Table 1.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards

for	Hazardous A	ir Pollutants	(NESHAP) fo	r Industrial	, Commercial	, and Instituti	onal Boilers	- Year 1, E	xisting La	rge Solid Fue	el Units			
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
Applications Surveys and Studies	na na													
3. Reporting Requirements	lid													
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	131	5,240	524	262	\$569,994	\$0	0	a
B. Required Activities	-10			00	-		101	0,240	024	202	\$000,004	\$ 0		- ^m
1. Conduct Energy Audit														
a) Commerical	20	\$854	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b, c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b, c, d
2. Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,h
3. Initial Stack Test and Report (for Hg) 4. Initial Stack Test and Report (for HCl)	12 12	\$0 \$0	\$8,000 \$8,000	\$0 \$0	1	12	0	0	0	0	\$0 \$0	\$0 \$0	0	C
5. Initial Stack Test and Report (for CO)	12	\$0 \$0	\$7,000	\$0 \$0	1	12	0	0	0	0	\$0	\$0	0	C C
6. Annual Stack Test and Report (for CO)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,i
7. Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C,i
8. Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C,i
Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C,i
 Repeat Stack Test and Report if Switch Fuels 														
(for Hg and HCI)	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0	0	C,j
11. Initial Fuel Analysis for Mercury and HCL Content	5	\$0 \$0	\$400 \$400	\$0 \$0	1 12	5 60	0	0	0	0	\$0 \$0	\$0 \$0	0	c,g
12. Monthly Fuel Analysis for Mercury and HCL Content 13. Annual Tune-up	5	\$U \$0	\$400	\$0	12	12	0	0	0	0	\$0	\$0	0	c,g c,L
14. Continuous Parameter Monitoring	12	Ψ0	Ψ2,013	40	-	12	0		0	0	40	Ψ0	0	n
Establish Site-specific monitoring plan (all)	40	\$0		\$0	1	40	0	0	0	0	\$0	\$0	0	c
Opacity	-													
a) initial	10	\$0	\$0	\$43,100	1	10	0	0	0	0	\$0	\$0	0	С
b) annual	10	\$0	\$0	\$14,700	1	10	0	0	0	0	\$0	\$0	0	С
PM (only sources greater than 250 mmBtu/hr)														
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0	0	c,m
b) annual O2	10	\$0	\$0	\$56,100	1	10	0	U	0	0	\$0	\$0	0	c,m
a) initial	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0	0	с
b) annual	10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0	0	c
Scrubber System Monitoring and Operation		+-		+=,	_		-	-	-	-			-	
(for units with wet scrubbers)														
a) initial	10	\$0	\$0	\$24,300	1	10	0	0	0	0	\$0	\$0	0	С
b) annual	10	\$0	\$0	\$5,600	1	10	0	0	0	0	\$0	\$0	0	С
Bag Leak Detection System Operation														
(sources that have fabric filters) a) initial	10	\$0	\$0	\$25,500	1	10	0	0	0	0	\$0	\$0	0	с
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	c
DIFF Monitor	10			40,100	-	10					40	\$ 0		
a) initial	10	\$0	\$0	\$43,500	1	10	0	0	0	0	\$0	\$0	0	с
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	С
Carbon Injection Monitoring System														
(all sources that use ACI to control Hg)	10	+0				1.0					+0			
a) initial b) annual	10 10	\$0 \$0	\$0 \$0	\$115,000 \$9,700	1	10	0	0	0	0	\$0 \$0	\$0 \$0	0	C C
C. Create Information	na			\$9,700		10	0	0	0			\$0	0	
D. Gather Information	na													+
E. Report Preparation														
 Initial Notification that Source is Subject 	2	\$0	\$0	\$0	1	2	131	262	26	13	\$28,500	\$0	131	а
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	С
3) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	С
4) Semi-annual Compliance Report	20 30	\$0 \$0	\$0 \$0	\$0 \$0	2	40 30	0	0	0	0	\$0	\$0 \$0	0	a k
5) Affirmative Defense Reporting Subtotal	30	ΦU	\$U	\$U	1	30	0	5,502	550	275	\$0 \$598,494	\$0	131	ĸ
4. Recordkeeping Requirements						1		3,302	- 330	215	4000,404		101	+
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													е
D. Record Information														\square
Records of Operating Parameter Values Describe of Operating Parameter Values	20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	С
3) Records of Stack Tests 4) Records of Monitoring Device Calibrations	2	\$0 \$0	\$0 \$0	\$0 \$0	1	2	0	0	0	0	\$0 \$0	\$0 \$0	0	C C
4) Records of Monitoring Device Calibrations 5) Records of All Compliance Reports Submitted	2	\$U \$0	\$0	\$0 \$0	2	4	0	0	0	0	\$0	\$0	0	C C
6) Records of Monthly Fuel Use	0.5	\$0	\$0	\$0	12	6	0	0	0	0	\$0	\$0	0	c
E. Personnel Training	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	f
F. Time for Audits	na													
Recordkeeping Subtotal								0	0	0	\$0	\$0		
Totala			1	1	1	1		E E02	550	275	eE00 404	e0.	101	1 1

a Number of respondents based on number of existing large solid fuel boilers which includes biomass and coal units greater than 10 mmBtu/hr.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 88% of facilities are in the industrial sector while the remaining 12% of facilities are in the commercial sector. C Since existing units have three years after the publication date or bubin tinitial onticitation of compliance activities, or meet recording requirements, no burden is assumed in year 1.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals. energy professionals. e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required. If For on-going training activities to keep personnel updated in order to implement compliance activities. g Existing large solid units are expected to determine compliance through stack testing and not fuel analysis h Units not equipped with PM CPMS will perform stack testing for PM. I No annual test and reporting burden is shown in year 1 as this is the same year as the initial test and report.

5,502 550 275 \$598,494 \$0

131

Totals

The antique test and reporting buttern is shown in year 1 as units the same year as the number with report. (on) applies to large solid the boliers, because solid her boliers may frie a mix of non-homogeneous fuels. Assumed all solid fuel units would perform a repeat stack test. 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 \$3,300 in labor burden. L Tune-ups are required as work practice standards in like of doixin/furant testing. m PM CPMS is required for coal boliers, biomass boliers which are not 100% biomass, and residual oil boliers which are >= 250 mmBtu/frr

n Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Poliutants – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates for the standous Air Poliutants – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates for the final rule.

Table 1.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards

for Hazardous Air Pollutants	(NESHAP) for Industrial, Commercia	al, and Institutional Boilers	Year 2, Existing Large Solid Fuel Units

101	Hazaruous	Air Poliutant	S (NESHAP)	or maustri	al, Commerci	ai, and insul	utional Boilers	s - rear z,		arge Soliu P	-uer Onits			
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Managemen t Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na					()		-/				[(= = =)=]		—
2. Surveys and Studies	na													+
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	а
B. Required Activities		+-					-	-	-	-			-	
1. Conduct Energy Audit														+
a) Commerical	20	\$854	\$0	\$0	1	20	8	160	16	8	\$17,404	\$6,832	0	b, c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	58	1,160	116	58	\$126,182	\$1,060,936	0	b, c, d
2. Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	544	6,528	653	326	\$710,100	\$2,720,000	0	c,h
3. Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	544	6,528	653	326	\$710,100	\$4,352,000	0	C
4. Initial Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	544	6,528	653	326	\$710,100	\$4,352,000	0	c
5. Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	544	6,528	653	326	\$710,100	\$3,808,000	0	c
6. Annual Stack Test and Report (for CO)	12	\$0	\$5,000	\$0	1	12	0	0,528	033	0	\$710,100	\$3,808,000	0	c,h,i
7. Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C, i
8. Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	
	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C, i
9. Annual Stack Test and Report (for CO)	12	ΦU	\$7,000	ΦU	1	12	0	0	0	0	ΦU	ΦU	0	C, İ
10. Repeat Stack Test and Report if Switch Fuels (for Hg and HCI) 11. Initial Fuel Analysis for Mercury and HCL Content	24	\$0 \$0	\$16,000 \$400	\$0 \$0	1	24 5	544 0	13,056	1,306	653 0	\$1,420,199 \$0	\$8,704,000 \$0	0	c,j c,g
12. Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0	0	
														c,g
13. Annual Tune-up 14. Continuous Parameter Monitoring	12	\$0	\$2,875	\$0	1	12	544	6,528	653	326	\$710,100	\$1,564,000	0	C,L
Establish Site-specific monitoring plan (all) Opacity	40	\$0		\$0	1	40	66	2,640	264	132	\$287,173	\$0	0	n C
a) initial	10	\$0	\$0	\$43,100	1	10	226	2,260	226	113	\$245.837	\$9.740.600	0	с
b) annual	10	\$0	\$0	\$14,700	1	10	226	2,260	226	113	\$245,837	\$3,322,200	0	c
PM (only sources greater than 250 mmBtu/hr)	10	ΨŪ	ΨΟ	\$14,700	-	10	220	2,200	220	115	Ψ243,031	\$3,322,200	0	+ -
a) initial	10	\$0	\$0	\$158,000	1	10	145	1,450	145	73	\$157,727	\$22,910,000	0	c,m
b) annual	10	\$0	\$0	\$56,100		10	145	1,450	145	73	\$157,727	\$8,134,500	0	c,m
	10	20	\$0	\$56,100	1	10	145	1,450	145	73	\$157,727	\$8,134,500	0	C,m
O2	10	* 0	\$0	\$8,523		10	544	5,440	544	272	#F01 7F0	04 COC E10		
a) initial	10	\$0 \$0	\$0	\$8,523	1	10	544	5,440	544	272	\$591,750 \$591,750	\$4,636,512 \$781,184	0	с
b) annual	10	\$0	\$0	\$1,436	1	10	544	5,440	544	272	\$591,750	\$781,184	0	С
Scrubber System Monitoring and Operation (for units with wet scrubbers) a) initial	10	\$0	\$0	\$24.300	1	10	200	2.000	200	100	\$217.555	\$4.860.000	0	c
b) annual	10	\$0	\$0	\$24,300	1	10	200	2,000	200	100	\$217,555	\$1,120,000	0	C C
, , , , , , , , , , , , , , , , , , , ,	10	ΦU	\$U	\$5,000	1	10	200	2,000	200	100	\$217,555	\$1,120,000	0	- ^c
Bag Leak Detection System Operation (sources that have fabric filters) a) initial	10	\$0	\$0	\$25,500	1	10	22	220	22	11	\$23,931	\$561,000	0	с
b) annual	10	\$0	\$0	\$9,700	1	10	22	220	22	11	\$23,931	\$213,400	0	c
DIFF Monitor	10	ΦU	\$U	\$9,700	1	10	22	220	22	11	\$23,931	\$213,400	0	L C
a) initial	10	\$0	\$0	\$43,500	1	10	38	380	38	19	\$41,335	\$1,653,000	0	-
	10		\$0		1		38	380	38		\$41,335	\$368,600	0	C
b) annual Carbon Injection Monitoring System (all sources that use ACI to control Hg)	10	\$0	\$0	\$9,700	1	10	38	380	38	19	\$41,335	\$368,600	0	С
a) initial	10	\$0	\$0	\$115.000	1	10	18	180	18	9	\$19.580	\$2.070.000	0	c
b) annual	10	\$0	\$0	\$9,700	1	10	18	180	18	9	\$19,580 \$19,580	\$2,070,000 \$174,600	0	C C
C. Create Information	na	ΨU	ψυ	φ 3 ,700		10	10	100	10	9	\$15,00U	9114,000	- U	+ -
D. Gather Information	na													+
E. Report Preparation	110			I										+
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
2) Notification of Compliance Status	8	\$0	\$0	\$0 \$0	1	8	0	0	0	0	\$0	\$0	0	C
3) Initial Report on results of Energy Audit	5	\$U \$0	\$0 \$0	\$0 \$0	1	5	0	0	0	0	\$0 \$0	\$0 \$0	0	C C
	20	\$0 \$0	\$0	\$0	2	40	0	0	0	0	\$0 \$0	\$0 \$0	0	C C
5) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	0	\$0 \$0	\$0	0	k c
Reporting Subtotal	30	ΦU	- DA	- DO		30	U U	73,516	7,352	3,676	\$7,996,887	\$0 \$87,113,364	0	<u>к</u>
4. Recordkeeping Requirements								13,510	1,302	3,070	100,000	φ01,113,304		+
A. Read Instructions	Included in 3a													+
B. Implement Activities														+
C. Develop Record System	na na			-										e
	11a		l	l		l	l	L					l	+ e
D. Record Information							-	-	-	-	**	**		+
1) Records of Operating Parameter Values	20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	С
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	С
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	с
 Records of Monitoring Device Calibrations 	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	С
Records of All Compliance Reports Submitted	2	\$0	\$0	\$0	2	4	0	0	0	0	\$0	\$0	0	С
Records of Monthly Fuel Use	0.5	\$0	\$0	\$0	12	6	0	0	0	0	\$0	\$0	0	С
E. Personnel Training	40	\$0	\$0	\$0	1	40	66	2,640	264	132	\$287,173	\$0	\$0	f
F. Time for Audits	na													
Recordkeeping Subtotal								2,640	264	132	\$287,173	\$0	0	
Totals								76,156	7,616	3,808	\$8,284,059	\$87,113,364	0	
								,200	.,	2,500			, ,	

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 88% of facilities are in the industrial sector while the remaining 12% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements, will not begin until year 3 of this ICR. energy professionals.

f For on-going training activities to keep personnel updated in order to implement compliance activities

e Assumes facility must already maintain records on boiler insurance and/or maintenance calculue. No new record system would be required.
g Existing large solid units are expected to determine compliance through stack testing and not fuel analysis

h Units not equipped with PM CPMS wil perform stack testing for PM.

i Subsequent annual testing in year 2 are based on the number of sources that had an initial test in year 1 of this ICR. Subsequent semi-annual compliance reporting and recordkeeping requirements are based on the number of new sources in years 1 and 2 of this ICR.

I conception annual estantian in year 2 are costed in the named of insured annual estant year 2 of this contraction compared to the named of insured annual estant year 2 of this contraction of the named of insured annual estant year 2 of this contraction of the named of insured annual estant year 2 of this contraction of the named of insured annual estant year 2 of this contraction of the named of insured annual estant year 2 of this contraction of the named of insured annual estant year 2 of this contraction of the named of insured annual estant year 2 of this contraction of the named of insured annual estant year 2 of this contraction of the named of insured annual estant year 2 of this contraction of the named of insured annual estant year 2 of this contraction of the named of insured estant in the insure of the named of insure insure of the named of insure insure insure of the named of insure in

m PM CPMS is required for coal boilers, biomass boilers which are not 100% biomass, and residual oil boilers which are >= 250 mmBtu/hr

n Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated into the burden estimates for the final rule.

Table 1.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards

					al, Commercia		itional Boilers							
Burden Item	(A) Respondent Hours per Occurrence (Technical hours) na	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
2. Surveys and Studies	na													+
3. Reporting Requirements														1
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	a
B. Required Activities														
1. Conduct Energy Audit														
a) Commerical b) Industrial	20	\$854	\$0 \$0	\$0	1	20	8 57	160	16 114	8 57	\$17,404	\$6,832	0	b, c, c
2. Initial Stack Test and Report (for PM)	20 12	\$18,292 \$0	\$0	\$0 \$0	1	20	57	1,140 6,528	653	326	\$124,006 \$710,100	\$1,042,644 \$2,720,000	0	b, c, c c,h
3. Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	544	6,528	653	326	\$710,100	\$4,352,000	0	C
4. Initial Stack Test and Report (for HCl)	12	\$0	\$8,000	\$0	1	12	544	6,528	653	326	\$710,100	\$4,352,000	0	c
5. Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	544	6,528	653	326	\$710,100	\$3,808,000	0	c
6. Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	544	6,528	653	326	\$710,100	\$2,720,000	0	c,h,i
Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	544	6,528	653	326	\$710,100	\$4,352,000	0	C, İ
Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	544	6,528	653	326	\$710,100	\$4,352,000	0	C, İ
Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	544	6,528	653	326	\$710,100	\$3,808,000	0	C, İ
 Repeat Stack Test and Report if Switch Fuels (for Hg and HCI) 	24	\$0	\$16,000	\$0	1	24	544	13,056	1,306	653	\$1,420,199	\$8,704,000	0	C,j
 Initial Fuel Analysis for Mercury and HCL Content 	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0	0	c,g
12. Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0	0	c,g
13. Annual Tune-up	12	\$0	\$2,875	\$0	1	12	544	6,528	653	326	\$710,100	\$1,564,000	0	C,L
14. Continuous Parameter Monitoring Establish Site-specific monitoring plan (all)	40	\$0		\$0	1	40	65	2,600	260	130	\$282,822	\$0	0	n C
Opacity	40	*0	**			10	005	0.050	0.05	440	4011710	40.007.500		_
a) initial b) annual	10 10	\$0 \$0	\$0 \$0	\$43,100 \$14,700	1	10	225 225	2,250 2,250	225 225	113 113	\$244,749 \$244,749	\$9,697,500 \$3,307,500	0	c
PM (only sources greater than 250 mmBtu/hr)	10	ΦU		Φ14,700	1	10	225	2,250	225	113	\$244,749	\$3,307,500	0	С
a) initial	10	\$0	\$0	\$158,000	1	10	144	1,440	144	72	\$156,640	\$22,752,000	0	c,m
b) annual	10	\$0	\$0	\$56,100	1	10	144	1,440	144	72	\$156,640	\$8,078,400	0	c,m
02														
a) initial	10	\$0	\$0	\$8,523	1	10	544	5,440	544	272	\$591,750	\$4,636,512	0	С
b) annual	10	\$0	\$0	\$1,436	1	10	544	5,440	544	272	\$591,750	\$781,184	0	С
Scrubber System Monitoring and Operation														
(for units with wet scrubbers) a) initial	10	\$0	\$0	\$24,300	1	10	199	1,990	199	100	\$216,467	\$4,835,700	0	С
b) annual	10	\$0	\$0	\$5,600	1	10	199	1,990	199	100	\$216,467	\$1,114,400	0	C C
Bag Leak Detection System Operation				40,000	-		100	1,000	100	100	4220,101	\$1,111,100		
(sources that have fabric filters)	10	\$0	\$0	\$25,500	1	10	22	220	22	11	\$23,931	\$561,000	0	-
a) initial b) annual	10 10	\$0 \$0	\$0	\$25,500	1	10	22	220	22	11	\$23,931 \$23,931	\$213,400	0	C C
DIFF Monitor	10			\$9,700	1	10	22	220	22	11	\$23,931	\$213,400	0	
a) initial	10	\$0	\$0	\$43,500	1	10	37	370	37	19	\$40,248	\$1,609,500	0	С
b) annual	10	\$0	\$0	\$26,500	1	10	37	370	37	19	\$40,248	\$980,500	0	c
Carbon Injection Monitoring System (all sources that use ACI to control Hg)														
a) initial	10	\$0	\$0	\$115,000	1	10	17	170	17	9	\$18,492	\$1,955,000	0	с
b) annual	10	\$0	\$0	\$9,700	1	10	17	170	17	9	\$18,492	\$164,900	0	c
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8 E	131	1,048	105	52	\$113,999	\$0	131	C
3) Initial Report on results of Energy Audit 4) Semi-annual Compliance Report	5 20	\$0 \$0	\$0 \$0	\$0 \$0	2	5 40	131 131	655 5,240	66 524	33 262	\$71,249 \$569,994	\$0 \$0	131 262	c a
5) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	0	\$509,994	\$0	0	k
Reporting Subtotal		4 0			1		0	106,411	10,641	5,321	\$11,575,123	\$102,468,972	524	- ×
4. Recordkeeping Requirements										-,				1
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													e
D. Record Information							1.000	01 700	0.470	1.000	#0.000.000			+
1) Records of Operating Parameter Values 2) Records of Startup, Shutdown, Malfunction	20 15	\$0 \$0	\$0 \$0	\$0 \$0	1	20 15	1,088 1,088	21,760 16,320	2,176	1,088	\$2,366,998 \$1,775,249	\$0 \$0	0	c
2) Records of Startup, Shutdown, Malfunction			\$0			2			1,632	816				C
3) Records of Stack Tests 4) Records of Monitoring Device Calibrations	2	\$0 \$0	\$0	\$0 \$0	1	2	1,088 1.088	2,176 2,176	218 218	109 109	\$236,700 \$236,700	\$0 \$0	0	C C
5) Records of All Compliance Reports Submitted	2	\$0 \$0	\$0	\$0 \$0	2	4	1,088	4.352	435	218	\$473,400	\$0	0	C C
6) Records of Monthly Fuel Use	0.5	\$0	\$0	\$0	12	6	1,088	6,528	653	326	\$710,100	\$0	0	C C
E. Personnel Training	40	\$0	\$0	\$0	1	40	65	2,600	260	130	\$282,822	\$0	0	f
F. Time for Audits	na													
Recordkeeping Subtotal								55,912	5,591	2,796	\$6,081,968	\$0	0	
Totals								162,323	16,232	8.116	\$17.657.090	\$102,468,972	524	1

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 88% of facilities are in the industrial sector while the remaining 12% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements will not begin until year 3 of this ICR.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals

\$17,657,090 \$102,468,972

524

162,323 16,232

8,116

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

For on-going training activities to keep personnel updated in order to implement compliance activities.
g Existing large solid units are expected to determine compliance through stack testing and not fuel analysis

h Units not equipped with PM CPMS wil perform stack testing for PM.

