

Table 1: Annual Respondent Burden and Cost – NSPS for Sewage Sludge Incineration U

Burden Item	A	B	C
	Technical person-hours per occurrence	No. of occurrences per respondent per year	Technical person-hours per respondent per year (AxB)
1. Applications	N/A		
2. Survey and Studies	N/A		
3. Reporting Requirements			
A. Familiarize with regulation requirements			
1) New sources ^c	40	1	40
2) Existing sources ^d	4	1	4
B. Required activities			
1) Initial stack test and report (new sources) ^c	40	1	40
2) Annual stack test and test report (existing sources) ^{d,e}	40	0.33	13.2
3) Operator training and qualification			
a) Establish and teach operator qualification course ^{c,f}	64	1	64
b) Obtain operator qualification ^{c,f}	72	1	72
c) Annual refresher course ^d	12	1	12
d) Initial review of site-specific information	See 3A		
e) Annual review of site-specific information (existing sources) ^d	8	1	8
4) Establish maximum and minimum operating parameters (new sources) ^c	40	1	40
5) Continuous parameter monitoring (including CEMS) ^d	11	1	11
C. Create Information	See 3B		
D. Gather Existing Information	See 3E		
E. Write report			
1) Notification of construction (includes siting analysis) ^c	160	1	160
2) Notification of start-up (includes monitoring plan) ^c	40	1	40
3) Notification of initial performance test ^c	2	1	2
4) Notification of initial CMS Demonstration ^c	2	1	2
5) Initial Compliance Report	40	1	40
6) Annual Compliance Report	40	1	40
7) Status report for operators that are off-site for more than 2 weeks ^g	8	1	8
8) Corrective action summary for operators that are off-site for more than 2 weeks ^g	8	2	16
9) Semiannual Deviation Report ^h	24	2	48

Subtotal for Reporting Requirements			
4. Recordkeeping Requirements			
A. Familiarize with regulation requirements	See 3A		
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	52	104
2) Records of exceedances of the operating parameters ^h	2	1	2
3) Records of stack tests	2	1	2
4) Records of siting analysis	2	1	2
5) Records of persons who have reviewed operating procedures	2	1	2
6) Records of persons who have completed operator training	2	1	2
7) Records of persons who meet operator qualification criteria	2	1	2
8) Records of monitoring device calibration	2	1	2
9) Records of site-specific documentation	24	1	24
F. Time to train personnel	See 3B		
G. Time for audits	N/A		
Subtotal for Recordkeeping Requirements			
TOTAL LABOR BURDEN AND COSTS (rounded)ⁱ			
TOTAL CAPITAL AND O&M COSTS (rounded)ⁱ			
GRAND TOTAL (rounded)ⁱ			

Assumptions:

^a We assume there are 7 existing facilities with 6 incineration units each. Burden estimates are based on a "per re total of 2 new sources and 1 modified source over the next three-year period, averaging to 1 new respondent per y

^b This ICR uses the following labor rates: \$66.62 for managerial, \$49.44 for technical, and \$26.75 for clerical lal 2019 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to acc

^c One-time only costs for new sources.

^d Annual Costs for existing sources. Annual costs are not incurred until the second year of operation.

^e Existing facilities may test every three years if certain requirements are met, and it is assumed that all facilities year (7 x 0.33 = 2.31) perform annual testing following the initial performance test.

^f Costs incurred by a facility regardless of the number of affected units at the plant.

^g We assume that 10 percent of the facilities would not have a qualified operator available for more than two wee two corrective action summaries.

^h We assume that 10 percent of the facilities would have an exceedance during the year.

ⁱ Totals are rounded to 3 significant figures. Figures may not add exactly due to rounding.

