year cost. It is assumed most facilities would meet the requirements.
- k Assumed no affirmative defense claims would be filed in the first three years after promulgation. If a source were to meet the notification, reporting, and recordkeeping requirements of affirmative defense, it would be approximately 30 hours or \$3,100 in labor burden.

Table 2.C - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements of the Emissions Guidelines

for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart MMMM - Year 3, Multiple Hearth

for Exfor Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart MM	(A)	(B)	(C)	(D)	(E)	(F)	(G)						
FootFootnotes Total Total ResprResponses	Respondent Hours per Occurrence (Technical hours)	Non-Labor Costs Per Occurrence	Number of Occurrences Per Respondent Per Year	Hours Per Respondent Per Year (C=A x B)	Number of Respondents Per Year	Technical Hours Per Year (CXD)	Management Hours Per Year (E x 0.05)	Clerical Hours Per Year (E x 0.1)	Total Labor Costs Per Year	Total Non-Labor Costs Per Year	Total Responses Per Year		Footnotes
Burden Item													
1. Applications	N/A												
2. Surveys and Studies	N/A												
3. Reporting Requirements													
A. Read and Understand Rule Requirements	40	\$0	1	40	0	0	0	0	\$0	\$0	0		a,b,i
B. Required Activities													
1) Initial stack test and report	40	\$61,740	1	40	0	0	0	0	\$0	\$0	0		a
2) Annual stack test and test report	40	\$23,302	1	40	144	5,760	288	576	\$376,578	\$3,355,488	0		c,j
3) Operator training and qualification													
a) Establish and teach operator qualification course	64	\$0	1	64	0	0	0	0	\$0	\$0	0		a,b
b) Obtain operator qualification	72	\$0	1	72	0	0	0	0	\$0	\$0	0		a,b
c) Annual refresher course	12	\$0	1	12	69	828	41	83	\$54,133	\$0	0		c
d) Initial review of site-specific information	Incl. in a.												
e) Annual review of site-specific information	8	\$0	1	8	69	552	28	55	\$36,089	\$0	0		c
4) Establish operating parameters (maximum and minimum)	40	\$0	1	40	0	0	0	0	\$0	\$0	0		a
5) Continuous parameter monitoring (including CEMS)													
a) Initial capital costs	0	\$0	1	0	0	0	0	0	\$0	\$0	0		a,d
b) Annualized capital and O&M costs	11	\$389	1	11	144	1,584	79	158	\$103,559	\$56,000	0		c,e
C. Create Information	Incl. in 3.B												
D. Gather Information	Incl. in 3.E												
E. Report Preparation													
1) Notification of initial performance test	2	\$0	1	2	0	0	0	0	\$0	\$0	0		
2) Notification of initial CMS Demonstration	2	\$0	1	2	0	0	0	0	\$0	\$0	0		b,j
3) Final Control Plan	20	\$0	1	20	0	0	0	0	\$0	\$0	0		
4) Initial Compliance Report	40	\$0	1	40	0	0	0	0	\$0	\$0	0		
5) Report for site-specific parameter petition	14	\$0	1	14	0	0	0	0	\$0	\$0	0		a,f
6) Annual Compliance Report	40	\$0	1	40	144	5,760	288	576	\$376,578	\$0	144		
7) Status report for operators that are off-site for more than 2 weeks	8	\$0	1	8	7	56	3	6	\$3,661	\$0	7		g
8) Corrective action summary for operators that are off-site for more than 2 weeks	8	\$0	2	16	7	112	6	11	\$7,322	\$0	14		g
9) Semiannual Deviation Report	24	\$0	2	48	7	336	17	34	\$21,967	\$0	14		h
10) Affirmative Defense	30	\$0	1	30	0	0	0	0	\$0	\$0	0		k
Reporting Subtotal						14,988	749	1,499	\$979,886	\$3,411,488	179		
4. Recordkeeping Requirements													
A. Read Instructions	Incl. in 3.A												
B. Plan Activities	N/A												
C. Implement Activities	N/A												
D. Develop Record System	N/A												
E. Record Information													
1) Records of operating parameters	2	\$0	52	104	0	0	0	0	\$0	\$0	0		
2) Records of exceedances of the operating parameters	2	\$0	1	2	7	14	1	1	\$915	\$0	0		g
3) Records of stack tests	2	\$0	1	2	69	138	7	14	\$9,022	\$0	0		
4) Records of persons who have reviewed operating procedures	2	\$0	1	2	69	138	7	14	\$9,022	\$0	0		
5) Records of persons who have completed operator training	2	\$0	1	2	69	138	7	14	\$9,022	\$0	0		
6) Records of persons who meet operator qualification criteria	2	\$0	1	2	69	138	7	14	\$9,022	\$0	0		
7) Records of monitoring device calibration	2	\$0	1	2	69	138	7	14	\$9,022	\$0	0		
8) Records of site-specific documentation	24	\$0	1	24	69	1,656	83	166	\$108,266	\$0	0		
F. Personnel Training	Incl. in 3.B												
G. Time for Audits	N/A												
Recordkeeping Subtotal						2360	118	236	\$154,292	\$0	0		
TOTAL:						17,348	867	1,735	\$1,134,178	\$3,411,488	179		
								Total Hours	Labor	Non-Labor	Total		
								19,950	\$1,134,178	\$3,411,488	\$4,545,666		
										\$0			
										\$3,411,488			