Totals

i Subsequent annual testing in year 2 are based on the number of sources that had an initial test in year 1 of this ICR. Subsequent semi-annual compliance reporting and recordkeeping requirements are based on the number of new sources in years 1 and 2 of this ICR.

j Only applies to large solid fuel boilers, because solid fuel boilers may fire a mix of non-homogeneous fuels. Assumed all solid fuel units would perform a repeat stack test. 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.

L Tune-ups are required as work practice standards in lieu of dioxin/furan testing.

m PM CPMS is required for coal boilers, biomass boilers which are not 100% biomass, and residual oil boilers which are >= 250 mmBtu/hr

n Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Poliutants – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated into the burden estimates for the final rule.

Table 2.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards

for Hazardous Air Pollutants	(NESHAP) for Industrial, Commercia	I, and Institutional Boilers -	Year 1, Existing Large Liquid Fuel Units

toi	Hazardous A	ir Pollutants	(NESHAP) to	r Industrial	, Commercial	, and Institu	tional Boilers	- Year 1,	Existing L	arge Liquid F	-uel Units			
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na	Occurrence	Occurrence	Occurrence	Terrea		Terrea	()	X 0.1)	X .03)	costs i ci i cui		1 cui (E X O)	<u> </u>
2. Surveys and Studies	na		-											-
3. Reporting Requirements														+
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	71	2,840	284	142	\$308,928	\$0	71	a
B. Required Activities														
1. Conduct Energy Audit				-							1			-
a) Commerical	20	\$854	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b, c, (
b) Industrial	20	\$18,292	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b, c, (
Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,h
3. Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C
Initial Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	С
Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0	0	С
Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,h,i
Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C,i
Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C,i
Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C,İ
 Repeat Stack Test and Report if Switch Fuels (for Hg and HCI) 	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0	0	c,f
 Initial Fuel Analysis for Mercury and HCL Content 	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0	0	c,g
Monthly Fuel Analysis for Mercury and HCL Content		\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0	0	c,g
13. Annual Tune-up	12	\$0	\$2,875	\$0	1	12	0	0	0	0	\$0	\$0	0	C,L
Continuous Parameter Monitoring														n
Establish Site-specific monitoring plan (all) Opacity	40	\$0		\$0	1	40	0	0	0	0	\$0	\$0	0	с
a) initial	10	\$0	\$0	\$43,100	1	10	0	0	0	0	\$0	\$0	0	С
b) annual	10	\$0	\$0	\$14,700	1	10	0	0	0	0	\$0	\$0	0	С
PM (only sources greater than 250 mmBtu/hr)														
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0	0	c,m
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0	0	c,m
02														
a) initial	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0	0	С
b) annual	10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0	0	С
Scrubber System Monitoring and Operation (for units with wet scrubbers)														
a) initial	10	\$0	\$0	\$24,300	1	10	0	0	0	0	\$0	\$0	0	С
b) annual	10	\$0	\$0	\$5,600	1	10	0	0	0	0	\$0	\$0	0	С
Bag Leak Detection System Operation (sources that have fabric filters)														
a) initial	10	\$0	\$0	\$25,500	1	10	0	0	0	0	\$0	\$0	0	С
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	С
DIFF Monitor			-											
a) initial	10	\$0	\$0	\$43,500	1	10	0	0	0	0	\$0	\$0	0	С
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	С
Carbon Injection Monitoring System (all sources that use ACI to control Hg)	10	* 0				- 10								
a) initial	10	\$0	\$0	\$115,000	1	10	0	0	0	0	\$0	\$0	0	с
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	С
C. Create Information	na	l	+'	├ ────'	 	 '	<u> </u> '	<u> </u>	 	L	↓	 	L	+
D. Gather Information	na		+/	├ ────'	t	 '	<u> </u>	<u> </u>	<u> </u>	<u> </u>	↓	<u> </u>	<u>+</u>	+-
E. Report Preparation 1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	71	142	14	7	\$15,446	\$0	71	+_
2) Notification of Compliance Status	8	\$0	\$0 \$0	\$0	1	8	0	0	0	0	\$15,446	\$0	0	a c
3) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0 \$0	\$0	0	C C
4) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0 \$0	\$0	0	a
5) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	0	\$0	\$0	0	k
Reporting Subtotal	- 30	φυ			<u> </u>		5	2,982	298	149	\$324,375	\$0	71	+
4. Recordkeeping Requirements	1		+	H	<u> </u>	1	<u> </u>	2,302		1.13	402-7,010			+-
A. Read Instructions	Included in 3a	1	1	<u> </u>		1			<u> </u>		<u> </u>			+
B. Implement Activities	na		1 1			t			1		<u> </u>			+
C. Develop Record System	na	1	1 1	<u> </u>					1		<u> </u>		1	е
D. Record Information			1											1
1) Records of Operating Parameter Values	20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	С
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	c
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	c
4) Records of Monitoring Device Calibrations	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	c
5) Records of All Compliance Reports Submitted	2	\$0	\$0	\$0	2	4	0	0	0	0	\$0	\$0	0	c
6) Records of Monthly Fuel Use	0.5	\$0	\$0	\$0	12	6	0	0	0	0	\$0	\$0	0	c
E. Personnel Training	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	1
F. Time for Audits	na	1				1			<u> </u>					Ť
F. Time for Addits														
Recordkeeping Subtotal								0	0	0	\$0	\$0	0	

a Number of respondents based on number of existing large liquid fuel boilers which includes units greater than 10 mmBtu/hr.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boliers or process heaters, 88% of facilities are in the industrial sector while the remaining 12% of facilities are in the commercial sector. c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, no burden is assumed in year 1.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals. e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

f Only applies to large solid fuel boilers, because solid fuel boilers may fire a mix of non-homogeneous fuels. Assumed zero respondents for liquid and gas units. g Existing large liquid units are expected to determine compliance for Hg and HCI through fuel analysis not stack testing. h Units not equipped with PM CPMS wil perform stack testing for PM.

i No annual test and reporting burden is shown in year 1 as this is the same year as the initial test and report.

j For on-going training activities to keep personnel updated in order to implement compliance activities.

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. L Tune-ups are required as work practice standards in lieu of dioxin/furan testing. m PM CPMS is required for coal boilers, biomass boilers which are not 100% biomass, and residual oil boilers which are >= 250 mmBtu/hr

n Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated in on the burden estimates for the final rule.

Table 2.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards

for	Hazardous A	ir Pollutants	(NESHAP) fo	r Industrial	, Commercial,	, and Institu	tional Boilers	- Year 2, E	Existing La	arge Liquid F	uel Units		1	
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													
2. Surveys and Studies	na													-
3. Reporting Requirements A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	a
B. Required Activities	40	40	40		1	40	0			0	40		0	- u
1. Conduct Energy Audit														
a) Commerical	20	\$854	\$0	\$0	1	20	4	80	8	4	\$8,702	\$3,416	0	b, c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	31	620	62	31	\$67,442	\$567,052	0	b, c, d
2. Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	294	3,528	353	176	\$383,767	\$1,470,000	0	c,h
3. Initial Stack Test and Report (for Hg) 4. Initial Stack Test and Report (for HCl)	12 12	\$0 \$0	\$8,000 \$8,000	\$0 \$0	1	12 12	0	0	0	0	\$0 \$0	\$0 \$0	0	C C
5. Initial Stack Test and Report (for CO)	12	\$0	\$8,000	\$0	1	12	294	3,528	353	176	\$383,767	\$2,058,000	0	c c,i
6. Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$383,707	\$2,038,000	0	c,h,j
7. Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C,j
8. Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C,j
Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C,j
 Repeat Stack Test and Report if Switch Fuels (for Hg and HCI) 	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0	0	c,f
11. Initial Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	1	5	294	1,470	147	74	\$159,903	\$117,600	0	c,g
12. Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0	0	c,g
13. Annual Tune-up	12	\$0	\$2,875	\$0	1	12	294	3,528	353	176	\$383,767	\$845,250	0	c,m
14. Continuous Parameter Monitoring Establish Site-specific monitoring plan (all)	40	\$0		\$0	1	40	36	1.440	144	72	\$156.640	\$0	0	0 C
Opacity	40	40			1	40		1,440	744	12	\$130,040		0	- ^c
a) initial	10	\$0	\$0	\$43,100	1	10	27	270	27	14	\$29,370	\$1,163,700	0	С
b) annual	10	\$0	\$0	\$14,700	1	10	27	270	27	14	\$29,370	\$396,900	0	С
PM (only sources greater than 250 mmBtu/hr)														
a) initial	10	\$0	\$0	\$158,000	1	10	17	170	17	9	\$18,492	\$2,686,000	0	c,n
b) annual O2	10	\$0	\$0	\$56,100	1	10	17	170	17	9	\$18,492	\$953,700	0	c,n
a) initial	10	\$0	\$0	\$8,523	1	10	294	2,940	294	147	\$319,806	\$2,505,762	0	с
b) annual	10	\$0	\$0	\$1,436	1	10	294	2,940	294	147	\$319,806	\$422,184	0	c
Scrubber System Monitoring and Operation					_			-,					-	<u> </u>
(for units with wet scrubbers)														
a) initial	10	\$0	\$0	\$24,300	1	10	253	2,530	253	127	\$275,207	\$6,147,900	0	С
b) annual	10	\$0	\$0	\$5,600	1	10	253	2,530	253	127	\$275,207	\$1,416,800	0	с
Bag Leak Detection System Operation (sources that have fabric filters)														
a) initial	10	\$0	\$0	\$25,500	1	10	1	10	1	1	\$1,088	\$25,500	0	с
b) annual	10	\$0	\$0	\$9,700	1	10	1	10	1	1	\$1,088	\$9,700	0	c
DIFF Monitor														
a) initial	10	\$0	\$0	\$43,500	1	10	27	270	27	14	\$29,370	\$1,174,500	0	С
b) annual	10	\$0	\$0	\$9,700	1	10	27	270	27	14	\$29,370	\$261,900	0	С
Carbon Injection Monitoring System (all sources that use ACI to control Hg)														
a) initial	10	\$0	\$0	\$115,000	1	10	0	0	0	0	\$0	\$0	0	с
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	ő	\$0	\$0	0	c
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation			* 0					-	-		* 0			
1) Initial Notification that Source is Subject 2) Notification of Compliance Status	2 8	\$0 \$0	\$0 \$0	\$0 \$0	1	2 8	0	0	0	0	\$0 \$0	\$0 \$0	0	a c
3) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	C C
4) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0	\$0	0	C C
5) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	ő	\$0	\$0	0	L
Reporting Subtotal								26,574	2,657	1,329	\$2,890,653	\$22,225,864	0	
4. Recordkeeping Requirements														
A. Read Instructions B. Implement Activities	Included in 3a													+
C. Develop Record System	na na					-								е
D. Record Information	iia					-								-
1) Records of Operating Parameter Values	20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	C
Records of Stack Tests	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	С
 Records of Monitoring Device Calibrations 	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	С
5) Records of All Compliance Reports Submitted	2	\$0	\$0	\$0	2	4	0	0	0	0	\$0	\$0	0	c
6) Records of Monthly Fuel Use E. Personnel Training	0.5	\$0 \$0	\$0 \$0	\$0 \$0	12	6 40	0 36	0 1,440	0 144	0	\$0 \$156,640	\$0 \$0	0	c k
E. Personnel Training F. Time for Audits	40 na	\$0	30	\$0	1	40	30	1,440	144	72	\$150,040	\$0	U	ĸ
Recordkeeping Subtotal	110							1,440	144	72	\$156,640	\$0	0	+
Totals								28.014	2.801	1.401	\$3,047,293	\$22,225,864	0	\square
			1		1	1	1	20,014	2,001	-,-101	40,0-71,200			4

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 87.4% of facilities are in the industrial sector while the remaining 12.6% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements will not begin until year 3 of this ICR. audit, testing and monitoring plan development in year 2 and nair will conduct mem in year 3 in order to be in compliance by the timo year after promulgation. Intu energy professionals. e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required. f Only applies to large solid fuel boilers, because solid fuel boilers may fire a mix of non-homogeneous fuels. Assumed zero respondents for liquid and gas units. g Existing large fluid units are expected to determine compliance for Hg and HCI through fuel analysis not stack testing. h Units not equipped with PM CPMS wil perform stack testing for PM.

1 Subsequent annual testing in year 2 are based on the number of sources that had an initial test in year 1 of this ICR. Subsequent semi-annual compliance reporting and recordkeeping requirements are based on the number of new sources in years 1 and 2 of this ICR.

KPC on-going training activities to keep personnel updated in order to implement compliance activities. L 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. m Tune-ups are required as work practice standards in lieu of dioxin/furan testing. m PM CPMS is required for coal boilers, biomass boilers which are not 100% biomass, and residual oil boilers which are >= 250 mmBtu/hr

o Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Politarats – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated into the burden estimates for the linal rule.

Table 2.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards

f	or Hazardous A	ir Pollutants	(NESHAP) fo	or Industrial	, Commercial	, and Institu	tional Boilers	- Year 3,	Existing La	arge Liquid F	uel Units	-	-	
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	а
B. Required Activities 1. Conduct Energy Audit														
a) Commerical	20	\$854	\$0	\$0	1	20	4	80	8	4	\$8,702	\$3,416	0	b, c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	31	620	62	31	\$67,442	\$567,052	0	b, c, d
Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	293	3,516	352	176	\$382,462	\$1,465,000	0	c,h
Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	С
Initial Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	С
5. Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	293 294	3,516 3,528	352 353	176	\$382,462	\$2,051,000	0	c,i
6. Annual Stack Test and Report (for PM) 7. Annual Stack Test and Report (for Hg)	12	\$0 \$0	\$5,000 \$8,000	\$0 \$0	1	12 12	294	3,528	353	176 0	\$383,767 \$0	\$1,470,000 \$0	0	c,h,j
8. Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	C,j C,j
9. Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	294	3,528	353	176	\$383,767	\$2,058,000	0	C,j
10. Repeat Stack Test and Report if Switch Fuels (for Hg and HCI)	24	50	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0	0	c,f
11. Initial Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	1	5	293	1,465	147	73	\$159,359	\$117,200	0	C,g
12. Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	587	35,220	3,522	1,761	\$3,831,144	\$2,817,600	0	c,g
13. Annual Tune-up	12	\$0	\$2,875	\$0	1	12	293	3,516	352	176	\$382,462	\$842,375	0	c,m
14. Continuous Parameter Monitoring														0
Establish Site-specific monitoring plan (all)	40	\$0		\$0	1	40	35	1,400	140	70	\$152,289	\$0	0	С
Opacity	10	\$0	\$0	\$43.100	1	10	26	260	26	13	\$28.282	\$1.120.600	0	С
a) initial b) annual	10	\$0	\$0	\$43,100 \$14,700	1	10	26	260	26	13	\$28,282 \$28,282	\$382,200	0	C C
PM (only sources greater than 250 mmBtu/hr)	10		-90 -	\$14,700	1	10	20	200	20	15	\$20,202	\$362,200	0	U.
a) initial	10	\$0	\$0	\$158.000	1	10	17	170	17	9	\$18,492	\$2,686,000	0	c,n
b) annual	10	\$0	\$0	\$56,100	1	10	17	170	17	9	\$18,492	\$953,700	0	c,n
02														
a) initial	10	\$0	\$0	\$8,523	1	10	293	2,930	293	147	\$318,718	\$2,497,239	0	С
b) annual	10	\$0	\$0	\$1,436	1	10	293	2,930	293	147	\$318,718	\$420,748	0	С
Scrubber System Monitoring and Operation (for units with wet scrubbers)														
a) initial	10	\$0	\$0	\$24,300	1	10	252	2,520	252	126	\$274,119	\$6,123,600	0	С
b) annual	10	\$0	\$0	\$5,600	1	10	252	2,520	252	120	\$274,119	\$1,411,200	0	c
Bag Leak Detection System Operation				+0,000				-,			+=,===	+=, -==,===	-	-
(sources that have fabric filters)														
a) initial	10	\$0	\$0	\$25,500	1	10	0	0	0	0	\$0	\$0	0	С
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	С
DIFF Monitor	10	\$0	\$0	\$43.500	1	10	27	270	27	14	\$29,370	\$1,174,500	0	
a) initial b) annual	10	\$0	\$0	\$43,500	1	10	27	270	27	14	\$29,370 \$29,370	\$1,174,500 \$261,900	0	C C
Carbon Injection Monitoring System	10			\$9,700	1	10	21	210	21	14	\$25,370	\$201,500	0	L.
(all sources that use ACI to control Hg)														
a) initial	10	\$0	\$0	\$115,000	1	10	0	0	0	0	\$0	\$0	0	С
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	С
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation 1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	а
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	71	568	57	28	\$61,786	\$0	71	c
3) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	71	355	36	18	\$38,616	\$0	71	c
4) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	71	2,840	284	142	\$308,928	\$0	142	c
5) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	0	\$0	\$0	0	L
Reporting Subtotal								72,452	7,245	3,623	\$7,881,147	\$28,423,330	284	
4. Recordkeeping Requirements	Inclust 11													-
A. Read Instructions B. Implement Activities	Included in 3a na		+											
C. Develop Record System	na		+					<u> </u>						е
D. Record Information	114													
1) Records of Operating Parameter Values	20	\$0	\$0	\$0	1	20	587	11,740	1,174	587	\$1,277,048	\$0	0	с
Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	587	8,805	881	440	\$957,786	\$0	0	С
 Records of Stack Tests 	2	\$0	\$0	\$0	1	2	587	1,174	117	59	\$127,705	\$0	0	С
 Records of Monitoring Device Calibrations 	2	\$0	\$0	\$0	1	2	587	1,174	117	59	\$127,705	\$0	0	С
5) Records of All Compliance Reports Submitted	2	\$0	\$0	\$0	2	4	587	2,348	235	117	\$255,410	\$0	0	С
6) Records of Monthly Fuel Use	0.5	\$0	\$0	\$0	12	6	587	3,522	352	176	\$383,114	\$0	0	С
E. Personnel Training F. Time for Audits	40	\$0	\$0	\$0	1	40	35	1,400	140	70	\$152,289	\$0	0	k
Recordkeeping Subtotal	na		t					30,163	3,016	1,508	\$3,281,056	\$0	0	1
Totals								102,615	10,262	5,131	\$11,162,203	\$28,423,330	284	1
Totals		L	I	L		I	l	102,015	10,202	5,131	φ11,102,203	ə20,423,33U	204	L

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 88% of facilities are in the industrial sector while the remaining 12% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements, will not begin until year 3 of this ICR. d cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals. e Assume facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

erreity processonas. e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required. f Only applies to large solid fuel boilers, because solid fuel boilers may fire a mix of non-homogeneous fuels. Assumed zero respondents for liquid and gas units. g Existing large liquid units are expected to determine compliance for Hg and HC1 through fuel analysis not stack testing. h Units not equipped with PMC PMS will perform stack testing for PM.