Units (40 CFR Part 60, Subpart LLLL) (Renewal)

D	E	F	G	H
Respondents per year ^a	Technical hours per year (Cx D)	Management hours per year (Ex0.05)	Clerical hours per year (Ex0.10)	Total cost per year ^b
1	40	2	4	\$2,217.84
7	28	1.4	3	\$1,552.49
1	40	2	4	\$2,217.84
2.3	30	1.5	3	\$1,690.66
1	64	3	6	\$3,548.54
1	72	4	7	\$3,992.11
7	84	4	8	\$4,657.46
7	56	3	6	\$3,104.98
1	40	2	4	\$2,217.84
7	77	4	8	\$4,269.34
1	160	8	16	\$8,871.36
1	40	2	4	\$2,217.84
1	2	0.1	0.2	\$110.89
1	2	0.1	0.2	\$110.89
1	40	2	4	\$2,217.84
7	280	14	28	\$15,524.88
0.7	5.6	0.3	0.6	\$310.50
0.7	11.2	0.6	1.1	\$621.00
0.7	34	1.7	3.4	\$1,862.99

2019 Labor Rates	
Technical	\$49.44
Management	\$66.62
Clerical	\$26.75

	1,272			\$61,317
0	0	0	0	\$0
0.7	1.4	0.07	0.14	\$77.62
7	14	0.7	1.4	\$776.24
7	14	0.7	1.4	\$776.24
7	14	0.7	1.4	\$776.24
7	14	0.7	1.4	\$776.24
7	14	0.7	1.4	\$776.24
7	14	0.7	1.4	\$776.24
7	168	8.4	17	\$9,314.93
	291			\$14,050
	1,560			\$75,400
				\$1,050,000
				\$1,130,000

101 hr/response

spondent" basis, not a "per unit" basis. We assume that there will be a year. Estimates are based on EPA's 2016 SSI Inventory.

cor. These rates are from the Office of Personnel Management (OPM), amount for the benefit packages available to government employees.

would meet the requirements. Thus, on average 2.31 existing sources per

orks at least once a year. We further assume that this would require only

Table 2: Average Annual EPA Burden and Cost – NSPS for Sewage Sludge Incineration Units (LLLL) (Renewal)

Burden Item	A	B	C	D	E
	Technical person-hours per occurrence	No. of occurrences per respondent per year	Technical person-hours per respondent per year (AxB)	Respondents per year ^a	Technical hours per year (CxD)
1. Applications	N/A				
2. Required Activities					
A. Observe stack tests ^c	48	1	48	0.5	23.832
B. Excess emissions - Enforcement activities	24	1	24	1	24
C. Create Information	N/A				
D. Gather Information	N/A				
E. Report Reviews					
1) Review initial notifications ^d	40	2	80	1	80
2) Review initial compliance report	40	1	40	1	40
3) Review annual compliance report	8	1	8	7	56
4) Review semi-annual excess emission and parameter exceedance report	16	2	32	0.7	22.4
5) Review status reports and corrective action summary for operators off-site	4	1	4	0.7	2.8
F. Prepare annual summary report ^e	4	1	4	7	28
TOTAL COST (rounded) ^f					

Assumptions:

^a We assume there are 7 existing facilities with 6 incineration units each. Burden estimates are based on a "per respondent that there will be a total of 2 new sources and 1 modified source over the next three-year period, averaging to 1 new respondent per EPA's 2016 SSI Inventory.

^b This ICR uses the following labor rates: \$66.62 for managerial, \$49.44 for technical, and \$26.75 for clerical labor. The Management (OPM), 2019 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent available to government employees.

^c Assumes EPA personnel attend 15 percent of the stack tests. New facilities do stack testing. Existing facilities may test if required, and it is assumed that all facilities would meet the requirements. (((1 new facility + (7 existing facilities x 0.33)))

^d Includes notification of construction, notification of start-up for new units, notification of initial performance test, and notification of initial compliance test.

^e We assume four hours per state to write annual summary report.

^f Totals rounded to 3 significant figures. Figures may not add exactly due to rounding.