FOOTNOTES

- a One-time only costs.
- b Cost incurred by a facility regardless of the number of affected units at the plant.
- c Annual cost. Annual costs are not incurred until the second year of operation.
- d Based on the sum of the total capital costs for each monitoring system required for incinerators.
- e Based on the sum of the annualized capital costs for each monitoring system required for incinerators.
- f Assumed that none of the facilities will petition for site-specific parameters.
- g Assumed that 10 percent of the facilities would not have a qualified operator available for more than two weeks at least once a year. Assumed that this required only two corrective action summaries.
- h Assumed that 10 percent of the facilities would have an exceedance during the year.
- i Assumed \$100 for purchase of filing cabinet to house copy of rule, records and report copies.
- j Facilities may test every three years if certain requirements are met, thus annual testing is divided by three to give a per year cost. It is assumed most facilities would meet the requirements.
- k Assumed no affirmative defense claims would be filed in the first three years after promulgation. If a source were to meet the notification, reporting, and recordkeeping requirements of affirmative defense, it would be approximately 30 hours or \$3,100 in labor burden.

Table 2.D - Summary of Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements of the Emissions Guidelines for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart M - Multiple Hearth

Year	Technical Hours	Management Hours	Clerical Hours	Total Hours	Labor Costs	Non-Labor (Annualized Capital/Startup and O&M) Costs	Total Costs
1	34,982	1,749	3,498	40,229	\$2,287,055	\$8,953,460	\$11,240,515
2	17,348	867	1,735	19,950	\$1,134,178	\$3,411,488	\$4,545,666
3	17,348	867	1,735	19,950	\$1,134,178	\$3,411,488	\$4,545,666
Total	69,678	3,484	6,968	80,130	\$4,555,412	\$15,776,436	\$20,331,848
Average	23,226	1,161	2,323	26,710	\$1,518,471	\$5,258,812	\$6,777,283

Table 3 - Summary of Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements of the Emissions Guidelines for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart Mmmm - All Subcategories

Year	Technical Hours	Management Hours	Clerical Hours	Total Labor Hours	Labor Costs	Non-Labor (Annualized Capital/Startup and O&M) Costs	Total Costs
1	51,868	2,593	5,187	59,648	\$3,391,029	\$12,701,960	\$16,092,989
2	25,392	1,270	2,539	29,201	\$1,660,079	\$4,732,368	\$6,392,447
3	25,392	1,270	2,539	29,201	\$1,660,079	\$4,732,368	\$6,392,447
Total	102,652	5,133	10,265	118,050	\$6,711,187	\$22,166,696	\$28,877,883
Average	34,217	1,711	3,422	39,350	\$2,237,062	\$7,388,899	\$9,625,961

Table 4 - Annual Designated Administrator Burden and Cost of Recordkeeping and Reporting Requirements of the Emission Guidelines for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart MMMM - Year 1

Burden Item	(A)		(B)	(C)	(D)	(E)	(F)
	Number of Occurrences Per Year		EPA Hours Per Occurrence	Tech Hours Per Year (C=AxB)	Management Hours Per Year (D=Cx0.05)	Clerical Hours Per Year (E=Cx0.1)	EPA Cost Per Year
1. Applications	not applicable						
2. Read and Understand Rule Requirements	60	a	40	2400	120	240	\$124,374
3. Required Activities							
A. Observe stack tests	41	b	48	1958	98	196	\$101,489
B. Excess emissions -- Enforcement Activities	12		24	288	14	29	\$14,925
C. Create Information	not applicable						
D. Gather Information	not applicable						
E. Report Reviews							
1) Review initial notifications	204		20	4080	204	408	\$211,435
2) Review initial compliance report	204		40	8160	408	816	\$422,871
3) Review annual compliance report	0		8	0	0	0	\$0
4) Review semi-annual excess emission and parameter exceedance report	24		16	384	19	38	\$19,900
5) Review status reports and corrective action summary for operators off-site	24		4	96	5	10	\$4,975
F. Prepare annual summary report	1	c	200	200	10	20	\$10,364
5. Travel expenses: (1 person * 30 hours per year / 8 hours per day * \$75 per diem) + (\$600 per round trip) =					\$881	per trip	\$35,955
TOTAL				17566	878	1757	\$946,288

FOOTNOTES

- a Number of occurrences is the number of states where affected sources will exist and each EPA Region (50 states + 10 EPA regions = 60 respondents).
- b Assumes EPA personnel attend 20 percent of the stack tests.
- c Using four hours per state to write annual summary report.