Subsequent annual testing in year 2 are based on the number of sources that had an initial test in year 1 of this ICR. Subsequent semi-annual compliance reporting and recordkeeping requirements are based on the number of new sources in years 1 and 2 of this ICR. K For on-going training activities to keep personnel updated in order to implement compliance activities. L 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. T Tone-ups are required as work practice standards in lieu of dioxinfurant testing.

n PM CPMS is required for coal boilers, biomass boilers which are not 100% biomass, and residual oil boilers which are >= 250 mmBtu/hr

o Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emission's Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Politatats – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated into the burden estimates for the linal rule.

Table 3.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards

	or Hazardous						tional Boilers							
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													
2. Surveys and Studies	na													-
3. Reporting Requirements A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	549	21,960	2,196	1,098	\$2,388,754	\$0	0	-
B. Required Activities	40		\$U		1	40	549	21,900	2,190	1,096	\$2,366,754	\$U	0	a
Required Activities 1. Conduct Energy Audit														-
a) Commerical	20	\$854	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b, c, d
b) Industrial	20	\$18.292	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b, c, d
2. Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
3. Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
4. Initial Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
5. Initial Stack Test and Report (for CO)	12	\$0	\$7.000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
7. Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
 Annual Stack Test and Report (for HCI) 	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
 Repeat Stack Test and Report if Switch Fuels (for Hg and HCI) 	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0	0	c,f
11. Initial Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	1	5	ő	0	0	0	\$0	\$0	0	c,g
12. Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0	0	c,g
13. Continuous Parameter Monitoring														p
Establish Site-specific monitoring plan (all)	40	\$0		\$0	1	40	0	0	0	0	\$0	\$0	0	C
Opacity														
a) initial	10	\$0	\$0	\$43,100	1	10	0	0	0	0	\$0	\$0	0	c,h
b) annual	10	\$0	\$0	\$14,700	1	10	0	0	0	0	\$0	\$0	0	c,h
PM (only sources greater than 250 mmBtu/hr)														
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0	0	c,h
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0	0	c,h
02														
a) initial	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0	0	с
b) annual	10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0	0	С
Scrubber System Monitoring and Operation														
(for units with wet scrubbers)	10	\$0	\$0	\$24,300	1	10					\$0	\$0	0	-
a) initial b) annual	10	\$0	\$0	\$24,300 \$5,600	1	10	0	0	0	0	\$0	\$0	0	C C
	10		\$U	\$5,000	1	10	0	0	0	0	50	\$U	0	C
Bag Leak Detection System Operation (sources that have fabric filters)														
a) initial	10	\$0	\$0	\$25,500	1	10	0	0	0	0	\$0	\$0	0	с
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	c
14. Annual Tune-up	12	\$0	\$2,875	\$0	1	12	0	0	Ő	0	\$0	\$0	0	c
15. Mercury Fuel Spec Analysis	5	\$0	\$200	\$0	12	60	0	0	0	0	\$0	\$0	0	C,i
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
 Initial Notification that Source is Subject 	2	\$0	\$0	\$0	1	2	549	1,098	110	55	\$119,438	\$0	549	а
Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	С
 Initial Report on results of Energy Audit 	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	С
 Annual Compliance Report 	20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	c,L
5) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0	\$0	0	c,L
6) Notification of Alternative Fuel Use	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	c,m
7) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	0	\$0	\$0	0	0
Reporting Subtotal			l					23,058	2,306	1,153	\$2,508,192	\$0	549	+
4. Recordkeeping Requirements	Included in 3a			-										+
A. Read Instructions B. Implement Activities	na na									1				+
C. Develop Record System	na		1											е
D. Record Information	.14		1	1										+ ~
1) Records of Operating Parameter Values	20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	c
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	c
4) Records of Monitoring Device Calibrations	2	\$0	\$0	\$0	1	2	ő	0	0	0	\$0	\$0	0	c
5) Records of All Annual Compliance Reports Submitted	2	\$0	\$0	\$0	1	2	ő	0	0	0	\$0	\$0	0	C, L
6) Records of All Semi-Annual Compliance Reports										-				1
Submitted	2	\$0	\$0	\$0	2	4	0	0	0	0	\$0	\$0	0	c, L
7) Records of Monthly Fuel Use	0.5	\$0	\$0	\$0	12	6	0	0	0	0	\$0	\$0	0	c,g
Records of Annual Tune-up	0.25	\$0	\$0	\$0	1	0.25	0	0	0	0	\$0	\$0	0	С
E. Personnel Training	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	n
F. Time for Audits	na													
Recordkeeping Subtotal								0	0	0	\$0	\$0	0	1
Totals			1					23.058	2.306	1.153	\$2.508.192	\$0	549	1
10(0)5	1		1	1	1	1		20,000	2,300	1,100	Ψ£,500,132	ψŪ	J 345	1 1

a Number of respondents based on number of existing large gas fuel boilers which includes natural, petroleum, and other gas fuel units greater than 10 mmBtu/hr.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 88% of facilities are in the industrial sector. C Since existing units have three years then the publication date of the final rule to submit hind and indication of compliance activities, or meet recordseeping or reporting requirements, no burden is assumed in year 1.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified

energy professionals.

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

e Assumes tacility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required. 1 Only applies to large solid fue boilers, because solid fue boilers may fire a mix of non-homogeneous tuels. Assumed zero respondents for liquid and gas units. g Existing large gas 2 units are expected to determine compliance through stack testing not fuel analysis h Gas units are exempt from PM CPMS and opacity monitoring. i Number based on units which reported firing fuels other than natural or refinery gas. j The units firing other process gases other than natural gas refinery gases or other on-spec gas 1 fuels have limits for PM, HCI, Hg, and CO and are subject to testing and monitoring requirements for each pollutant. k The recordicepting requirements for natural gas fired units is to conduct an annual tune-up and document that the tune-up was completed. The documentation does not need to be submitted as a report unless requested by the Administrator.

L Only facilities with process gas (gas 2 units) subject to numerical emission limits are expected to be required to submit semi-annual compliance reports. Natural gas and refinery gas units are required to submit reports annually

to on summer servers gas gas 2 and 3 subject to monitorial emission and an expected to be required to summer server and an onparate reports. Natural gas and remery gas ones are required to summer reports and day. n For on-going training activities to keep personnel updated in order to implement compliance activities. o 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.

p Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Heazrdous Air Pollutants – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis or this proposal, but the changes will be incorporated in the burden estimates for the final rule.

Table 3.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 2, Existing Large Gas Fuel Units

	for Hazardous	Air Poliulants	S (NESHAP) T	or industria	i, Commercia	i, and institu	tional Bollers	- rear z, i	Existing L	arge Gas Fue	TUNILS			
	(A) Respondent Hours per Occurrence (Technical	(B) Certified Energy Audit Cost per	(C) Stack Testing and Fuel Analysis Cost Per	(D) Other Non-Labor Costs Per	(E) Number of Occurrences Per Respondent	Hours per Respondent Per Year	(G) Number of Respondents	(H) Technical Hours per Year @ \$98.20 (F	(I) Clerical Hours per Year @ \$48.53 (H	(J) Management Hours per Year @ \$114.49 (H	(K) Total Labor	(L) Total Non- Labor Capital Costs Per Year	(M) Total Number of Responses per	Footnotes
Burden Item	hours)	Occurrence	Occurrence	Occurrence	Per Year	(A X E)	Per Year	X G)	X 0.1)	X .05)	Costs Per Year	[(B+C+D)xExG]	Year (E X G)	ш
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	а
B. Required Activities														
 Conduct Energy Audit 														
a) Commerical	20	\$854	\$0	\$0	1	20	33	660	66	33	\$71,793	\$28,182	0	b, c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	242	4,840	484	242	\$526,483	\$4,426,664	0	b, c, d
Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	39	468	47	23	\$50,908	\$195,000	0	c,j,k
Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	39	468	47	23	\$50,908	\$312,000	0	c,j,k
Initial Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	39	468	47	23	\$50,908	\$312,000	0	c,j,k
Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	39	468	47	23	\$50,908	\$273,000	0	c,j,k
Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
8. Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
9. Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0	0	c,j,k
10. Repeat Stack Test and Report if Switch Fuels (for Hg and HCI)	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0	0	
		\$0			-		0			0				C,f
11. Initial Fuel Analysis for Mercury and HCL Content	5		\$400 \$400	\$0	1 12	5		0	0		\$0	\$0 \$0	0	c,g
12. Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	00	0	0	0	0	\$0	\$0	0	c,g
13. Continuous Parameter Monitoring					L .	1.	-			10	101 750			р
Establish Site-specific monitoring plan (all)	40	\$0		\$0	1	40	5	200	20	10	\$21,756	\$0	0	С
Opacity														
a) initial	10	\$0	\$0	\$43,100	1	10	0	0	0	0	\$0	\$0	0	c,h
b) annual	10	\$0	\$0	\$14,700	1	10	0	0	0	0	\$0	\$0	0	c,h
PM (only sources greater than 250 mmBtu/hr)														
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0	0	c,h
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0	0	c,h
02														
a) initial	10	\$0	\$0	\$8,523	1	10	39	390	39	20	\$42,423	\$332,397	0	с
b) annual	10	\$0	\$0	\$1,436	1	10	39	390	39	20	\$42,423	\$56,004	0	С
Scrubber System Monitoring and Operation					_						*		-	
(for units with wet scrubbers)														
a) initial	10	\$0	\$0	\$24,300	1	10	3	30	3	2	\$3.263	\$72,900	0	с
b) annual	10	\$0	\$0	\$5,600	1	10	3	30	3	2	\$3,263	\$16,800	0	c
Bag Leak Detection System Operation		\$ 0	\$ 0	40,000	-	10		00		-	\$0,200	\$10,000		—
(sources that have fabric filters)														
a) initial	10	\$0	\$0	\$25,500	1	10	0	0	0	0	\$0	\$0	0	с
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	c
14. Annual Tune-up	10	\$0	\$2,875	\$9,700	1	10	2,236	26,832	2,683	1,342	\$2,918,718	\$6,428,500	0	C,k
15. Mercury Fuel Spec Analysis	5	\$0	\$200	\$0	12	60	193	11,580	1,158	579	\$1,259,643	\$463,200	0	c,i
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation						-								
 Initial Notification that Source is Subject 	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	а
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	с
 Initial Report on results of Energy Audit 	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	С
4) Annual Compliance Report	20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	C, L
5) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0	\$0	0	C, L
6) Notification of Alternative Fuel Use	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	c,m
Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	0	\$0	\$0	0	0
Reporting Subtotal								46,824	4,682	2,341	\$5,093,398	\$12,916,647	0	
 Recordkeeping Requirements 														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													е
D. Record Information														
1) Records of Operating Parameter Values	20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	c
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	c
4) Records of Monitoring Device Calibrations	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	c
5) Records of All Annual Compliance Reports Submitted	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	C, L
				40		-					40	40		
 Records of All Semi-Annual Compliance Reports Submitted 	2	\$0	\$0	\$0	2	4	0	0	0	0	\$0	\$0	0	C, L
7) Records of Monthly Fuel Use	0.5	\$0	\$0	\$0	12	6	0	0	0	ő	\$0	\$0	0	c,g
8) Records of Annual Tune-up	0.25	\$0	\$0	\$0	1	0.25	0	0	0	0	\$0	\$0	0	C,g
E. Personnel Training	40	\$0	\$0	\$0	1	40	275	11,000	1,100	550	\$1,196,553	\$0	0	n
*		ΨŪ					213	11,000	1,100	550	Q1,100,000	Ψ0		+ "
F. Time for Audits	na													+
Recordkeeping Subtotal								11,000	1,100	550	\$1,196,553	\$0		
Totals								57,824	5,782	2,891	\$6,289,950	\$12,916,647	0	
L										, ,,				

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1. b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 87.4% of facilities are in the industrial sector while the remaining 12.6% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements will not begin until year 3 of this ICR.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals. e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

Conversion and the second operation of the second operation of the second operation of the second operation of the second operation of the second operation of the second operation of the second operation of the second operation of the second operation o

h Gas units are exempt from PM CPMS and opacity monitoring.

h Gas units are exempt from PM CPMs and opacity monitoring. i Number based on units which reported fining fuels other than natural or refinery gas. j The units fining other process gases other than natural gas, refinery gases or other on-spec gas 1 fuels have limits for PM, HCI, Hg, and CO and are subject to testing and monitoring requirements for each pollutant. k The recordkeeping and reporting requirements for natural gas, fried units is to conduct an annual tune-up and document that the tune-up was completed. The documentation does not need to be submitted as a report unless requested by the Administrator. L Only facilities with process gas (gas 2 units) subject to numerical emission limits are expected to be submit semi-annual compliance reports. Natural gas and refinery gas units are required to submit reports annually. m Number based on 17.8% of the large gas 1 units using liquid instead of gas at some point. n For on-going training activities to keep personnel updated in order to implement compliance activities. a destunded on effortable defines a claims would be find in the first those avers of the required to a part of the required to a provimately 20 hours or \$3.100 in lat

o 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.

p Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emission Standards for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated into the burden estimates for the final rule.

Table 3.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 3, Existing Large Gas Fuel Units

Г	or Hazardous	Air Pollutant	S (NESHAP)	for industria	ai, Commercia	u, and instit	utional Boilers	5 - Year 3,	Existing L	arge Gas Fue	i Units			
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na	Occurrence	Occurrence	Occurrence	Perfeat	(A \ E)	Perfedi	× G)	× 0.1)	× .05)	COSIS Per fear	[(B+C+D)XEXG]	Teal (E X G)	ш.
2. Surveys and Studies	na													
3. Reporting Requirements	Ind													
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	а
B. Required Activities														
1. Conduct Energy Audit														
a) Commerical	20	\$854	\$0	\$0	1	20	33	660	66	33	\$71,793	\$28,182	0	b, c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	241	4,820	482	241	\$524,308	\$4,408,372	0	b, c, d
2. Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	39 39	468	47	23 23	\$50,908	\$195,000 \$312,000	0	c,j,k
3. Initial Stack Test and Report (for Hg) 4. Initial Stack Test and Report (for HCl)	12	\$0 \$0	\$8,000 \$8,000	\$0 \$0	1	12 12	39	468 468	47 47	23	\$50,908 \$50,908	\$312,000	0	c,j,k c,j,k
5. Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	39	408	47	23	\$50,908	\$273,000	0	C,j,k C,j,k
6. Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	39	468	47	23	\$50,908	\$195,000	0	C,j,k
7. Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	39	468	47	23	\$50,908	\$312,000	0	c,j,k
8. Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	39	468	47	23	\$50,908	\$312,000	0	C,j,k
Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	39	468	47	23	\$50,908	\$273,000	0	c,j,k
 Repeat Stack Test and Report if Switch Fuels (for Hg and HCI) 	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0	0	c,f
11. Initial Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0	0	c,g
12. Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0	0	c,g
13. Continuous Parameter Monitoring														р
Establish Site-specific monitoring plan (all)	40	\$0		\$0	1	40	4	160	16	8	\$17,404	\$0	0	С
Opacity														
a) initial	10	\$0	\$0	\$43,100	1	10	0	0	0	0	\$0	\$0 \$0	0	c,h
b) annual PM (only sources greater than 250 mmBtu/hr)	10	\$0	\$0	\$14,700	1	10	0	0	0	0	\$0	\$0	0	c,h
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0	0	c,h
b) annual	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0	0	c,n
02	10	40	ψυ	\$30,100	1	10	0	0	0	0	Ψ0	40	0	0,11
a) initial	10	\$0	\$0	\$8,523	1	10	39	390	39	20	\$42,423	\$332,397	0	С
b) annual	10	\$0	\$0	\$1,436	1	10	39	390	39	20	\$42,423	\$56,004	0	С
Scrubber System Monitoring and Operation (for units with wet scrubbers)														
a) initial	10	\$0	\$0	\$24,300	1	10	3	30	3	2	\$3,263	\$72.900	0	с
b) annual	10	\$0	\$0	\$5,600	1	10	3	30	3	2	\$3,263	\$16,800	0	c
Bag Leak Detection System Operation (sources that have fabric filters)														
a) initial	10	\$0	\$0	\$25,500	1	10	0	0	0	0	\$0	\$0	0	с
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	C
14. Annual Tune-up	12	\$0	\$2,875	\$0	1	12	4,471	53,652	5,365	2,683	\$5,836,130	\$12,854,125	0	c,k
15. Mercury Fuel Spec Analysis	5	\$0	\$200	\$0	12	60	192	11,520	1,152	576	\$1,253,117	\$460,800	0	C,İ
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation	-		**								**	**		
1) Initial Notification that Source is Subject	2	\$0 \$0	\$0 \$0	\$0 \$0	1	2	0 549	0	0 439	0 220	\$0 \$477,751	\$0	0 549	a
2) Notification of Compliance Status 3) Initial Report on results of Energy Audit	8	\$0 \$0	\$0	\$0	1	8	549	4,392	275	137	\$298,594	\$0 \$0	549	C C
4) Annual Compliance Report	20	\$0	\$0	\$0	1	20	540	10,800	1,080	540	\$1,174,797	\$0	540	C, L
5) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	9	360	36	18	\$39,160	\$0	18	C, L
6) Notification of Alternative Fuel Use	5	\$0	\$0	\$0	1	5	796	3,980	398	199	\$432,934	\$0	796	c,m
7) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	0	\$0	\$0	0	0
Reporting Subtotal								97,673	9,767	4,884	\$10,624,625	\$20,413,580	2,452	
 Recordkeeping Requirements 														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System D. Record Information	na													е
1) Records of Operating Parameter Values	20	\$0	\$0	\$0	1	20	78	1,560	156	78	\$169,693	\$0	0	С
Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	78	1,170	117	59	\$127,270	\$0	0	С
Records of Stack Tests	2	\$0	\$0	\$0	1	2	78	156	16	8	\$16,969	\$0	0	С
4) Records of Monitoring Device Calibrations	2	\$0	\$0	\$0	1	2	78	156	16	8	\$16,969	\$0	0	с
5) Records of All Annual Compliance Reports Submitted	2	\$0	\$0	\$0	1	2	540	1,080	108	54	\$117,480	\$0	0	C, L
 Records of All Semi-Annual Compliance Reports Submitted 	2	\$0	\$0	\$0	2	4	9	36	4	2	\$3,916	\$0	0	C, L
7) Records of Monthly Fuel Use	0.5	\$0	\$0	\$0	12	6	4,549	27,294	2,729	1,365	\$2,968,973	\$0	0	C, L C, g
8) Records of Annual Tune-up	0.25	\$0	\$0	\$0	1	0.25	4,471	1,118	112	56	\$121,586	\$0	0	C,g
E. Personnel Training	40	\$0	\$0	\$0	1	40	274	10,960	1,096	548	\$1,192,201	\$0	0	n
F. Time for Audits	na													
Recordkeeping Subtotal								43,530	4,353	2,176	\$4,735,057	\$0		+
Totals								141,203	14,120	7,060	\$15,359,682	\$20,413,580	2,452	+
iotais	-		l	1		L	I	141,203	14,120	1,000	\$10,009,00Z	φ∠0,+13,300	2,432	

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 87.4% of facilities are in the industrial sector while the remaining 12.6% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements will not begin until year 3 of this ICR. d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals.

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

f Only applies to large solid fuel boilers, because solid fuel boilers may fire a mix of non-homogeneous fuels. Assumed zero respondents for liquid and gas units.

g Existing large gas 2 units are expected to determine compliance through stack testing.

h Gas units are exempt from PM CPMS and opacity monitoring. i Number based on units which reported firing fuels other than natural or refinery gas.

The units find other process gases other than natural as, retement yas. 1) The units find other process gases other than natural gas, refinery gases or other han natural gas, refinery gases other chan annual tance-up and document that the tune-up was completed. The documentation does not need to be submitted as a report unless requested by the Administrator. L Only facilities with process gas (gas 2 units) subject to numerical emission finance reports. Natural gas and refinery gas units are required to submit reports annually. m Number based on 17.8% of the large gas 1 units using liquid instead of gas at some point.

n For on-going training activities to keep personnel updated in order to implement compliance activities.

o 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.

p Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutantis – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated init to be furden estimates for the final rule.