(40 CFR Part 60, Subpart

F	G	H
Management hours per year (Ex0.05)	Clerical hours per year (Ex0.10)	Total cost per year^b
1.1916	2.3832	\$1,321.39
1.2	2.4	\$1,330.70
4	8	\$4,435.68
2	4	\$2,217.84
2.8	5.6	\$3,104.98
1.12	2.24	\$1,241.99
0.14	0.28	\$155.25
1.4	2.8	\$1,552.49
319		\$15,400

Labor Rates	
Technical	\$49.44
Management	\$66.62
Clerical	\$26.75

t" basis, not a "per unit" basis. We assume
ndent per year. Estimates are based on

se rates are from the Office of Personnel
percent to account for the benefit packages

every three years if certain requirements
(x 0.15) = 0.5 tests observed per year)

otification of initial CMS demonstration.

Capital/Startup vs. Operation and Maintenance (O&M) Costs					
(A)	(B)	(C)	(D)	(E)	(F)
Item	Capital/Startup Cost for One Respondent	Number of New Respondents ^a	Total Capital/Startup Cost, (B X C)	Annual O&M Costs for One Respondent	Number of Respondents with O&M
CEMS/CPMS ^b	\$239,607	1	\$239,607	\$85,688	7
Stack testing ^c	\$64,773	1	\$64,773	\$64,773	2.31
Filing cabinet ^d	\$100	1	\$100		
Total			\$304,000		

^a We assume that there are 7 existing SSI facilities with an average of 6 incinerator units. Burden estimates are based on We assume that there will be one new or modified source each year over the next three-year period, averaging in an estimate. The estimate for the number of facilities subject to NSPS Subpart LLLL is based on EPA's 2016 SSI Inventory for the F (https://beta.regulations.gov/document/EPA-HQ-OAR-2012-0319-0020) and adjusted to reflect the estimated growth rate

^b Based on estimated monitoring costs provided in Table 1 from the Supporting Statement for the Standards of Performance for Sludge Incineration (SSI) Units (Subpart LLLL) from the March 21, 2011 final rule (see https://beta.regulations.gov/document/EPA-HQ-OAR-2011-0319-0020). Monitoring costs have been updated from 2008 to 2019 values using the CEPCI CE Index.

^c Total estimated cost for initial stack test, including Method 5 (PM) (\$9,150), Method 9 (opacity) (\$2,464), Method 10 (Method 29 (metals) (\$10,558), Method 23 (CDD/CDF) (\$20,412), Method 7E (NOx) (\$5,631), Method 6C (SO2) (\$5,631) from “Burden Estimate Tables - Standards of Performance for New Stationary Sources Sewage Sludge Incineration (SSI) (https://beta.regulations.gov/document/EPA-HQ-OAR-2009-0559-0168). Testing costs have been updated to 2019 dollars. Facilities may test every three years if certain requirements are met, and it is assumed that all facilities would meet the requirements. The estimate for the number of facilities that will test every three years is 7 x 0.33 = 2.31. Facilities that do not test every three years will perform annual testing following the initial performance test.

^d Assumed \$100 for purchase of filing cabinet to store copy of rule, records, and report copies.

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

Number of Respondents					
Year	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports		
	(A) Number of New Respondents ^a	(B) Number of Existing Respondents ^b	(C) Number of Existing Respondents that keep records but do not submit reports	(D) Number of Existing Respondents That Are Also New Respondents	(E) Number of Respondents (E=A+B+C-D)
1	1	6	0	0	7
2	1	7	0	0	8
3	1	8	0	0	9
Average	1	7	0	0	8

^a We assume there will be 2 new sources and 1 modified source over the next three years, averaging to 1 new respondent per year.

^b Assumed there are 7 existing facilities with 6 units each on average. Based on EPA's 2016 SSI Inventory.

Total Annual Responses				
(A) Information Collection Activity	(B) Average Number of Respondents	(C) Number of Responses	(D) Number of Existing Respondents That Keep Records But Do Not Submit Reports	(E) Total Annual Responses E=(BxC)+D
Notification of Construction	1	1	0	1
Notification of Start-up	1	1	0	1
Notification of Initial Performance Test	1	1	0	1
Notification of Initial CMS Demonstration	1	1	0	1
Initial Compliance Report	1	1	0	1
Annual Compliance Report ^a	7	1	0	7
Status report for operators that are off-site for more than 2 weeks ^b	0.7	1	0	0.7
Corrective action summary for operators that are off-site for more than 2 weeks ^b	0.7	2	0	1.4
Semiannual Deviation Report ^c	0.7	2	0	1.4
			Total (rounded)	16

^a Facilities may test every three years if certain requirements are met, and it is assumed most facilities would meet the requirements. However, annual compliance reports must be submitted regardless of whether a performance test is conducted during the reporting period.