Table 5 - Annual Designated Administrator Burden and Cost of Recordkeeping and Reporting Requirements of the Emission Guidelines for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart Mmmm - Year 2

Burden Item	(A)		(B)	(C)	(D)	(E)	(F)
	Number of Occurrences Per Year		EPA Hours Per Occurrence	Tech Hours Per Year (C=AxB)	Management Hours Per Year (D=Cx0.05)	Clerical Hours Per Year (E=Cx0.1)	EPA Cost Per Year
1. Applications	not applicable						
2. Read and Understand Rule Requirements	0		40	0	0	0	\$0
3. Required Activities							
A. Observe stack tests	41	b	48	1958	98	196	\$101,489
B. Excess emissions -- Enforcement Activities	12		24	288	14	29	\$14,925
C. Create Information	not applicable						
D. Gather Information	not applicable						
E. Report Reviews							
1) Review initial notifications	0		20	0	0	0	\$0
2) Review initial compliance report	0		40	0	0	0	\$0
3) Review annual compliance report	204		8	1632	82	163	\$84,574
4) Review semi-annual excess emission and parameter exceedance report	24		16	384	19	38	\$19,900
5) Review status reports and corrective action summary for operators off-site	24		4	96	5	10	\$4,975
F. Prepare annual summary report	1	c	200	200	10	20	\$10,364
5. Travel expenses: (1 person * 30 hours per year / 8 hours per day * \$75 per diem) + (\$600 per round trip) =					\$881	per trip	\$35,955
TOTAL				4558	228	456	\$272,182

FOOTNOTES

- a Number of occurrences is the number of states where affected sources will exist and each EPA Region (50 states + 10 EPA regions = 60 respondents).
- b Assumes EPA personnel attend 20 percent of the stack tests.
- c Using four hours per state to write annual summary report.

Table 6 - Annual Designated Administrator Burden and Cost of Recordkeeping and Reporting Requirements of the Emission Guidelines for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart MMMM - Year 3

Burden Item	(A)		(B)	(C)	(D)	(E)	(F)
	Number of Occurrences Per Year		EPA Hours Per Occurrence	Tech Hours Per Year (C=AxB)	Management Hours Per Year (D=Cx0.05)	Clerical Hours Per Year (E=Cx0.1)	EPA Cost Per Year
1. Applications	not applicable						
2. Read and Understand Rule Requirements	0	a	40	0	0	0	\$0
3. Required Activities							
A. Observe stack tests	41	b	48	1958	98	196	\$101,489
B. Excess emissions -- Enforcement Activities	12		24	288	14	29	\$14,925
C. Create Information	not applicable						
D. Gather Information	not applicable						
E. Report Reviews							
1) Review initial notifications	0		20	0	0	0	\$0
2) Review initial compliance report	0		40	0	0	0	\$0
3) Review annual compliance report	204		8	1632	82	163	\$84,574
4) Review semi-annual excess emission and parameter exceedance report	24		16	384	19	38	\$19,900
5) Review status reports and corrective action summary for operators off-site	24		4	96	5	10	\$4,975
F. Prepare annual summary report	1	c	200	200	10	20	\$10,364
5. Travel expenses: (1 person * 30 hours per year / 8 hours per day * \$75 per diem) + (\$600 per round trip) =					\$881	per trip	\$35,955
TOTAL				4558	228	456	\$272,182

FOOTNOTES

- a Number of occurrences is the number of states where affected sources will exist and each EPA Region (50 states + 10 EPA regions = 60 respondents).
- b Assumes EPA personnel attend 20 percent of the stack tests.
- c Using four hours per state to write annual summary report.

Table 7 - Summary of Designated Administrator Burden and Cost of Recordkeeping and Reporting Requirements of the Emission Guidelines for Existing Stationary Sources: Sewage Sludge Incineration Units - Subpart M

Year	Technical Hours	Management Hours	Clerical Hours	Total Hours	Labor Costs	Non-Labor Costs	Total Costs
1	17,566	878	1,757	20,201	\$946,288	\$0	\$946,288
2	4,558	228	456	5,242	\$272,182	\$0	\$272,182
3	4,558	228	456	5,242	\$272,182	\$0	\$272,182
Total	26,683	1,334	2,668	30,686	\$1,490,652	\$0	\$1,490,652
Average	8,894	445	889	10,229	\$496,884	\$0	\$496,884