Table 4.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards nts (NESHAP) for Industrial, C aial and h nal Boilers - Year 1. New Larg e Solid Fuel Units

11. Dimini Field Analysis for Mecray and HC Content 5 80 9400 80 12 60 0 0 0 80 80 0 11. Monthly field Analysis for Mecray and HC Content 5 80 \$2.875 80 11 12 26 \$12 31 16 83.339 \$7.470 0 12. Annual Ture up partial 40 4 10 40 4 10 8 83.339 \$7.470 0	fc	or Hazardous A	Air Pollutants	(NESHAP) fo	or Industria	I, Commercial	, and Institu	tional Boilers	s - Year 1,	New Large	Solid Fuel	Units			
Servery and Studen na -		Respondent Hours per Occurrence (Technical hours)	Ènergy Audit Cost per	Testing and Fuel Analysis Cost Per	Non-Labor Costs Per	Occurrences Per Respondent	Hours per Respondent Per Year	Respondents	Technical Hours per Year @ \$98.20 (F X	Hours per Year @ \$48.53 (H	Management Hours per Year @ \$114.49 (H	(K) Total Labor Costs Per Year	Labor Capital Costs Per Year	Number of Responses per Year (E	Footnotes
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12. Annual fune-up 12 80 1. 12 26 31.2 31. 14.6 83.3939 97.750 0 B3. Controus Paraneter Munting 40 80 1 40 4 160 16 6 \$17.404 80 0 DaskS 10 80 80 94.300 1 10 26 26 13 452.222 13.1060 0 Dask 90 80 843.000 1 10 26 26 28 13 452.222 458.220 0 PM (origo succes greater fram 520 mmBulty) 10 80 856.000 1 10 0 0 0 0 80 80 0 D annal 10 80 85.22 1 10 26 26 28 13 458.222 427.538 0 Struber System Montoing and Operation (for units where strubers) 10 80 857.600 1 10 26 260 28 <t< td=""><td>10. Initial Fuel Analysis for Mercury and HCL Content</td><td>5</td><td>\$0</td><td>\$400</td><td>\$0</td><td>1</td><td>5</td><td>0</td><td>0</td><td>0</td><td>0</td><td>\$0</td><td>\$0</td><td>0</td><td>a,e</td></t<>	10. Initial Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0	0	a,e
13. Continuos Planneter Monitoring	 Monthly Fuel Analysis for Mercury and HCL Content 					12					-			-	a,e
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Carbon higheright on Monitoring System (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (all sources that use ACI to control Hg) Image: https://www.new.org/system (block of Monitoring Device Calibrations (block of ACI to source ACI to control Hg) Image: https://www.new.org/system (block of ACI to source ACI to control Hg) Image: https://www.new.org/system (block of ACI to source ACI to contechange ACI to to control Hg) Image: https://ww		10				1	10								a
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b) annual 10 80 80 \$9,700 1 10 0 0 0 \$0		'													1
C. Create Information na na </td <td>a) initial</td> <td>10</td> <td>\$0</td> <td>\$0</td> <td>\$115,000</td> <td>1</td> <td>10</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>\$0</td> <td>\$0</td> <td>0</td> <td>a</td>	a) initial	10	\$0	\$0	\$115,000	1	10	0	0	0	0	\$0	\$0	0	a
D. Gather Information na na </td <td></td> <td></td> <td>\$0</td> <td>\$0</td> <td>\$9,700</td> <td>1</td> <td>10</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>\$0</td> <td>\$0</td> <td>0</td> <td>а</td>			\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	а
E. Report Preparation r															
1) Initial Notification that Source is Subject 2 \$0 \$0 \$1 2 4 8 1 0 \$870 \$0 4 2) Notification of Compliance Status 8 \$0 \$0 \$0 \$1 8 4 32 3 2 \$3,481 \$0 4 3) Semi-annual Compliance Report 20 \$0 \$0 \$0 \$0 2 40 4 160 16 8 \$17,404 \$0 8 4) Affirmative Defense 30 \$0 \$0 \$0 0 0 0 0 \$0		na													
2) Notification of Compliance Status 8 90 \$0 \$0 1 8 4 32 3 2 \$3,481 \$0 4 3) Semi-annual Compliance Report 20 \$0 \$0 \$0 \$2 40 4 160 16 8 \$17,404 \$0 8 4) Affirmative Defense 30 \$0 \$0 \$0 0		<u> </u>													
3) Semi-annual Compliance Report 20 \$0 \$0 \$0 2 40 4 160 16 8 \$17,404 \$0 8 4) Affirmative Defense 30 \$0 \$0 \$0 1 30 0		-				-	-								b
4) Affirmative Defense 30 \$0<		-				-	-								b
Reporting Subtotal Included in 3a Include in 3a Inc															b
4. Recordkeeping Requirements Included in 3a		30	\$0	\$0	\$0	1	30	0							h
A. Read Instructions Included in 3a Include in 3a In		<u>↓'</u>							4,264	426	213	\$463,827	\$3,895,684	16	
B. Implement Activities na		<u> </u>													\square
C. Develop Record System na n															\vdash
D. Record Information Image: Constraint of the presentation of the present of the presentation of the present of the presentat									-						$ \rightarrow $
1) Records of Operating Parameter Values 20 \$0 \$0 \$1 20 26 520 52 26 \$56,664 \$0 0 2) Records of Startup, Shutdown, Malfunction 15 \$0 \$0 \$0 1 15 26 390 39 20 \$42,423 \$0 0 3) Records of Startup, Shutdown, Malfunction 2 \$0 \$0 \$0 \$0 1 15 26 52 5 3 \$5,656 \$0 0 4) Records of Monitoring Device Calibrations 2 \$0 \$0 \$0 1 2 26 52 5 3 \$5,656 \$0 0 5) Records of Monitoring Device Calibrations 2 \$0 \$0 \$0 1 2 26 52 5 3 \$5,656 \$0 0 5) Records of All Compliance Reports Submitted 2 \$0 \$0 \$0 \$0 \$0 2 4		na													С
2) Records of Startup, Shutdown, Maltunction 15 \$0 \$0 \$0 1 15 26 390 39 20 \$4,2,423 \$0 0 3) Records of Startup, Shutdown, Maltunction 15 \$0 \$0 \$1 15 26 390 39 20 \$4,2,423 \$0 0 4) Records of Stack Tests 2 \$0 \$0 \$0 1 2 26 52 5 3 \$5,656 \$0 0 5) Records of Montioning Device Calibrations 2 \$0 \$0 \$0 1 2 26 52 5 3 \$5,656 \$0 0 5) Records of Monthy Fuel Use 0.5 \$0 \$0 \$2 4 26 154 10 5 \$11,313 \$0 0 6) Records of Monthy Fuel Use 0.5 \$0 \$0 \$0 \$12 6 26 156 16 8 \$16,969 \$0 <td></td> <td><u> '</u></td> <td>A-</td> <td>A</td> <td>4-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>AF0</td> <td><i>a</i>-</td> <td></td> <td>\vdash</td>		<u> '</u>	A-	A	4-							AF0	<i>a</i> -		\vdash
3) Records of Stack Tests 2 \$0 \$0 \$0 1 2 26 52 5 3 \$5,656 \$0 0 4) Records of Monitoring Device Calibrations 2 \$0 \$0 \$0 1 2 26 52 5 3 \$5,656 \$0 0 4) Records of Monitoring Device Calibrations 2 \$0 \$0 \$0 1 2 26 52 5 3 \$5,656 \$0 0 5) Records of M Compliance Reports Submitted 2 \$0 \$0 \$0 2 4 26 104 10 5 \$11,313 \$0 0 0 6 6 6 16 8 \$16,969 \$0 0 0 6 7 7 \$17,044 \$0 0 0 7 143 143 72 \$15,987 \$0 0 1 143 143 143 72 \$15,987 \$0 1 1 1 1 1 1 1 1 1 1 1 1 1 1						-								-	a
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5) Records of All Compliance Reports Submitted 2 \$0 \$0 2 4 26 104 10 5 \$11,313 \$0 0 6) Records of Monthly Fuel Use 0.5 \$0 \$0 \$0 \$2 4 26 104 10 5 \$11,313 \$0 0 6) Records of Monthly Fuel Use 0.5 \$0 \$0 \$0 12 6 26 156 16 8 \$16,969 \$0 0 E. Personnel Training 40 \$0 \$0 \$0 \$0 1 40 4 160 16 8 \$17,404 \$0 0 F. Time for Audits na 143 72 \$155,987 \$0 Recordkeeping Subtotal 1,434 143 72 \$155,987 \$0															a
6) Records of Monthly Fuel Use 0.5 \$0 \$0 \$12 6 26 156 16 8 \$16,969 \$0 0 E. Personnel Training 40 \$0 \$0 \$0 1 40 4 160 16 8 \$16,969 \$0 0 F. Time for Audits na <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>а</td>															а
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F. Time for Audits na															a,g
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		- na							1 424	142	72	¢155.007	¢0		\vdash
Totals 5,698 570 285 \$619,814 \$3,895,684 16		+′													⊢−−∣
	Totals	<u> </u>							5,698	570	285	\$619,814	\$3,895,684	16	

a In order to calculate a per year estimate of the number of boilers and facilities required to meet these rule requirements, the number of projected boilers and facilities is each divided by 3.

b Assumed reporting activities would start the first year a boiler is applicable to rule. c Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

O Only applies to large solid fuel boilers, because solid lue boilers may fire a mix of non-homogeneous fuels. Assumed all solid fuel units would perform a repeat stack test. e Existing large solid units are expected to determine compliance through stack testing and not fuel analysis f For on-going training activities to keep personnel updated in order to implement compliance activities. g Tune-ups are required as work practice standards in lieu of dioxinfluran testing.

h 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. i PM CPMS is required for coal boilers, biomass boilers which are not 100% biomass, and residual oil boilers which are >= 250 mmBtu/hr. It was assumed all new solid fuel boilers are firing 100% biomass.

j Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated into the burden estimates for the final rule.

Table 4.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards to (NESHAD) for In ductrial (- - - - nal Bailar V---o Solid Eucl Unite

fo	or Hazardous	Air Pollutan	ts (NESHAP)	for Industri	al, Commerci	al, and Instit	utional Boilers	s - Year 2,	New Larg	e Solid Fuel	Units			
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements						1.5								
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	3	120	12	6	\$13,053	\$0	0	a
B. Required Activities	10		AF 0.00	\$0		12	26			4.0	\$33.939	\$130.000		
1. Initial Stack Test and Report (for PM)	12	\$0 \$0	\$5,000 \$8,000	\$0	1	12		312	31	16	\$33,939 \$33,939	\$130,000 \$208,000	0	a
2. Initial Stack Test and Report (for Hg) 3. Initial Stack Test and Report (for HCl)	12 12	\$0	\$8,000	\$0	1	12	26 26	312 312	31 31	16 16	\$33,939	\$208,000	0	a a
4. Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	26	312	31	16	\$33,939	\$182,000	0	a
5. Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	26	312	31	16	\$33,939	\$130,000	0	a
6. Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	26	312	31	16	\$33,939	\$208,000	0	a
7. Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	26	312	31	16	\$33,939	\$208,000	0	a
8. Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	26	312	31	16	\$33,939	\$182,000	0	a
9. Repeat Stack Test and Report if Switch Fuels														
(for Hg and HCI)	24	\$0	\$16,000	\$0	1	24	26	624	62	31	\$67,877	\$416,000	0	a,d
10. Initial Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0	0	a,e
11. Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0	0	a,e
12. Annual Tune-up	12	\$0	\$2,875	\$0	1	12	52	624	62	31	\$67,877	\$149,500	0	a,g
13. Continuous Parameter Monitoring							-			-			-	L İ
Establish Site-specific monitoring plan (all)	40	\$0		\$0	1	40	3	120	12	6	\$13,053	\$0	0	a
Opacity	10	\$0	\$0	\$43.100	1	10	26	260	26	13	\$28.282	\$1.120.600	0	
a) initial b) annual	10	\$0 \$0	\$0	\$43,100 \$14,700	1	10	52	520	52	26	\$28,282 \$56,564	\$1,120,600 \$764,400	0	a a
PM (only sources greater than 250 mmBtu/hr)	10			\$14,700	1	10	52	520	52	20	\$30,304	\$764,400	0	d
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0	0	a,i
b) annual	10	\$0	\$0	\$56,100	1	10	ő	0	0	0	\$0	\$0	0	a,i
02				***,=**	_		-	-		-			-	
a) initial	10	\$0	\$0	\$8,523	1	10	26	260	26	13	\$28,282	\$221,598	0	a
b) annual	10	\$0	\$0	\$1,436	1	10	52	520	52	26	\$56,564	\$74,672	0	a
Scrubber System Monitoring and Operation (for units with wet scrubbers)														
a) initial	10	\$0	\$0	\$24,300	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$5,600	1	10	0	0	0	0	\$0	\$0	0	a
Bag Leak Detection System Operation (sources that have fabric filters)														
a) initial	10	\$0	\$0	\$25,500	1	10	26	260	26	13	\$28,282	\$663,000	0	a
b) annual	10	\$0	\$0	\$9,700	1	10	52	520	52	26	\$56,564	\$504,400	0	a
Carbon Injection Monitoring System (all sources that use ACI to control Hg)														
a) initial	10	\$0	\$0	\$115,000	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	a
C. Create Information	na													
D. Gather Information	na													\vdash
E. Report Preparation 1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	3	E	1	0	\$653	\$0	3	
1) Initial Notification that Source is Subject 2) Notification of Compliance Status	2	\$0 \$0	\$0	\$0	1	2 8	3	6 24	1 2	0	\$653	\$0	3	b
3) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	7	24	28	14	\$30.458	\$0	14	b
4) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	0	\$0	\$0	0	h
Reporting Subtotal					-		-	6,634	663	332	\$721,630	\$5,370,170	20	<u> </u>
4. Recordkeeping Requirements											,			
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													С
D. Record Information														
1) Records of Operating Parameter Values	20	\$0	\$0	\$0	1	20	52	1,040	104	52	\$113,129	\$0	0	a
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	52	780	78	39	\$84,846	\$0	0	a
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	52	104	10	5	\$11,313	\$0	0	a
4) Records of Monitoring Device Calibrations	2	\$0	\$0	\$0	1	2	52	104	10	5	\$11,313	\$0	0	a
5) Records of All Compliance Reports Submitted 6) Records of Monthly Fuel Use	2 0.5	\$0 \$0	\$0 \$0	\$0 \$0	2 12	4 6	52 52	208 312	21 31	10 16	\$22,626 \$33,939	\$0 \$0	0	a
E. Personnel Training	40	\$0	\$0 \$0	\$0 \$0	12	40	3	120	12	6	\$13,053	\$0	0	a,g f
F. Time for Audits	40 na	ΦU		ΦU	1	40	3	120	12	0	\$13,033	ΦU	0	+
Recordkeeping Subtotal	na					1		2,668	267	133	\$290,218	\$0		+
Totals						1		9,302	930	465	\$1,011,848	\$5,370,170	20	
10(0)5								5,302	530	405	91,011,040	\$3,310,110	20	

a In order to calculate a per year estimate of the number of boilers and facilities required to meet these rule requirements, the number of projected boilers and facilities is each divided by 3.

a motor to calculate the spectral solution to the finite of bolins and tables required to the requirements, the finite of projected bolics and tables is the b Assumed reporting activities would start the first year a bolier is applicable to rule. c Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required. d Only applies to large solid fuel boilers, because solid fuel boilers may fire a mix of non-homogeneous fuels. Assumed all solid fuel units would perform a repeat stack test.

e Existing large solid units are expected to determine compliance through stack testing and not fuel analysis f For on-going training activities to keep personnel updated in order to implement compliance activities.

g Tune-ups are required as work practice standards in lieu of dioxin/furan testing. h 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.

i PM CPMS is required for coal boilers, biomass boilers which are not 100% biomass, and residual oil boilers which are >= 250 mmBtu/hr. It was assumed all new solid fuel boilers are firing 100% biomass.

j Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutaris – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated into the burden estimates to the Inal rule.

Table 4.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 3, New Large Solid Fuel Units

	or Hazardous	All Follutar		ioi muusui	ai, commerci	ai, anu msuu	utional Bollers	5 - icai J	New Larg	e Jonu Fuer				
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na							, í	,	,				
2. Surveys and Studies	na													
3. Reporting Requirements													<u> </u>	+
A. Read and Understand Rule Requirements	40	* 0	\$0	\$0	1	40	0	120	12	C	\$13,053	\$0	0	
	40	\$0	ΦU	ΦU	1	40	3	120	12	6	\$13,055			a
B. Required Activities														
 Initial Stack Test and Report (for PM) 	12	\$0	\$5,000	\$0	1	12	26	312	31	16	\$33,939	\$130,000	0	а
Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	26	312	31	16	\$33,939	\$208,000	0	a
Initial Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	26	312	31	16	\$33,939	\$208,000	0	a
Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	26	312	31	16	\$33,939	\$182,000	0	a
5. Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	52	624	62	31	\$67,877	\$260,000	0	a
6. Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	52	624	62	31	\$67,877	\$416,000	0	a
7. Annual Stack Test and Report (for HCl)	12	\$0	\$8,000	\$0	1	12	52	624	62	31	\$67,877	\$416,000	0	a
8. Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	52	624	62	31	\$67,877	\$364,000	0	a
	12	\$U	\$7,000	\$U	1	12	52	624	62	31	\$07,877	\$364,000		a
 Repeat Stack Test and Report if Switch Fuels (for Hg and HCI) 	24	\$0	\$16,000	\$0	1	24	26	624	62	31	\$67,877	\$416,000	0	a,d
 Initial Fuel Analysis for Mercury and HCL Content 	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0	0	a,e
11. Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0	0	a,e
12. Annual Tune-up	12	\$0	\$2,875	\$0	1	12	78	936	94	47	\$101,816	\$224,250	0	a,g
13. Continuous Parameter Monitoring	+ <u></u>		\$E,010				.0				#101,010		<u> </u>	a,y j
		**		**		40		100	10		*** ***	**		
Establish Site-specific monitoring plan (all)	40	\$0		\$0	1	40	3	120	12	6	\$13,053	\$0	0	a
Opacity														
a) initial	10	\$0	\$0	\$43,100	1	10	26	260	26	13	\$28,282	\$1,120,600	0	a
b) annual	10	\$0	\$0	\$14,700	1	10	78	780	78	39	\$84,846	\$1,146,600	0	a
PM (only sources greater than 250 mmBtu/hr)														
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0	0	a,i
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0	0	a,i
02		\$ 0	ΨŪ	400,100	-	10			Ű	, in the second	40	40	-	
a) initial	10	\$0	\$0	\$8,523	1	10	26	260	26	13	\$28,282	\$221,598	0	a
	10	\$0	\$0	\$1,436		10		780			\$84,846	\$112.008		
b) annual	10	\$U	\$U	\$1,430	1	10	78	780	78	39	\$84,840	\$112,008	0	a
Scrubber System Monitoring and Operation														
(for units with wet scrubbers)														
a) initial	10	\$0	\$0	\$24,300	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$5,600	1	10	0	0	0	0	\$0	\$0	0	a
Bag Leak Detection System Operation (sources that have fabric filters)														
a) initial	10	\$0	\$0	\$25,500	1	10	26	260	26	13	\$28,282	\$663,000	0	a
b) annual	10	\$0	\$0	\$9,700	1	10	78	780	78	39	\$84,846	\$756,600	0	a
	10	ΦU	ΦU	\$9,700	1	10	10	/80	10	39	Φ04,040	\$750,000	0	d
Carbon Injection Monitoring System														
(all sources that use ACI to control Hg)										-				+
a) initial	10	\$0	\$0	\$115,000	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	а
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
 Initial Notification that Source is Subject 	2	\$0	\$0	\$0	1	2	3	6	1	0	\$653	\$0	3	b
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	3	24	2	1	\$2,611	\$0	3	b
3) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	10	400	40	20	\$43.511	\$0	20	b
4) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	400	40	20	\$0	\$0	0	h
	+	ΨŪ	ΨU		-	30	5	9,094	909	455	\$989,223	\$6,844,656	26	+ a
Reporting Subtotal		l						9,094	909	455	\$909,223	\$0,044,030	20	+
 Recordkeeping Requirements 	L													
A. Read Instructions	Included in 3a					L							L	+
B. Implement Activities	na													
C. Develop Record System	na													С
D. Record Information														
 Records of Operating Parameter Values 	20	\$0	\$0	\$0	1	20	78	1,560	156	78	\$169,693	\$0	0	a
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	78	1,170	117	59	\$127,270	\$0	0	a
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	78	156	16	8	\$16.969	\$0	0	a
4) Records of Monitoring Device Calibrations	2	\$0	\$0	\$0	1	2	78	156	16	8	\$16,969	\$0	0	a
5) Records of All Compliance Reports Submitted	2	\$0	\$0	\$0	2	4	78	312	31	16	\$33,939	\$0	0	a
					-								-	
6) Records of Monthly Fuel Use	0.5	\$0	\$0	\$0	12	6	78	468	47	23	\$50,908	\$0	0	a,g
E. Personnel Training	40	\$0	\$0	\$0	1	40	3	120	12	6	\$13,053	\$0	0	f
F. Time for Audits	na													
Recordkeeping Subtotal								3,942	394	197	\$428,801	\$0	0	
Totals								13,036	1,304	652	\$1,418,023	\$6,844,656	26	
10003						1		10,000	1,004	0.02	÷1,710,023	\$0,044,030		

a In order to calculate a per year estimate of the number of boilers and facilities required to meet these rule requirements, the number of projected boilers and facilities is each divided by 3.

b Assumed reporting activities would start the first year a boiler is applicable to rule. c Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required. d Only applies to large solid fuel boilers, because solid fuel boilers may fire a mix of non-homogeneous fuels. Assumed all solid fuel units would perform a repeat stack test.

e Existing large solid units are expected to determine compliance through stack testing and not fuel analysis fFor on-going training activities to keep personnel updated in order to implement compliance activities. g Tune-ups are required as work practice standards in lieu of dioxinfuran testing. h 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.

i PM CPMS is required for coal boilers, biomass boilers which are not 100% biomass, and residual oil boilers which are >= 250 mmBtu/hr. It was assumed all new solid fuel boilers are firing 100% biomass.

j Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated into the burden estimates for the final rule.