^b We assume that 10 percent of the facilities would not have a qualified operator available for more than two weeks at least once a year. We further assume this would require only two corrective action summaries.

^c We assume that 10 percent of the existing facilities ($7 * 0.1 = 0.7$) have excess emissions and submit semiannual deviation reports.

(G)	
Total O&M, (E X F)	
\$599,814	
\$149,625	
	total
\$749,000	\$1,050,000

a "per respondent" basis, not a "per unit" basis.
 nated growth rate of 1 new respondent per year.
 ederal Plan (see Appendix A at
 !.

ince for New Stationary Sources: Sewage
 ument/EPA-HQ-OAR-2009-0559-0168).

(CO) (\$4,927), Method 26 (HCl) (\$5,631),
 }1), and visible emissions testing (\$370) are
) Units (Subpart LLLL)" spreadsheet at
 using the CEPCI CE Index. Existing facilities
 ts. Thus, on average 2.31 existing sources per

Stack Testing Costs

Source: "Burden Estimate Tables - Standards of Performance for I

Parameters/Costs	Equation	Values
A. Parameters		
1. Cost index		
a. 2019		607.5
b. 2008		575.4
c. 1992		358.2
B. Testing Costs, \$		
1. Method 5 (PM)	= \$8,000 x (575.4/358.2)	\$13,000
2. Method 9 (opacity)	= \$1,000 x (575.4/358.2) + \$1,500	\$3,500
3. Method 10 (CO)	= \$4,000 x (575.4/358.2) + \$1,000	\$7,000
4. Method 26 (HCl)	= \$5,000 x (575.4/358.2)	\$8,000
5. Method 29 (metals)	= \$8,000 x (575.4/358.2) + \$2,000	\$15,000
6. Method 23 (CDD/CDF)	= \$21,000 x (575.4/358.2) - \$5,000	\$29,000
7. Method 7E (NO _x)	= \$5,000 x (575.4/358.2)	\$8,000
8. Method 6C (SO ₂)	= \$5,000 x (575.4/358.2)	\$8,000

SubTotal \$91,500

plus visible emissions testing

Total

Note:

1. Initial testing costs to be annualized over 15 years at 7% interest.
2. Testing costs have been rounded to the nearest \$1,000 (except for opacity) to be consistent with level of rounding in original costs; costs also adjusted based on additional information from EPA.
3. Multiple test costs adjusted by 2/3 in nationwide cost estimates to account for travel, accommodations, methods/sampling trains, etc. common to the tests.

Sources:

1. Memorandum from R. Segall, EPA/EMB, to R. Copland, EPA/SDB. October 14, 1992. Medical Waste Incinerator Study: Emission Measurement and Continuous Monitoring. (II-B-89)
2. E-mail from Jason Dewees, EPA, to Peter Westlin, EPA. August 20, 2008. Monitoring Options for SNCR & Test Cost Questions.
3. E-mail from Jason Dewees, EPA, to Mary Johnson, EPA. August 20, 2008. Re: Monitoring Options for SNCR & Test Cost Questions.

New Stationary Sources Sewage Sludge Incineration (SSI) Units (Subpart LLLL)" spreadsheet at <https://bet>

Adjusted testing cost	
Adjusted per Footnote 3	Updated to 2019 CEPCI
\$8,667	\$9,150
\$2,333	\$2,464
\$4,667	\$4,927
\$5,333	\$5,631
\$10,000	\$10,558
\$19,333	\$20,412
\$5,333	\$5,631
\$5,333	\$5,631
\$61,000	\$64,403
\$350	\$370
\$61,350	\$64,773

Everything **\$61,000**
 Annual **\$21,000**

www.regulations.gov/document/EPA-HQ-OAR-2009-0559-0168 [see the hidden stack testing tab]