Table 5.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 1, New Large Liquid Fuel Units

(A) (H) (J) (I) Clerical (C) Stack Testing and Fuel Analysis Respondent (E) Number of (F) Technica Technical Management Hours per Occurrence (Technical Hours per Year @ \$98.20 (F Hours per Year @ \$48.53 (H Hours per Year @ \$114.49 (H (L) Total Non-Labor Capital Costs Per Year (B) Certified (D) Other (M) Total Occurrences Hours per Footnotes Energy Audit Cost per Occurrence (G) Number of Non-Labor Costs Per Per Respondent Number of Respondent (K) Total Labor Costs Per Year Costs Per Year [(B+C+D)xExG] Cost Per Occurrence Per Year Respondents Per Year Responses per Year (E X G) Burden Item hours) Occurrence Per Year (A X E) X G) X 0.1) X .05) 1. Applications na 2. Surveys and Studies 3. Reporting Requirements na 40 \$0 \$0 \$0 40 \$0 \$0 A. Read and Understand Rule Requirements 0 0 0 0 0 а B. Required Activities
 1. Initial Stack Test and Report (for PM) 12 \$0 \$5,000 \$0 12 \$0 \$0 0 0 0 0 Initial Stack Test and Report (for Hg)
 Initial Stack Test and Report (for HG)
 Initial Stack Test and Report (for CO) \$8,000 \$8,000 \$7,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 0 0 0 \$0 \$0 \$0 Annual Stack Test and Report (for PM)
 Annual Stack Test and Report (for Hg)
 Annual Stack Test and Report (for HC) \$0 \$5,000 \$0 \$0 \$0 \$0 \$0 \$8,000 \$8,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 8. Annual Stack Test and Report (for CO) \$7.000 \$0 0 \$0 Repeat Stack Test and Report if Switch Fuels (for Hg and HCI) 24 \$0 \$16,000 \$0 \$0 \$0 24 0 0 0 0 0 10. Initial Fuel Analysis for Mercury and HCL Content \$0 \$0 0 \$0 \$0 I. Monthly Fuel Analysis of Mercury and HCL Content
 I. Monthly Fuel Analysis for Mercury and HCL Content
 I2. Annual Tune-up
 I3. Continuous Parameter Monitoring \$0 \$0 \$400 \$0 \$0 60 12 0 \$0 \$0 \$0 \$0 0 0 0 12 \$2,875 Establish Site-specific monitoring plan (all) 40 \$0 \$0 1 40 0 0 0 0 \$0 \$0 0 Opacity 0 \$0 \$0 \$43,100 \$0 \$0 a) initial 10 \$0 \$0 10 \$0 0 0 0 0 b) annual PM (only sources greater than 250 mmBtu/hr) 10 \$14,700 10 0 0 0 0 \$0 0 10 \$0 \$158,000 10 \$0 \$0 \$0 a) initial b) annual 0 0 0 10 \$0 \$0 \$56.100 0 0 0 0 \$0 \$0 0 02 a) initial \$8,523 \$0 \$0 \$0 \$0 \$0 \$0 0 0 0 0 0 \$0 b) annual 10 \$1,436 0 0 \$0 0 Scrubber System Monitoring and Operation (for units with wet scrubbers) \$24.300 a) initial \$0 \$0 \$0 0 0 \$0 \$0 \$0 0 \$0 b) annual \$5.600 10 0 0 0 \$0 0 Bag Leak Detection System Operation (sources that have fabric filters) a) initial b) annual \$25,500 \$9,700 \$0 \$0 \$0 \$0 10 10 0 0 \$0 \$0 \$0 \$0 0 Carbon Injection Monitoring System (all sources that use ACI to control Hg) a) initial \$115.000 10 \$0 ¢٢ ¢n \$0 10 \$0 b) annual \$0 \$9,700 10 0 0 0 0 \$0 \$0 0 C. Create Information D. Gather Information E. Report Preparation na na 1) Initial Notification that Source is Subject \$0 \$0 \$0 \$0 \$0 2) Notification of Compliance Status 0 \$0 \$0 \$0 8 0 0 \$0 \$0 3) Semi-annual Compliance Report \$0 \$0 \$0 \$0 \$0 \$0 40 0 0 0 0 0 \$0 \$0 4) Affirmative Defense 30 \$0 30 0 0 0 \$0 Reporting Subtotal 4. Recordkeeping Requirements \$0 \$0 A. Read Instructions B. Implement Activities C. Develop Record System Included in 3a na na C. Develop Record Sy D. Record Information Records of Operating Parameter Values
 Records of Startup, Shutdown, Malfunction 20 15 \$0 \$0 \$0 \$0 20 15 \$0 \$0 \$0 0 \$0 0 \$0 \$0 Records of Stack Tests
 Records of Monitoring Device Calibrations \$0 \$0 \$0 \$0 \$0 \$0 0 0 0 0 \$0 \$0 \$0 \$0 0 2 2 5) Records of All Compliance Reports Submitted \$0 \$0 \$0 4 0 0 \$0 \$0 0 0 0 6) Records of Monthly Fuel Use E. Personnel Training F. Time for Audits \$0 \$0 \$0 \$0 0.5 40 \$0 \$0 \$0 \$0 \$0 \$0 6 40 0 0 0 na \$0 \$0 Recordkeeping Subtotal 0 0 Totals 0 0 0 \$0 \$0 0

a There are no new large liquid units expected to be constructed/reconstructed over the next 5 years

Table 5.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 2, New Large Liquid Fuel Units

Process Process <t< th=""><th>ħ</th><th>or Hazardous</th><th>Air Pollutant</th><th>s (NESHAP)</th><th>for Industri</th><th>al, Commerci</th><th>al, and instit</th><th>utional Bollers</th><th>s - Year 2,</th><th>New Larg</th><th>e Liquia Fue</th><th>Units</th><th></th><th></th><th></th></t<>	ħ	or Hazardous	Air Pollutant	s (NESHAP)	for Industri	al, Commerci	al, and instit	utional Bollers	s - Year 2,	New Larg	e Liquia Fue	Units			
2 minor m </td <td>Burden Item</td> <td>Respondent Hours per Occurrence (Technical</td> <td>Ènergy Audit Cost per</td> <td>Testing and Fuel Analysis Cost Per</td> <td>Non-Labor Costs Per</td> <td>Occurrences Per Respondent</td> <td>Hours per Respondent Per Year</td> <td>Respondents</td> <td>Technical Hours per Year @ \$98.20 (F</td> <td>Clerical Hours per Year @ \$48.53 (H</td> <td>Management Hours per Year @ \$114.49 (H</td> <td></td> <td>Labor Capital Costs Per Year</td> <td>Number of Responses per</td> <td>Footnotes</td>	Burden Item	Respondent Hours per Occurrence (Technical	Ènergy Audit Cost per	Testing and Fuel Analysis Cost Per	Non-Labor Costs Per	Occurrences Per Respondent	Hours per Respondent Per Year	Respondents	Technical Hours per Year @ \$98.20 (F	Clerical Hours per Year @ \$48.53 (H	Management Hours per Year @ \$114.49 (H		Labor Capital Costs Per Year	Number of Responses per	Footnotes
Bescher Begamenes	1. Applications	na													
A. Result Query and Russequences 40 10	2. Surveys and Studies	na													
D. Begins Archine Image	3. Reporting Requirements														
1 1		40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	a
2 Image Stack for and Regring for high 12 400 800 400 11 122 0 0 0 100 </td <td>B. Required Activities</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	B. Required Activities							-							
2 Image Stack for and Regring for high 12 400 800 400 11 122 0 0 0 100 </td <td>1. Initial Stack Test and Report (for PM)</td> <td>12</td> <td>\$0</td> <td>\$5.000</td> <td>\$0</td> <td>1</td> <td>12</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>\$0</td> <td>\$0</td> <td>0</td> <td></td>	1. Initial Stack Test and Report (for PM)	12	\$0	\$5.000	\$0	1	12	0	0	0	0	\$0	\$0	0	
1. Mail Stack. To all Report (PurC) 12 40 86.00 90 1 12 0 0 0 00						1								0	
A. mana Stack Tet and Regard for CO 12 40 87.00 50.0 10 12 0 0 0 00 100<														0	-
S. Anal Sach Tei and Regard for Pay) 12 80						1									-
6 Annual Stack Test and Report for Najh 12 80															-
1. 1. 1.2 0 0.0 0 0.0 80 80 60 6. Annal Sack Test and Report (r NO) 1.2 0						_									\vdash
B. Annual State Test and Regort for CO ₁ 12 90 91 90 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>															
9. Respect State Text and Respond To State Fields 1 24 50 51.000 1 24 50 51.000 1 24 50 50.00 50 50.00															
Image of the grant HCD Add Set Set Set Set Set Set Set Set Set Set		12		\$7,000	- 40	1	12	0	0	0	0	40	40	0	
Dit nikä Fusk Andysis Mercury and HC. Content 5 60 0 0 0 80 90 0 11. Morthy fusk Andysis Mercury and HC. Content 5 80 80 10 10 0 0 0 0 80 80 0 12. Annal fure sp 12 80 82,175 80 1 12 0 0 0 0 80 80 0 1 15. Stable Singeoin: mortering plu (a) 10 80 84,130 1 10 0 0 0 80 80 0 1 10 0 0 0 80 80 0 1 10 0 0 0 0 80 80 0 1 10 0 0 0 0 80 80 0 1 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <	9. Repeat Stack Test and Report II Switch Fuels (for High and HCI)	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0	0	
11. Marthy field Analysis for Marcury and HC. Content 5 80 840 10 12 100 0 0 0 80 90 0 12. Lancial functions 12 400 12 10 0 0 0 80 80 0 1 10 0 0 0 80 80 0 1 10 0 0 0 0 80 80 0 0 10 10 10 10 0<		5													+
12. Armual Tune up 12 90 92,875 90 1 12 0 0 0 90 90 0 Ediability Segret multicing plan (4) 40 50 56 1 40 0 0 0 60 60 0 0 60 60 0 60 60 0 60 60 60 0 60 </td <td></td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td>		5													+
13. Continuos Paramete Montoring										-				U U	+
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PM (only sources greater han 280 mmBlu/n) Im Im </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>															-
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b) annal 10 80 90 <		10	* 0	* 0	#150.000	1	10	0	0	0	0	#0	*0	0	\vdash
O.2 Image I														•	
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m) annual 10 90 90 \$1,436 1 10 0 0 0 90 \$00		- 10	**	**	40 500		10					**	**		
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(for units with we strubbers) Image Image <t< td=""><td></td><td>10</td><td>\$0</td><td>\$0</td><td>\$1,436</td><td>1</td><td>10</td><td>0</td><td>0</td><td>0</td><td>0</td><td>\$0</td><td>\$0</td><td>0</td><td></td></t<>		10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0	0	
a) initial 10 \$0 \$0 \$2 \$23,00 1 10 0 0 0 \$0	Scrubber System Monitoring and Operation														
b) anual 10 \$0 \$0 \$0 0 0 0 0 \$								-		-				-	
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(sources that have fabric filters) Imila 10 SO \$\$\$		10	\$0	\$0	\$5,600	1	10	0	0	0	0	\$0	\$0	0	
b anual 10 \$0 </td <td>Bag Leak Detection System Operation (sources that have fabric filters)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Bag Leak Detection System Operation (sources that have fabric filters)														
Carbon Injection Monitoring System (all sources that use AC to control Hg) In	a) initial	10	\$0	\$0	\$25,500	1	10	0	0	0	0	\$0	\$0	0	
(all sources that use ACL to control Hg) Image	b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	
1 10 \$0 \$0 \$115,000 1 10 0 0 0 0 \$0<	Carbon Injection Monitoring System (all sources that use ACI to control Ho)														
b) anual 10 \$0 \$0 \$9,00 1 10 0 0 0 0 \$0 <th< td=""><td></td><td>10</td><td>\$0</td><td>\$0</td><td>\$115.000</td><td>1</td><td>10</td><td>0</td><td>0</td><td>0</td><td>0</td><td>\$0</td><td>\$0</td><td>0</td><td>-</td></th<>		10	\$0	\$0	\$115.000	1	10	0	0	0	0	\$0	\$0	0	-
C. Create Information na na </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>-</td>														0	-
D. Gather Information na na </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td>-</td> <td>-</td>								-	-	-	-			-	-
E. Report Preparation res															
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2) Notification of Compliance Status 8 \$0 \$0 1 8 0 0 0 0 \$0		2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	
3) Semi-annual Compliance Report 20 \$0 \$0 \$0 2 40 0 0 0 0 \$0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>1</td><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td><td></td></t<>						1	8							0	
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Reporting Subtrial Included in 3a Included in 3a <thincluded 3a<="" in="" th=""> Incl</thincluded>															
4. Record/seping Requirements Included in 3a										0					
A. Read Instructions Included in 3a ma									-		-				
B. Implement Activities na		Included in 3a													
C. Develop Record System na n															
D. Record Information Image: constraint of the stress of the															
1) Records of Operating Parameter Values 20 \$0 \$0 \$0 1 20 0 0 0 \$0															
2) Records of Startup, Shutdown, Maffunction 15 \$0 \$0 \$1 15 0 0 0 \$0 </td <td></td> <td>20</td> <td>\$0</td> <td>\$0</td> <td>\$0</td> <td>1</td> <td>20</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>\$0</td> <td>\$0</td> <td>0</td> <td></td>		20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	
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4) Records of Monitoring Device Calibrations 2 \$0 \$0 \$1 2 0 0 0 0 \$0															
5) Records of All Compliance Reports Submitted 2 \$0 \$0 \$0 2 4 0 0 0 \$0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td>															+
6) Records of Monthly Fuel Use 0.5 \$0 \$0 \$0 12 6 0 0 0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 0 0 \$0	5) Pecords of All Compliance Reports Submitted														+
E. Personnel Training 40 \$0 \$0 \$1 40 0 0 0 \$0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td>															+
F. Time for Audits na Image: Constraint of Audits Image: Constand to Audits Image: Constraint of Audits														U U	+
Recordkeeping Subtotal 0 0 0 \$0 \$0 0 <td></td> <td></td> <td>ΦU</td> <td>ΦU</td> <td>ΨU</td> <td>T</td> <td>40</td> <td>U</td> <td>U</td> <td>U</td> <td>U</td> <td>ΦU</td> <td>ΦU</td> <td>U</td> <td>+</td>			ΦU	ΦU	ΨU	T	40	U	U	U	U	ΦU	ΦU	U	+
		IId							0	0	0	\$0	0.2	0	+
Totais 0 0 0 \$0 \$0 0		-							-						+
	Totals								0	0	0	\$0	\$0	0	

a There are no new large liquid units expected to be constructed/reconstructed over the next 5 years

Table 5.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 3, New Large Liquid Fuel Units

Drade tem Origination of particle for all states Per Processor Responder Responder Per Processor Per Processor </th <th></th> <th></th> <th></th>			
I. AgeLacions na	(M) Total Number of Responses per	Number of Responses pe	er of ses per
2. Survey and Studies na na </td <td>Year (E X G)</td> <td>Year (E X G)</td> <td>X G)</td>	Year (E X G)	Year (E X G)	X G)
B. Report Requirements A. Read and United and Nuk Requirements A. Second Contrastration Nuk Requirements A. Second Contrastratis Nuk Requiremen			
B. Report Requirements A. Read and United and Nuk Requirements A. Second Contrastration Nuk Requirements A. Second Contrastratis Nuk Requiremen			
A. Redina Guidensinal Rule Requirements 40 50 50 50 1 40 0 0 0 0 90 90 1. Indial Stack Test and Report (for Tay) 12 50 85,000 80 1 12 0 0 0 0 0 60			
B. Regard Ackines Interf Sector for PM 12 50 50.00 50 11 12 0 </td <td>0</td> <td>0</td> <td></td>	0	0	
1. Insidi Stack Test and Report (or FM) 12 90 85.00 90 1 12 0 0 0 0 80 80 2. Insidi Stack Test and Report (or FA) 12 80 80.000 80 1 12 0 0 0 0 80 80 3. Annual Stack Test and Report (or FA) 12 80 82.000 80 1 12 0 0 0 0 80 80 10 12 0 0 0 0 80 80 10 12 0 0 0 0 80 80 80 80 80 80 80 11 12 0 0 0 0 0 80 80 80 12 10 10 10 10 10 10 10 10 10 10 10 10 0 0 0 10 80 10 10 10 10 10 10 10			
2. Initial Stack Test and Report (or Hg) 12 80.00 80.00 1 12 0 0 0 80 80 3. Initial Stack Test and Report (or HG) 12 80 85,000 80 1 12 0 0 0 0 80 80 4. Annual Stack Test and Report (or HG) 12 80 85,000 80 1 12 0 0 0 0 80 80 6. Annual Stack Test and Report (or HG) 12 80 83,000 80 1 12 0 0 0 0 80 80 8. Annual Stack Test and Report (or HG) 12 80 81,000 80 1 12 0 0 0 0 0 80 80 10. Initial Analysis M Mercary and HC. Contert 5 80 4800 80 1 12 0 0 0 0 0 80 80 12. Annual Test and Report for HG 10 80 80 1	0		
S. Insia Stack Test and Report (or HG) 12 50 \$7,00 80 1 12 0 0 0 80 80 S. Annal Stack Test and Report (or PA) 12 50 \$7,000 80 11 12 0 0 0 0 80 80 S. Annal Stack Test and Report (or PA) 12 50 85,000 80 1 12 0 0 0 0 80 80 B. Repart Stack Test and Report (or PC) 12 50 87,000 80 1 12 0 0 0 0 80 80 B. Repart Stack Test and Report (or PC) 12 50 87,000 80 1 24 0 <			
Image Stack Test and Report (for CD) 12 50 85:00 80 1 12 0 0 0 50 800 6. Annual Stack Test and Report (for PM) 12 50 85:000 80 1 12 0 0 0 0 80 80 6. Annual Stack Test and Report (for CD) 12 80 85:000 80 1 12 0 0 0 0 0 80 80 1. Annual Stack Test and Report (for CD) 12 80 81:000 80 1 12 0 0 0 0 0 0 80 80 1. Monthy Fach Analys for Mexcury and HCL Content 5 80 80:0 12 60 0 0 0 0 80 80 1.1. Monthy Fach Analys for Mexcury and HCL Content 5 80 80:0 12 10 0 0 0 0 80 80 12 10 0 0 0 80 80 <td< td=""><td>0</td><td></td><td></td></td<>	0		
S. Annual Stack Test and Report for Ph0 12 80 1 12 0	0		
6 Annual Sack Test and Report for Hoj) 12 50 86.000 80 1 12 0 </td <td>0</td> <td></td> <td></td>	0		
T. Annual Stack Test and Report (for HC)) 12 90 8.400 50 1 12 0 0 0 0 30 50 9. Repeat Stack Test and Report IS Switch Fuels (bit gring in HCi) 24 50 51.000 50 1 24 0 0 0 0 50 50 10. Monthly Field Analysis for Morcury and HCL Content 12. Annual Ture-up 5 50 5400 50 1 2.6 0 0 0 0 50 50 12. Annual Ture-up 12 50 50 1 1 1 0 0 0 0 0 50 50 1 1 0 <td>0</td> <td></td> <td></td>	0		
B. Annual Stack Test and Report (for CO) 12 90 97.000 90 1 12 0 <th< td=""><td>0</td><td></td><td></td></th<>	0		
9. Ropeat State. Tota and Report if Switch Puils (of trig and HCI). 24 5 50 1 24 0 <	0	0	
Identify and HC) 24 90 91,0000 800 1 24 0 0 0 0 0 0 800 800 10. Initial Analysis for Mercury and HCL Content 5 800 800 12 60 0 0 0 80 800 11. Monthly Fail Analysis for Mercury and HCL Content 5 80 8400 80 12 60 0 0 0 80 800 13. Ground Names 82.075 80 1 10 0 0 0 0 80 800 80 800 80 800	0	0	
Identify and HC) 24 90 91,0000 800 1 24 0 0 0 0 0 0 800 800 10. Initial Analysis for Mercury and HCL Content 5 800 800 12 60 0 0 0 80 800 11. Monthly Fail Analysis for Mercury and HCL Content 5 80 8400 80 12 60 0 0 0 80 800 13. Ground Names 82.075 80 1 10 0 0 0 0 80 800 80 800 80 800			
110. Intel Fuel Analysis for Mercury and HCL Content 5 80 8400 80 12 60 0 0 0 80 80 111. Monthy Fuel Analysis for Mercury and HCL Content 5 80 82.875 80 11 12 0 0 0 80 80 122. Annual Ture-up 12 80 82.875 80 1 12 0 0 0 0 80 80 123. Continuos Paranteel Montoring 10 80 83.4100 1 10 0 0 0 0 90 80 83.4100 1 10 0 0 0 0 90 80 83.4100 1 10 0 0 0 0 0 90 80 83.100 1 10 0 0 0 0 80 80 82.823 1 10 0 0 0 80 80 80 80 80 80 80 80 8	0	0	
11. Monthy Fuel Analysis for Mercury and HCL Content 5 80 8400 90 12 60 0 0 0 80 80 12. Annual Tune-up 12 50 52,875 50 1 12 0 0 0 0 80 50 13. Continuous Parameter Monitoring 40 50 1 40 0 0 0 80 50 13. Continuous Parameter Monitoring 10 50 50 53,100 1 40 0 0 0 50 50 10 30 50 51,4700 1 10 0 0 0 80 50 1 9) annual 10 50 50 55,500 1 10 0 0 0 0 50 <	0		
12. Annual Tune-up 12 50 \$2.75 50 1 12 0 0 0 \$0	0		
13. Continuos Framerer Monitoring <th< td=""><td>0</td><td></td><td></td></th<>	0		
Establish Site-specific monitoring plan (all) 40 50 1 40 0 0 0 80 \$0 a) initial 10 \$0 \$0 \$43,00 11 10 0 <t< td=""><td>5</td><td></td><td>-+</td></t<>	5		-+
Opacity r </td <td>0</td> <td></td> <td></td>	0		
a) initial 10 \$0 \$43,100 1 10 0	0		
b) anual 10 80 81 700 1 10 0 0 0 0 50 50 50 a) initial 10 50 50 \$158,000 1 10 0 0 0 0 50 \$50 \$50 b) anual 10 50 \$0 \$158,000 1 10 0 0 0 0 \$50 \$50 \$50 c) anual 10 50 \$0 \$14,36 1 10 0 0 0 0 \$50			
PM (only sources greater than 250 mmBu/hr) Image Image <td>0</td> <td></td> <td></td>	0		
a) initial 10 \$0 \$0 \$0 \$0 0 0 0 0 0 0 \$	0	0	
b) annual 10 \$0			
Q2 m	0	0	
a) initial 10 50 90 \$\$1,23 1 10 0 0 0 0 \$0	0	0	
b) annual 10 \$0 \$0 \$1,436 1 10 0 0 0 \$0			
b) annual 10 \$0 \$0 \$1,436 1 10 0 0 0 \$0	0	0	
Scruber System Monitoring and Operation (for units with wet scrubbers) Image: constraint of the sc	0	0	
(for units with wet scrubbers)			
a) initial 10 \$0 \$0 \$24,300 1 10 0 0 0 0 \$0 \$0 \$0 Bag Leak Detection System Operation (sources that have fabric filters) 10 \$0			
b) annual 10 \$0 \$0 \$5,600 1 10 0 0 0 0 \$0 <	0		
Bag Leak Detection System Operation (sources that have fabric filters) Image Ima	0		
(sources that have fabric filters)	0	0	
b) annual 10 \$0			
Carbon Injection Monitoring System (all sources that use ACI to control Hg) Image Image <t< td=""><td>0</td><td></td><td></td></t<>	0		
(all sources that use ACI to control Hg)	0	0	
b) annual 10 \$0			
b) annual 10 \$0	0	0	
C. Create Information na na </td <td>0</td> <td></td> <td></td>	0		
D. Gather Information na Image: constraint of the state of the st			
E. Report Preparation m			
1) Initial Notification that Source is Subject 2 \$0 \$0 \$0 1 2 0 0 0 0 0 \$0			-+
2) Notification of Compliance Status 8 \$0 \$0 1 8 0 0 0 0 \$0	0		-+
3) Semi-annual Compliance Report 20 \$0 \$0 \$0 0 0 0 0 0 0 \$0 <th< td=""><td></td><td></td><td></td></th<>			
4) Affirmative Defense 30 \$0 \$0 \$0 1 30 0 0 0 0 0 0 \$0	0		
Reporting Subtal Included in 3a Inclu	0		
4. Recordkeeping Requirements Include in 3a	0		
A. Read instructions Included in 3a I	0	0	
B. Implement Activities na Implement Activities na Implement Activities Impl			
C. Develop Record System na n			
D. Record Information -			
1) Records of Operating Parameter Values 20 \$0 \$0 1 20 0 0 0 \$0 \$0 \$0 2) Records of Startup, Shutdown, Malfunction 15 \$0 \$0 \$0 1 15 0 0 0 \$0 \$0 \$0 \$0 \$0			
2) Records of Startup, Shutdown, Malfunction 15 \$0 \$0 \$0 1 15 0 0 0 \$0 \$0 \$0			
2) Records of Startup, Shutdown, Malfunction 15 \$0 \$0 \$0 1 15 0 0 0 \$0 \$0 \$0	0	0	
	0	0	
3) Records of Stack Tests 2 \$0 \$0 \$0 1 2 0 0 0 \$0 \$0 \$0	0		
J Recurs of stark resist 2 30 30 1 2 0 0 0 30 30 4) Records of Monitoring Device Calibrations 2 \$0 \$0 \$1 2 0 0 0 0 \$0 \$0	0		
4) records of All Compliance Reports Submitted 2 \$0 \$0 1 2 0 0 0 0 \$0 \$0 5) Records of All Compliance Reports Submitted 2 \$0 \$0 \$0 2 4 0 0 0 \$0 \$0	0		
a) records of Monthly Fuel Use 0.5 \$0 \$0 2 4 0 0 0 0 30 \$0 6) Records of Monthly Fuel Use 0.5 \$0 \$0 \$0 12 6 0 0 0 \$0 \$0	0		
E. Personnel Training 40 \$0 \$0 1 40 0 0 0 \$0 \$0	0	0	
F. Time for Audits na na na na na na na na na na na na na			\longrightarrow
Recordkeeping Subtolal 0 0 0 \$0 \$0 \$0	0	-	
Totals 0 0 0 \$0 \$0	0	0	

a There are no new large liquid units expected to be constructed/reconstructed over the next 5 years

Table 6.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards

for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 1, New Large Gas Fuel Units

10	r Hazardous A	All Pollularits	S (NESHAP) I	or industrial	, Commerciai	, and institu	tional Bollers	s - rear 1,	New Larg	e Gas Fuel Of	iits			
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na	Occurrence	Occurrence	Occurrence	rerrea		rerrea	, (0)	7 0.1)	X.00)	Terrea	[[BICID)XEXO]	, (0)	<u> </u>
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	33	1,320	132	66	\$143,586	\$0	0	a
B. Required Activities														
1. Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	е
2. Initial Stack Test and Report (for Hg)	12	\$0 \$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	е
3. Initial Stack Test and Report (for HCl) 4. Initial Stack Test and Report (for CO)	12	\$0 \$0	\$8,000 \$7.000	\$0 \$0	1	12 12	0	0	0	0	\$0 \$0	\$0 \$0	0	e e
6. Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0 \$0	\$0	0	a
7. Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	a
8. Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	a
9. Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0	0	a
 Repeat Stack Test and Report if Switch Fuels (for Hg and HCI) 	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0	0	a,e
12. Initial Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0	0	a,f
Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0	0	a,f
14. Continuous Parameter Monitoring														k
Establish Site-specific monitoring plan (all) Opacity	40	\$0		\$0	1	40	0	0	0	0	\$0	\$0	0	a
a) initial	10	\$0	\$0	\$43,100	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$14,700	1	10	0	0	0	0	\$0 \$0	\$0	0	a
PM (only sources greater than 250 mmBtu/hr)	10	40	40	\$14,700	-	10	0	- ·	0	0	Ψΰ	40	0	- u
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0	0	a
02														
a) initial	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0	0	a
Scrubber System Monitoring and Operation (for units with wet scrubbers)														
a) initial	10	\$0 \$0	\$0 \$0	\$24,300 \$5,600	1	10 10	0	0	0	0	\$0 \$0	\$0 \$0	0	a
b) annual Bag Leak Detection System Operation (sources that have fabric filters)	10	\$0	50	\$5,600	1	10	0	0	0	0	\$0	\$0	0	a
a) initial	10	\$0	\$0	\$25,500	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	a
15. Annual Tune-up	12	\$0	\$2,875	\$0	1	12	262	3,144	314	157	\$341,996	\$753,250	0	c
16. Mercury Fuel Spec Analysis	5	\$0	\$200	\$0	12	60	0	0	0	0	\$0	\$0	0	h
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation	-	*0	**	* 0					7		#7.470	*0		
1) Initial Notification that Source is Subject 2) Notification of Compliance Status	2	\$0 \$0	\$0 \$0	\$0 \$0	1	2 8	33 33	66 264	26	3 13	\$7,179 \$28,717	\$0 \$0	33 33	a a
3) Annual Compliance Report	20	\$0	\$0	\$0	1	20	33	660	66	33	\$71,793	\$0	33	a, e
4) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0	\$0	0	a, e
5) Notification of Alternative Fuel Use	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	i
6) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	0	\$0	\$0	0	j
Reporting Subtotal								5,454	545	273	\$593,272	\$753,250	99	
4. Recordkeeping Requirements														
A. Read Instructions	Included in 3a													\vdash
B. Implement Activities C. Develop Record System	na													d
D. Record Information	IIa													u
1) Records of Operating Parameter Values	20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	a
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	a
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
 Records of Monitoring Device Calibrations 	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
Submitted	2	\$0	\$0	\$0	2	4	33	132	13	7	\$14,359	\$0	0	a, e
6) Records of All Semi-Annual Compliance Reports														
Submitted	2	\$0	\$0	\$0	2	4	0	0	0	0	\$0	\$0	0	a, e
7) Records of Monthly Fuel Use	0.5	\$0	\$0	\$0	12	6	262	1,572	157 7	79 3	\$170,998	\$0	0	a
8) Records of Annual Tune-up E. Personnel Training	0.25	\$0 \$0	\$0 \$0	\$0 \$0	1	0.25 40	262	66 1,320	132	66	\$7,125 \$143,586	\$0 \$0	262 0	c g
F. Time for Audits	na	40	40		-			1,020	102	00	\$140,000			9
Recordkeeping Subtotal	ild							3,090	309	154	\$336,068	\$0		\vdash
														<u> </u>
Totals						I		8,544	854	427	\$929,341	\$753,250	99	

a In order to calculate a per year estimate of the number of boilers and facilities required to meet these rule requirements, the number of projected boilers and facilities is each divided by 3. b A one-time requirement.

c All large boilers require annual tune-ups.

d Assumes facility must already maintain records on boiler insurance and/or maintenance schedule as part of their operations. No new record system would be required.

e Only facilities with process gas (gas 2 units) subject to numerical emission limits are expected to be required to submit semi-annual compliance reports and conduct testing and monitoring (There will not be any new process gas units). Natural gas and refinery gas units are required to submit reports annually and conduct a tune-up. I Process gas units are required to submit reports annually and conduct a tune-up. I Process gas units are expected to demonstrate compliance with a stack test instead of a fuel analysis. g For on-going training activities to keep personnel updated in order to implement compliance activities.

Table 6.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards

for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 2, New Large Gas Fuel Units

I		All Foliulai	IS (NESHAF)	ioi muusu	ai, commerci	iai, anu msu	tutional Bolle	15 - Teal A	L, INEW Lai	ye Gas Fuel (
	(A) Respondent Hours per Occurrence (Technical	(B) Certified Energy Audit Cost per	(C) Stack Testing and Fuel Analysis Cost Per	(D) Other Non-Labor Costs Per	(E) Number of Occurrences Per Respondent	(F) Technical Hours per Respondent Per Year	(G) Number of Respondents	(H) Technical Hours per Year @ \$98.20 (F	(I) Clerical Hours per Year @ \$48.53 (H	(J) Management Hours per Year @ \$114.49 (H	(K) Total Labor Costs	(L) Total Non- Labor Capital Costs Per Year	(M) Total Number of Responses per Year (E	Footnotes
Burden Item	hours)	Occurrence	Occurrence	Occurrence	Per Year	(A X E)	Per Year	X G)	X 0.1)	X .05)	Per Year	[(B+C+D)xExG]	X G)	ъ
1. Applications	na													
Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	33	1,320	132	66	\$143,586	\$0	0	а
B. Required Activities														
 Initial Stack Test and Report (for PM) 	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	е
Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	е
Initial Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	е
Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0	0	е
Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	а
Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	а
Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	a
Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0	0	а
11. Repeat Stack Test and Report if Switch Fuels														
(for Hg and HCI)	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0	0	a,e
12. Initial Fuel Analysis for Mercury and HCL Content		\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0	0	a,f
Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0	0	a,f
14. Continuous Parameter Monitoring			\$100				<u> </u>				\$ 5	40		k
Establish Site-specific monitoring plan (all)	40	\$0		\$0	1	40	0	0	0	0	\$0	\$0	0	a
Opacity	40	40		40	-	40	0	0	Ŭ	Ū	40	40	0	u
a) initial	10	\$0	\$0	\$43,100	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$14,700	1	10	0	0	0	0	\$0	\$0	0	a
PM (only sources greater than 250 mmBtu/hr)	10	40	ΨŪ	\$14,700	-	10	0			•	40	40	0	u
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0	0	a
	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0	0	
b) annual O2	10	ΦU	ΦU	\$30,100	1	10	0	0	0	0	ΦU	ΦU	0	a
	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0	0	
a) initial	10					10	-	, v	-		\$0 \$0	\$0 \$0	0	a
b) annual	10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0	0	a
Scrubber System Monitoring and Operation (for units with wet scrubbers)										-				
a) initial	10	\$0	\$0	\$24,300	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$5,600	1	10	0	0	0	0	\$0	\$0	0	а
Bag Leak Detection System Operation														
(sources that have fabric filters)														
a) initial	10	\$0	\$0	\$25,500	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0	0	a
15. Annual Tune-up	12	\$0	\$2,875	\$0	1	12	524	6,288	629	314	\$683,993	\$1,506,500	0	С
16. Mercury Fuel Spec Analysis	5	\$0	\$200	\$0	12	60	0	0	0	0	\$0	\$0	0	h
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
 Initial Notification that Source is Subject 	2	\$0	\$0	\$0	1	2	33	66	7	3	\$7,179	\$0	33	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	33	264	26	13	\$28,717	\$0	33	a
3) Annual Compliance Report	20	\$0	\$0	\$0	1	20	66	1,320	132	66	\$143,586	\$0	66	a, e
 Semi-annual Compliance Report 	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0	\$0	0	a, e
5) Notification of Alternative Fuel Use	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	i
6) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	0	\$0	\$0	0	j
Reporting Subtotal								9,258	926	463	\$1,007,062	\$1,506,500	132	
4. Recordkeeping Requirements														
A. Read Instructions	Included in 3a											1		
B. Implement Activities	na											l		
C. Develop Record System	na													d
D. Record Information														-
1) Records of Operating Parameter Values	20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	a
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	a
3) Records of Starkup, Shudowit, Manufiction	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
4) Records of Monitoring Device Calibrations	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
	2			\$0 \$0	2	4						\$0 \$0	0	
Submitted	2	\$0	\$0	ΨU	2	4	66	264	26	13	\$28,717	\$U	U	a, e
 Records of All Semi-Annual Compliance Reports Submitted 	2	\$0	\$0	\$0	2	4	0	o	o	0	\$0	\$0	0	a, e
Records of Monthly Fuel Use	0.5	\$0	\$0	\$0	12	6	524	3,144	314	157	\$341,996	\$0	0	a
8) Records of Annual Tune-up	0.25	\$0	\$0	\$0	1	0.25	524	131	13	7	\$14,250	\$0	524	С
E. Personnel Training	40	\$0	\$0	\$0	1	40	33	1,320	132	66	\$143,586	\$0	0	g
F. Time for Audits	na								-		.,			r 1
	ia							1.050	400		A500 555			
Recordkeeping Subtotal								4,859	486	243	\$528,550	\$0		
Totals								14,117	1,412	706	\$1,535,612	\$1,506,500	132	

a In order to calculate a per year estimate of the number of boilers and facilities required to meet these rule requirements, the number of projected boilers and facilities is each divided by 3.

b A one-time requirement.

c Energy Audits are a requirement for existing units only.

d Assumes facility must already maintain records on boiler insurance and/or maintenance schedule as part of their operations. No new record system would be required. e Only facilities with process gas (gas 2 units) subject to numerical emission limits are expected to be required to submit semi-annual compliance reports and conduct testing and monitoring (There will not be any new process gas units). Natural gas and refinery gas units are required to submit reports annually and conduct a tune-up.

ges units are required source (process gas a units are expected to demonstrate complicate a unit op.) I Process gas units are expected to demonstrate compliance with a stack test instead of a fuel analysis. g For on-going training activities to keep personnel updated in order to implement compliance activities. h Assume all units will fire natural gas, so fuel spec analysis not necessary.

i Assumed no units would fire an alternative fuel.

Assumed no and inclusive clarace clarace visual to the first three years after promulgation. If a source were to meet the notification, reporting, and recordseeping requirements of affirmative defense, it would be approximately 30 hours or \$3.100 in labor burden. k Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated into the burden estimates for the final rule.

Table 6.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards

for Honordour ants (NESHAP) for Industrial, C Year 3, New Large Gas Fuel Units

to	r Hazardous /	Air Pollutants	s (NESHAP) f	or Industria	l, Commercial	l, and Institu	tional Boilers	- Year 3,	New Large	Gas Fuel Un	its			
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Stack Testing and Fuel Analysis Cost Per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year [(B+C+D)xExG]	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	33	1,320	132	66	\$143,586	\$0	0	a
B. Required Activities 1. Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	e
2. Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	e
3. Initial Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	e
4. Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0	0	e
6. Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0	0	a
Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	a
Annual Stack Test and Report (for HCI)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0	0	а
Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0	0	a
 Repeat Stack Test and Report if Switch Fuels 														
(for Hg and HCI)	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0	0	a,e
12. Initial Fuel Analysis for Mercury and HCL Content	5	\$0 \$0	\$400 \$400	\$0 \$0	1 12	5 60	0	0	0	0	\$0 \$0	\$0 \$0	0	a,f a,f
13. Monthly Fuel Analysis for Mercury and HCL Content 14. Continuous Parameter Monitoring	5	ΦU	Φ4UU	ΦU	12	00	U	U	U	0	ΦU	ΦU	0	a,r k
Establish Site-specific monitoring plan (all)	40	\$0		\$0	1	40	0	0	0	0	\$0	\$0	0	a
Opacity	-10	<i></i>		\$ 0			Ů	0	0	Ŭ	\$ 0	\$ 0		- u
a) initial	10	\$0	\$0	\$43,100	1	10	0	0	0	0	\$0	\$0	0	а
b) annual	10	\$0	\$0	\$14,700	1	10	0	0	0	0	\$0	\$0	0	а
PM (only sources greater than 250 mmBtu/hr)														
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0	0	a
02	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0	0	a
a) initial b) annual	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0	0	a
Scrubber System Monitoring and Operation	10	4 0	40	φ1,430	1	10	0	0	0	0		φυ	0	a
(for units with wet scrubbers)														
a) initial	10	\$0	\$0	\$24,300	1	10	0	0	0	0	\$0	\$0	0	a
b) annual	10	\$0	\$0	\$5,600	1	10	0	0	0	0	\$0	\$0	0	а
Bag Leak Detection System Operation														
(sources that have fabric filters)	10	**	**	405 500	1	10	0		0		**	**	0	
a) initial b) annual	10	\$0 \$0	\$0 \$0	\$25,500 \$9,700	1	10 10	0	0	0	0	\$0 \$0	\$0 \$0	0	a a
15. Annual Tune-up	10	\$0	\$2,875	\$0	1	10	785	9,420	942	471	\$1,024,684	\$2,256,875	0	c a
16. Mercury Fuel Spec Analysis	5	\$0	\$200	\$0	12	60	0	0	0	0	\$0	\$0	ō	h
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	33	66	7	3	\$7,179	\$0	33	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	33	264	26	13	\$28,717	\$0	33	a
3) Annual Compliance Report 4) Semi-annual Compliance Report	20	\$0 \$0	\$0 \$0	\$0 \$0	2	20 40	99 0	1,980	198 0	99 0	\$215,379 \$0	\$0 \$0	99	a, e a, e
5) Notification of Alternative Fuel Use	5	\$0	\$0	\$0	1		0	0	0	0	\$0	\$0	0	a, e i
6) Affirmative Defense	30	\$0	\$0	\$0	1	30	0	0	0	ő	\$0	\$0	0	i i
Reporting Subtotal								13,050	1,305	653	\$1,419,546	\$2,256,875	165	
 Recordkeeping Requirements 														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System D. Record Information	na					-								d
1) Records of Operating Parameter Values	20	\$0	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	a
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	a
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
4) Records of Monitoring Device Calibrations	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
5) Records of All Annual Compliance Reports Submitted	2	\$0	\$0	\$0	2	4	99	396	40	20	\$43,076	\$0	0	a, e
6) Records of All Semi-Annual Compliance Reports														
Submitted	2	\$0	\$0	\$0	2	4	0	0	0	0	\$0	\$0	0	a, e
7) Records of Monthly Fuel Use	0.5	\$0 \$0	\$0 \$0	\$0	12	6	785 785	4,710	471	236 10	\$512,342	\$0 \$0	0 785	a
8) Records of Annual Tune-up E. Personnel Training	0.25	\$0 \$0	\$0 \$0	\$0 \$0	1	0.25	785	196 1,320	20 132	10 66	\$21,348 \$143,586	\$0 \$0	785	c g
		ψυ	ΨŪ	40	-	+0		1,320	132		\$143,300			9
F. Time for Audits	na					-			0			4-		
Recordkeeping Subtotal								6,622	662	331	\$720,352	\$0		
Totals								19,672	1,967	984	\$2,139,898	\$2,256,875	165	

a In order to calculate a per year estimate of the number of boilers and facilities required to meet these rule requirements, the number of projected boilers and facilities is each divided by 3.

b A one-time requirement.

c Energy Audits are a requirement for existing units only.

deformation of the set of th

h Assume all units will fire natural gas, so fuel spec analysis not necessary.

i Assumed no units would fire an alternative fuel. j 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.

k Estimated number of units expected to require each type of parameter monitoring are consistent with the estimated number of units expected to install controls, as outlined in the memorandum: "Revised (November 2011) Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants – Major Source." Small edits to the MACT floor dataset were made after the impacts analysis and ICR burden estimates are prepared. These edits are not reflected in the ICR or impacts analysis for this proposal, but the changes will be incorporated into the burden estimates for the final rule.

Table 7.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 1, Existing Small and Limited Use Solid Fuel Units

Ion mazarda						l Don	1001 - 1001 - 1,1							1
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total	(L) Total Non-Labor Capital Costs Per Year ((B+C+D)x ExG)	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	5	200	20	10	\$21,756	\$0	0	a
B. Required Activities														
1. Conduct Energy Audit														
a) Commerical	20	\$854	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b,c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b,c, d
2. Biennual Tune-Up	12	\$0	\$2,228	\$0	0.5	6	0	0	0	0	\$0	\$0	0	C
C. Create Information	na		. , -					-		-			-	
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	5	10	1	1	\$1,088	\$0	5	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	c
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	0	0	0	0	\$0	\$0	0	f
4) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	c
Reporting Subtotal		+ 0	+•	**	-			210	21	11	\$22,843	\$0	5	-
4. Recordkeeping Requirements											+22,010	+0		
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													е
D. Record Information	na													
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	0	0	0	0	\$0	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	g
3) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	0	0	0	0	\$0	\$0	0	C
E. Personnel Training	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	h
F. Time for Audits	na													
Recordkeeping Subtotal								0	0	0	\$0	\$0	0	
Totals								210	21	11	\$22,843	\$0	5	

a Number of respondents based on number of existing small and limited use solid fuel boilers which includes biomass and coal units less than 10 mmBtu/hr or operating less than 876 hours.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution facility NAICS codes in the 2008 combustion unit survey database, 12% of facilities are in the commercial sector while the remaining 88% of facilities are in the industrial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, no burden is assumed in year 1.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals. It is assumed that all will be industrial facilities since industrial is the vast majority of projected units.

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

f Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

g Small units are not required to maintain records on startup, shutdown and malfunction.

Table 7.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 2, Existing Small and Limited Use Solid Fuel Units

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Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non-Labor Capital Costs Per Year ((B+C+D)x ExG)	(M) Total Number of Responses per Year (E X G)	of
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	a
B. Required Activities														
1. Conduct Energy Audit														
a) Commerical	20	\$854	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b,c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	3	60	6	3	\$6,527	\$54,876	0	b,c, d
2. Biennual Tune-Up	12	\$0	\$2,228	\$0	0.5	6	18	108	11	5	\$11,748	\$40,104	0	С
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	с
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	0	0	0	0	\$0	\$0	0	f
4) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	с
Reporting Subtotal								168	17	8	\$18,275	\$94,980	0	
4. Recordkeeping Requirements										-	, .	,		
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													е
D. Record Information														
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	0	0	0	0	\$0	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	g
 Biennial Tune-Up Records 	0.5	\$0	\$0	\$0	0.5	0.25	0	0	0	0	\$0	\$0	0	С
E. Personnel Training	40	\$0	\$0	\$0	1	40	3	120	12	6	\$13,053	\$0	0	h
F. Time for Audits	na													
Recordkeeping Subtotal								120	12	6	\$13,053	\$0	0	
Totals								288	29	14	\$31,328	\$94,980	0	

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1. Energy audit burdens for this unit will be accounted for in year 2.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution facility NAICS codes in the 2008 combustion unit survey database, 12% of facilities are in the commercial sector while the remaining 88% of facilities are in the industrial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements will not begin until year 3 of this ICR. Annualized cost of \$2228 for a tune-up is calculated considering a biennual schedule.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals. It is assumed that all will be industrial facilities since industrial is the vast majority of projected units.

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

f Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

g Small units are not required to maintain records on startup, shutdown and malfunction.

Table 7.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 3, Existing Small and Limited Use Solid Fuel Units

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Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non- Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	Year @	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	Year @	(K) Total Labor Costs Per Year	(L) Total Non-Labor Capital Costs Per Year ((B+C+D)x ExG)	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	a
B. Required Activities														
1. Conduct Energy Audit														
a) Commerical	20	\$854	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b,c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	2	40	4	2	\$4,351	\$36,584	0	b,c, d
2. Biennual Tune-Up	12	\$0	\$2,228	\$0	0.5	6	18	108	11	5	\$11,748	\$40,104	0	С
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	5	40	4	2	\$4,351	\$0	5	с
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	5	13	1	1	\$1,360	\$0	3	f
4) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	5	25	3	1	\$2,719	\$0	5	с
Reporting Subtotal	-					-	-	226	23	11	\$24,529	\$76,688	13	-
4. Recordkeeping Requirements											+= .,===			
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													е
D. Record Information	ina													
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	5	5	1	0	\$544	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	g
3) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	36	9	1	0	\$979	\$0	0	С
E. Personnel Training	40	\$0	\$0	\$0	1	40	2	80	8	4	\$8,702	\$0	0	h
F. Time for Audits	na													
Recordkeeping Subtotal								94	9.4	4.7	\$10,225	\$0	0	
Totals								320	32	16	\$34,754	\$76,688	13	

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution facility NAICS codes in the 2008 combustion unit survey database, 12% of facilities are in the commercial sector while the remaining 88% of facilities are in the industrial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements will not begin until year 3 of this ICR.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals. It is assumed that all will be industrial facilities since industrial is the vast majority of projected units.

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

f Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

g Small units are not required to maintain records on startup, shutdown and malfunction.

Table 8.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 1, Existing Small and Limited Use Liquid Fuel Units

				,	inererai, and i			_,						
	(A) Respondent Hours per Occurrence (Technical	(B) Certified Energy Audit Cost per	Tune-Up Cost	(D) Other Non-Labor Costs Per	(E) Number of Occurrences Per Respondent	Hours per Respondent Per Year	(G) Number of Respondents	(H) Technical Hours per Year @ \$98.20 (F X		(J) Management Hours per Year @ \$114.49 (H	(K) Total Labor Costs		Number of Responses per Year (E X	Footnotes
Burden Item	hours)	Occurrence	per Occurrence	Occurrence	Per Year	(A X E)	Per Year	G)	X 0.1)	X .05)	Per Year	G)	G)	ш
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	43	1,720	172	86	\$187,097	\$0	0	a
B. Required Activities														
 Conduct Energy Audit 														
a) Commerical	20	\$854	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b, c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b, c, d
2. Biennual Tune-Up	12	\$0	\$2,228	\$0	0.5	6	0	0	0	0	\$0	\$0	0	C, f
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	43	86	9	4	\$9,355	\$0	43	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	С
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	0	0	0	0	\$0	\$0	0	C, f
4) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	С
Reporting Subtotal								1,806	181	90	\$196,452	\$0	43	
4. Recordkeeping Requirements														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													е
D. Record Information														
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	0	0	0	0	\$0	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	c, g
Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	0	0	0	0	\$0	\$0	0	C, f
E. Personnel Training	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	h
F. Time for Audits	na													
Recordkeeping Subtotal								0	0	0	\$0	\$0	0	
Totals								1,806	181	90	\$196,452	\$0	43	

a Number of respondents based on number of existing small and limited use liquid fuel boilers which includes units less than 10 mmBtu/hr or operating less than 876 hours.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 88% of facilities are in the industrial sector while the remaining 12% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, no burden is assumed in year 1.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals.

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

f Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

g Small units are not required to maintain records on startup, shutdown and malfunction.

Table 8.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial. Commercial. and Institutional Boilers - Year 2. Existing Small and Limited Use Liquid Fuel Units

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Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	Number of Responses	-ootnotes
1. Applications	na							,	,	,		,	,	+
2. Surveys and Studies	na													-
3. Reporting Requirements														-
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	а
B. Required Activities								-		-			-	-
1. Conduct Energy Audit														-
a) Commerical	20	\$854	\$0	\$0	1	20	3	60	6	3	\$6,527	\$2,562	0	b, c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	19	380	38	19	\$41,335	\$347,548	0	b, c, d
2. Biennual Tune-Up	12	\$0	\$2,228	\$0	0.5	6	180	1,080	108	54	\$117,480	\$401,040	0	C, f, i
C. Create Information	na							,			. ,	,		
D. Gather Information	na													+
E. Report Preparation														+
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	а
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	с
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	0	0	0	0	\$0	\$0	0	C, f
4) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	C
Reporting Subtotal								1,520	152	76	\$165,342	\$751,150	0	
4. Recordkeeping Requirements														
A. Read Instructions	Included in 3a													-
B. Implement Activities	na													-
C. Develop Record System	na													е
D. Record Information														
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	0	0	0	0	\$0	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	c, g
3) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	0	0	0	0	\$0	\$0	0	C, f
E. Personnel Training	40	\$0	\$0	\$0	1	40	22	880	88	44	\$95,724	\$0	0	h
F. Time for Audits	na													
Recordkeeping Subtotal								880	88	44	\$95,724	\$0	0	
Totals								2,400	240	120	\$261,066	\$751,150	0	

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 88% of facilities are in the industrial sector while the remaining 12% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements will not begin until year 3 of this ICR.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals.

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

f Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

g Small units are not required to maintain records on startup, shutdown and malfunction.

h For on-going training activities to keep personnel updated in order to implement compliance activities.

i Some very small boilers firing light liquid fuels qualify for tune-ups every five years, however they would still incur an initial tune-up. For the time period of this ICR, there will not be a difference in burden associated with biennial vs 5-year tune-ups for existing units.

Table 8.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial. Commercial. and Institutional Boilers - Year 3. Existing Small and Limited Use Liquid Fuel Units

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Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	Year @	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG	(M) Total Number of Responses per Year (E X G)	-ootnotes
1. Applications	na					()		- /				,	-/	<u> </u>
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	а
B. Required Activities				-										
1. Conduct Energy Audit														
a) Commerical	20	\$854	\$0	\$0	1	20	3	60	6	3	\$6,527	\$2,562	0	b, c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	18	360	36	18	\$39,160	\$329,256	0	b, c, d
2. Biennual Tune-Up	12	\$0	\$2,228	\$0	0.5	6	180	1,080	108	54	\$117,480	\$401,040	0	c, f, i
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	а
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	43	344	34	17	\$37,419	\$0	43	С
 Biennial Compliance Report 	5	\$0	\$0	\$0	0.5	2.5	43	108	11	5	\$11,694	\$0	22	C, f
 Initial Report on results of Energy Audit 	5	\$0	\$0	\$0	1	5	43	215	22	11	\$23,387	\$0	43	С
Reporting Subtotal								2,167	217	108	\$235,666	\$732,858	108	
4. Recordkeeping Requirements														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													е
D. Record Information														
 Records of All Notifications and Compliance Reports Submitted 	2	\$0	\$0	\$0	0.5	1	43	43	4	2	\$4,677	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	c, g
3) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	360	90	9	5	\$9,790	\$0	0	C, f
E. Personnel Training	40	\$0	\$0	\$0	1	40	21	840	84	42	\$91,373	\$0	0	h
F. Time for Audits	na													
Recordkeeping Subtotal								973	97.3	48.65	\$105,841	\$0	0	
Totals								3,140	314	157	\$341,507	\$732,858	108	

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 88% of facilities are in the industrial sector while the remaining 12% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements will not begin until year 3 of this ICR.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals.

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

f Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

g Small units are not required to maintain records on startup, shutdown and malfunction.

h For on-going training activities to keep personnel updated in order to implement compliance activities.

i Some very small boilers firing light liquid fuels qualify for tune-ups every five years, however they would still incur an initial tune-up. For the time period of this ICR, there will not be a difference in burden associated with biennial vs 5-year tune-ups for existing units.

Table 9.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 1, Existing Small and Limited Use Gas Fuel Units

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Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na					()		- /	,			(()	- /	+
2. Surveys and Studies	na													+
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	905	36,200	3,620	1,810	\$3,937,746	\$0	0	а
B. Required Activities	-					-		,	-,	,				
1. Conduct Energy Audit														+
a) Commerical	20	\$854	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b, c, d
b) Industrial	20	\$18,292	\$0	\$0	1	20	0	0	0	0	\$0	\$0	0	b, c, d
2. Biennial Tune-Up	12	\$0	\$2,228	\$0	0.5	6	0	0	0	0	\$0	\$0	0	C, f
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	905	1,810	181	91	\$196,887	\$0	905	а
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	С
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	0	0	0	0	\$0	\$0	0	C, f
4) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	С
Reporting Subtotal								38,010	3,801	1,901	\$4,134,633	\$0	905	
4. Recordkeeping Requirements														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													е
D. Record Information														
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	0	0	0	0	\$0	\$0	0	с
 Records of Startup, Shutdown, Malfunction 	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	c, g
3) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	0	0	0	0	\$0	\$0	0	C, f
E. Personnel Training	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	h
F. Time for Audits	na													
Recordkeeping Subtotal								0	0	0	\$0	\$0	0	
Totals								38,010	3,801	1,901	\$4,134,633	\$0	905	

a Number of respondents based on number of existing small and limited use gas fuel boilers which includes units less than 10 mmBtu/hr or operating less than 876 hours.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 88% of facilities are in the industrial sector while the remaining 12% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, no burden is assumed in year 1.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals.

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

f Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

g Small units are not required to maintain records on startup, shutdown and malfunction.

Table 9.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards	
for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 2, Existing Small and Limited Use Gas Fuel Units	;

					,,		Bollers real	, _/						
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non- Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	Hours per Year @	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	(M) Total Number of Responses per Year (E X G)	ootnotes
1. Applications	na	Occurrence	per occurrence	Occurrence	TCui		ica		0.1)	.00)	003131 01 1041			<u> </u>
2. Surveys and Studies	na													_
3. Reporting Requirements	па													
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	a
B. Required Activities	40	ΦΟ	φ 0	40		40	0	0	0	0	φ0	ΨΟ	0	a
1. Conduct Energy Audit														
a) Commerical	20	\$854	\$0	\$0	1	20	54	1.080	108	54	\$117,480	\$46,116	0	b,c,d
b) Industrial	20	\$18,292	\$0	\$0	1	20	398	7.960	796	398	\$865,869	\$7,280,216	0	b,c,d
2. Biennial Tune-Up	12	\$0	\$1,580	\$0	0.5	6	3.746	22.476	2.248	1.124	\$2,444,883	\$5,918,680	0	C,f,i
C. Create Information	na	40	\$1,000	\$ 0	0.0	0	0,140	22,410	2,240	1,124	φ2,444,000	40,010,000	0	0,1,1
D. Gather Information	na													-
E. Report Preparation	na													
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	c
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	0	0	0	0	\$0	\$0	0	C,f
4) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0	0	C.
Reporting Subtotal		<i>40</i>	**	40	-		Ŭ	31,516	3,152	1,576	\$3,428,232	\$13,245,012	0	-
4. Recordkeeping Requirements										_,			-	
	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													е
D. Record Information														
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	0	0	0	0	\$0	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	c,g
3) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	0	0	0	0	\$0	\$0	0	C,f
E. Personnel Training	40	\$0	\$0	\$0	1	40	453	18,120	1,812	906	\$1,971,048	\$0	\$0	h
F. Time for Audits	na													
Recordkeeping Subtotal								18120	1812	906	\$1,971,048	\$0	0	
Totals								49,636	4.964	2.482	\$5,399,280	\$13,245,012	0	

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 88% of facilities are in the industrial sector while the remaining 12% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements will not begin until year 3 of this ICR.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals.

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

f Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

g Small units are not required to maintain records on startup, shutdown and malfunction.

h For on-going training activities to keep personnel updated in order to implement compliance activities.

i Some very small boilers qualify for tune-ups every five years, however they would still incur an initial tune-up. For the time period of this ICR, there will not be a difference in burden associated with biennial vs 5-year tune-ups for existing units.

Table 9.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards
for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 3, Existing Small and Limited Use Gas Fuel Units

						10101, and 113						1		1	-
Burden Item	(A) Respondent Hours per Occurrence (Technical	(B) Emission Test Contractor Hours Per Occurrence	(B) Certified Energy Audit Cost per	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X		(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year	(M) Total Number of Responses per Year (E X	Footnotes
	hours)	Occurrence	Occurrence	per Occurrence	Occurrence	Per Year	(A X E)	Per Year	G)	X 0.1)	X .05)	Costs Per Year	((B+C+D)xExG)	G)	Ш.
1. Applications	na														
2. Surveys and Studies	na														
3. Reporting Requirements										-	-			-	
A. Read and Understand Rule Requirements	40		\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	a
B. Required Activities															
1. Conduct Energy Audit														-	
a) Commerical	20		\$854	\$0	\$0	1	20	54	1,087	109	54	\$118,263	\$46,423	0	b,c,d
b) Industrial	20		\$18,292	\$0	\$0	1	20	398	7,955	796	398	\$865,347	\$7,275,826	0	b,c,d
2. Biennial Tune-Up	12		\$0	\$1,580	\$0	0.5	6	3,745	22,470	2,247	1,124	\$2,444,230	\$5,917,100	0	c,f,i
C. Create Information	na														
D. Gather Information	na														
E. Report Preparation															
 Initial Notification that Source is Subject 	2		\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	а
Notification of Compliance Status	8		\$0	\$0	\$0	1	8	905	7,240	724	362	\$787,549	\$0	905	С
 Biennial Compliance Report 	5		\$0	\$0	\$0	0.5	2.5	905	2,263	226	113	\$246,109	\$0	453	c,f
 Initial Report on results of Energy Audit 	5		\$0	\$0	\$0	1	5	905	4,525	453	226	\$492,218	\$0	905	С
Reporting Subtotal									45,540	4,554	2,277	\$4,953,716	\$13,239,349	2,263	
 Recordkeeping Requirements 															
A. Read Instructions	Included in 3a														
B. Implement Activities	na														
C. Develop Record System	na														е
D. Record Information															
1) Records of All Notifications and Compliance Reports Submitted	2	0	\$0	\$0	\$0	0.5	1	905	905	91	45	\$98,444	\$0	0	с
2) Records of Startup, Shutdown, Malfunction	15	0	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0	0	c,g
3) Biennial Tune-Up Records	0.5		\$0	\$0	\$0	0.5	0.25	7,491	1,873	187	94	\$203,713	\$0	0	C,f
E. Personnel Training	40		\$0	\$0	\$0	1	40	452	18,080	1,808	904	\$1,966,697	\$0	0	h
F. Time for Audits	na														
Recordkeeping Subtotal									20857.75	2085.775	1042.8875	\$2,268,854	\$0	0	
Totals									66,398	6,640	3,320	\$7,222,570	\$13,239,349	2,263	

a The burden on existing sources to read and understand rule requirements, and submit an initial notification were assumed to all occur in year 1.

b Cost includes taking an inventory of facility equipment including age, operating schedules, square feet of the facility and other details necessary for preparing for the audit pre-screening, attending the energy audit, and reviewing audit report from the audit professional. Based on the distribution of facilities with affected boilers or process heaters, 88% of facilities are in the industrial sector while the remaining 12% of facilities are in the commercial sector.

c Since existing units have three years after the publication date of the final rule to submit initial notification of compliance status, conduct compliance activities, or meet recordkeeping or reporting requirements, it is assumed that half the affected units will conduct an audit, testing and monitoring plan development in year 2 and half will conduct them in year 3 in order to be in compliance by the third year after promulgation. Initial Notification of Compliance Reports and recordkeeping requirements will not begin until year 3 of this ICR.

d Cost per occurrence for energy audit professionals including an phone screening to discuss the facility prior to a visit, a 2 to 4 hour site visit, and an additional 2-4 hours to prepare a follow-up report on recommendations and findings. These site visits are assumed to be conducted by certified energy professionals.

e Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

f Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

g Small units are not required to maintain records on startup, shutdown and malfunction.

h For on-going training activities to keep personnel updated in order to implement compliance activities.

i Some very small boilers qualify for tune-ups every five years, however they would still incur an initial tune-up. For the time period of this ICR, there will not be a difference in burden associated with biennial vs 5-year tune-ups for existing units.

Table 10.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 1, New Small Solid Fuel Units

	mazar ao ao 7 mili				,	1						1		
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)		(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	1	40	4	2	\$4,351	\$0	0	a
B. Required Activities														
1. Biennial Tune-Up	12	\$0	\$2,228	\$0	0.5	6	4	24	2	1	\$2,611	\$8,912	0	a
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	1	2	0	0	\$218	\$0	1	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	1	8	1	0	\$870	\$0	1	a
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	1	3	0	0	\$272	\$0	1	d,e
Reporting Subtotal								77	8	4	8,321	8,912	3	
4. Recordkeeping Requirements														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													b
D. Record Information														
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	1	1	0	0	\$109	\$0	0	a
2) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	4	1	0	0	\$109	\$0	0	a,e
E. Personnel Training	40	\$0	\$0	\$0	1	40	1	40	4	2	\$4,351	\$0		С
F. Time for Audits	na													
Recordkeeping Subtotal								42	4.2	2.1	\$4,569	\$0	0	
Totals								119	12	6	\$12,890	\$8,912	3	

a For new small solid units, all boilers are assumed to come online in year 1.

b Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

c For on-going training activities to keep personnel updated in order to implement compliance activities.

d Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

Table 10.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 2, New Small Solid Fuel Units

			,,		,,									
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)		(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	a
B. Required Activities														
1. Biennial Tune-Up	12	\$0	\$2,228	\$0	0.5	6	0	0	0	0	\$0	\$0	0	a
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	a
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	0	0	0	0	\$0	\$0	0	d
Reporting Subtotal								0	0	0	0	0	0	
4. Recordkeeping Requirements														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													b
D. Record Information														
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	0	0	0	0	\$0	\$0	0	a
2) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	0	0	0	0	\$0	\$0	0	a
E. Personnel Training	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0		С
F. Time for Audits	na													
Recordkeeping Subtotal								0	0	0	\$0	\$0	0	
Totals								0	0	0	\$0	\$0	0	

a For new small solid units, all boilers are assumed to come online in year 1.

b Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

c For on-going training activities to keep personnel updated in order to implement compliance activities.

d Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

Table 10.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 3, New Small Solid Fuel Units

				in a dour al,				ea. e,	0					
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)		(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	а
B. Required Activities														
1. Biennial Tune-Up	12	\$0	\$2,228	\$0	0.5	6	4	24	2	1	\$2,611	\$8,912	0	а
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	а
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	а
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	1	3	0	0	\$272	\$0	1	d,e
Reporting Subtotal								27	3	1	2,883	8,912	1	
4. Recordkeeping Requirements														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													b
D. Record Information														
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	1	1	0	0	\$109	\$0	0	a
2) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	4	1	0	0	\$109	\$0	0	a,e
E. Personnel Training	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	С
F. Time for Audits	na													
Recordkeeping Subtotal								2	0.2	0.1	\$218	\$0	0	
Totals								29	3	1	\$3,100	\$8,912	1	

a For new small solid units, all boilers are assumed to come online in year 1.

b Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

c For on-going training activities to keep personnel updated in order to implement compliance activities.

d Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

e Since all boilers performed a tune-up in year 1, it is assumed the biennial tune-up would also occur in year 3.

Table 11.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 1, New Small Liquid Fuel Units

		<u></u>				a, and motife	tional Bolicis							
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	а
B. Required Activities														
1. Biennial Tune-Up	12	\$0	\$2,228	\$0	0.5	6	0	0	0	0	\$0	\$0	0	
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	0	0	0	0	\$0	\$0	0	
Reporting Subtotal								0	0	0	0	0	0	
4. Recordkeeping Requirements														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													
D. Record Information														
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	0	0	0	0	\$0	\$0	0	
2) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	0	0	0	0	\$0	\$0	0	
E. Personnel Training	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	
F. Time for Audits	na													
Recordkeeping Subtotal								0	0	0	\$0	\$0	0	
Totals								0	0	0	\$0	\$0	0	

a There are no new small solid units expected to be constructed/reconstructed over the next 3 years.

Table 11.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 2, New Small Liquid Fuel Units

								· · · · · · · · · · · · · · · · · · ·					-	
Burden item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	Costs Per	(E) Number of Occurrences Per Respondent Per Year		(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Managemen t Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	(M) Total Number of Responses per Year (E X G)	
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	a
B. Required Activities														
1. Biennial Tune-Up	12	\$0	\$2,228	\$0	0.5	6	0	0	0	0	\$0	\$0	0	
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	0	0	0	0	\$0	\$0	0	
Reporting Subtotal								0	0	0	0	0	0	
 Recordkeeping Requirements 														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													
D. Record Information														
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	0	0	0	0	\$0	\$0	0	
2) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	0	0	0	0	\$0	\$0	0	
E. Personnel Training	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	
F. Time for Audits	na													
Recordkeeping Subtotal								0	0	0	\$0	\$0	0	
Totals								0	0	0	\$0	\$0	0	

a There are no new small solid units expected to be constructed/reconstructed over the next 3 years.

Table 11.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 3, New Small Liquid Fuel Units

			, <u>, , , , , , , , , , , , , , , , , , </u>				tational Boners	,						
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	Costs Per	(E) Number of Occurrences Per Respondent Per Year		(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	(M) Total Number of Responses per Year (E X G)	
1. Applications	na													
2. Surveys and Studies	na													
3. Reporting Requirements														1
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	а
B. Required Activities														1
1. Biennial Tune-Up	12	\$0	\$2,228	\$0	0.5	6	0	0	0	0	\$0	\$0	0	1
C. Create Information	na													
D. Gather Information	na													-
E. Report Preparation														
 Initial Notification that Source is Subject 	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0	0	
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0	0	
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	0	0	0	0	\$0	\$0	0	í –
Reporting Subtotal								0	0	0	0	0	0	
4. Recordkeeping Requirements														i –
A. Read Instructions	Included in 3a													1
B. Implement Activities	na													
C. Develop Record System	na													1
D. Record Information														1
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	0	0	0	0	\$0	\$0	0	
2) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	0	0	0	0	\$0	\$0	0	1
E. Personnel Training	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0	0	1
F. Time for Audits	na													L
Recordkeeping Subtotal								0	0	0	\$0	\$0	0	
Totals								0	0	0	\$0	\$0	0	

a There are no new small solid units expected to be constructed/reconstructed over the next 3 years.

Table 12.A. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 1, New Small Gas Fuel Units

				,	,					0451 401 01				<u> </u>
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na													\square
2. Surveys and Studies	na													
3. Reporting Requirements														
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	41	1,640	164	82	\$178,395	\$0	0	a
B. Required Activities														
1. Biennial Tune-Up	12	\$0	\$2,228	\$0	0.5	6	326	1,956	196	98	\$212,769	\$726,328	0	a,e
C. Create Information	na													
D. Gather Information	na													
E. Report Preparation														
 Initial Notification that Source is Subject 	2	\$0	\$0	\$0	1	2	41	82	8	4	\$8,920	\$0	41	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	41	328	33	16	\$35,679	\$0	41	a
 Biennial Compliance Report 	5	\$0	\$0	\$0	0.5	2.5	41	103	10	5	\$11,150	\$0	21	a,d
Reporting Subtotal								4,109	411	205	446,912	726,328	103	
 Recordkeeping Requirements 														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													b
D. Record Information														
 Records of All Notifications and Compliance Reports Submitted 	2	\$0	\$0	\$0	0.5	1	41	41	4	2	\$4,460	\$0	0	a
2) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	326	82	8	4	\$8,865	\$0	0	a,d
E. Personnel Training	40	\$0	\$0	\$0	1	40	41	1,640	164	82	\$178,395	\$0	0	С
F. Time for Audits	na													
Recordkeeping Subtotal								1762.5	176.25	88.125	\$191,720	\$0	0	
Totals								5,871	587	294	\$638,633	\$726,328	103	

a In order to calculate a per year estimate of the number of boilers and facilities required to meet these rule requirements, the number of projected boilers and facilities is each divided by 3.

b Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

c For on-going training activities to keep personnel updated in order to implement compliance activities.

d Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

e Very small gas boilers (< 5 mmBtu/hr) qualify for tune-ups every five years, however they would still incur an initial tune-up during the year they come online.

Table 12.B. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 2, New Small Gas Fuel Units

				Tor industrial, commercial, and institutional bollers - real 2,												
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non- Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	(F) Technical Hours per Respondent Per Year (A X E)	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)	(I) Clerical Hours per Year @ \$48.53 (H X 0.1)	(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	(M) Total Number of Responses per Year (E X G)	Footnotes		
1. Applications	na															
2. Surveys and Studies	na															
3. Reporting Requirements																
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	41	1,640	164	82	\$178,395	\$0	0	a		
B. Required Activities																
1. Biennial Tune-Up	12	\$0	\$2,228	\$0	0.5	6	326	1,956	196	98	\$212,769	\$726,328	0	a,e		
C. Create Information	na															
D. Gather Information	na															
E. Report Preparation																
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	41	82	8	4	\$8,920	\$0	41	a		
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	41	328	33	16	\$35,679	\$0	41	a		
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	41	103	10	5	\$11,150	\$0	21	a,d		
Reporting Subtotal								4,109	411	205	446,912	726,328	103			
4. Recordkeeping Requirements																
A. Read Instructions	Included in 3a															
B. Implement Activities	na															
C. Develop Record System	na													b		
D. Record Information																
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	41	41	4	2	\$4,460	\$0	0	a		
2) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	326	82	8	4	\$8,865	\$0	0	a,d		
E. Personnel Training	40	\$0	\$0	\$0	1	40	41	1,640	164	82	\$178,395	\$0	0	a		
F. Time for Audits	na															
Recordkeeping Subtotal								1762.5	176.25	88.125	\$191,720	\$0	0			
Totals								5,871	587	294	\$638,633	\$726,328	103			

a In order to calculate a per year estimate of the number of boilers and facilities required to meet these rule requirements, the number of projected boilers and facilities is each divided by 3.

b Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

c For on-going training activities to keep personnel updated in order to implement compliance activities.

d Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

e Some boilers qualify for tune-ups every five years, however they would still incur an initial tune-up when they come online.

Table 12.C. Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers - Year 3, New Small Gas Fuel Units

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Certified Energy Audit Cost per Occurrence	(C) Annual Tune-Up Cost per Occurrence	(D) Other Non-Labor Costs Per Occurrence	(E) Number of Occurrences Per Respondent Per Year	Hours per	(G) Number of Respondents Per Year	(H) Technical Hours per Year @ \$98.20 (F X G)		(J) Management Hours per Year @ \$114.49 (H X .05)	(K) Total Labor Costs Per Year	(L) Total Non- Labor Capital Costs Per Year ((B+C+D)xExG)	(M) Total Number of Responses per Year (E X G)	Footnotes
1. Applications	na								, i	, í		,,,	· · · · ·	-
2. Surveys and Studies	na													+
3. Reporting Requirements														-
A. Read and Understand Rule Requirements	40	\$0	\$0	\$0	1	40	41	1,640	164	82	\$178,395	\$0	0	a
B. Required Activities														1
1. Biennial Tune-Up	12	\$0	\$2,228	\$0	0.5	6	648	3,888	389	194	\$422,927	\$1,443,744	0	a,e,f
C. Create Information	na													-
D. Gather Information	na													
E. Report Preparation														
1) Initial Notification that Source is Subject	2	\$0	\$0	\$0	1	2	41	82	8	4	\$8,920	\$0	41	a
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	41	328	33	16	\$35,679	\$0	41	a
3) Biennial Compliance Report	5	\$0	\$0	\$0	0.5	2.5	82	205	21	10	\$22,299	\$0	41	d,e
Reporting Subtotal								6,143	614	307	668,220	1,443,744	123	
Recordkeeping Requirements														
A. Read Instructions	Included in 3a													
B. Implement Activities	na													
C. Develop Record System	na													b
D. Record Information														
1) Records of All Notifications and Compliance Reports Submitted	2	\$0	\$0	\$0	0.5	1	82	82	8	4	\$8,920	\$0	0	a
2) Biennial Tune-Up Records	0.5	\$0	\$0	\$0	0.5	0.25	648	162	16	8	\$17,622	\$0	0	a,e,
E. Personnel Training	40	\$0	\$0	\$0	1	40	41	1,640	164	82	\$178,395	\$0	0	С
F. Time for Audits	na													
Recordkeeping Subtotal								1884	188.4	94.2	\$204,937	\$0	0	
Totals								8,027	803	401	\$873,157	\$1,443,744	123	

a In order to calculate a per year estimate of the number of boilers and facilities required to meet these rule requirements, the number of projected boilers and facilities is each divided by 3.

b Assumes facility must already maintain records on boiler insurance and/or maintenance schedule. No new record system would be required.

c For on-going training activities to keep personnel updated in order to implement compliance activities.

d Since a tune-up is required biennially, every two years, the compliance reports for small units are also due every two years. Records of the tune-ups will be submitted to the Administrator upon request.

e Assumes for boilers which performed a tune-up in year 1, the biennial tune-up would also occur in year 3.

f Very small boilers qualify for tune-ups every five years, however they would still incur an initial tune-up when they come online. For those boilers in year 1 which were performing their initial five-year tune-up, a tune-up in year 3 is not necessary. Four boilers would qualify for 5-year tune-ups and are thus not applicable to tune-ups in year 3.

Table 13.A. Annual Federal Government Burden and Cost of Recordkeeping and Reporting for the Industrial, Commercial, and Institutional Boiler and Process Heater Major Source NESHAP Subpart DDDDD- Year 1 - First Year After Promulgation

							1	6
	EPA hours per	Number of	EPA hours per	Technical	Mangmt hours per	Clerical hours		Footnotes
	occurrence	occurrences	occurrence per	hours per	year	per year		otu
Burden Item	(A)	per year (B)	year (C=AxB)	year (D=C)	(E=Dx0.05)	(F=Dx0.1)	(H) Costs, \$ k	Ъ
1. Read and understand rule requirements	40	60	2,400	2,400	120	240	\$124,379	a
2. Enter and update information into agency recordkeeping								
system	2	1,783	3,566	3,566	178	357	\$184,806	b
3. Required activities								
A. Review and approve monitoring plan	20	4	80	80	4	8	\$4,146	n
B. Review and approve fuel monitoring plan	20	4	80	80	4	8	\$4,146	0
C. Observe initial stack/performance test	40	21	840	840	42	84	\$43,533	С
D. Observe repeat performance test	40	13	520	520	26	52	\$26,949	d
E. Review operating parameters	2	104	208	208	10	21	\$10,779	е
F. Review continuous parameter monitoring	2	26	52	52	3	5	\$2,695	f
4 Excess Emissions Enforcement Activities and Inspections	24	3	0	0	0	0	\$0	g
5 Notification requirements								
A. Review initial notification that sources are subject to the								
standard	2	1,783	3,566	3,566	178	357	\$184,806	b
B. Review notification of initial performance tests and review								
test plan	20	104	2,080	2,080	104	208	\$107,795	е
C. Review notification of compliance status	2	79	158	158	8	16	\$8,188	b
6. Reporting requirements			0	0	0	0	\$0	
A. Review semiannual compliance report	4	8	32	32	2	3	\$1,658	h
B. Review annual compliance report	2	0	0	0	0	0	\$0	i
C. Review biennial compliance report	1	21	21	21	1	2	\$1,088	i
D. Review initial report on results of energy audit	2	0	0	0	0	0	\$0	Ĺ
7. Travel Expenses for Tests Attended	2 dove * (\$110	hotol i ¢E0 mor	als/incidentals) + (¢600 round				
			\$37.536	m				
TOTAL BURDEN AND COST (SALARY)	trip) = \$1104 p			10.000	600	1 260	,	<u> </u>
				13,603	680	1,360	\$742,505	+
TOTAL ANNUAL HOURS						15,643		

a Number of occurences is the number of states where affected sources will exist and each EPA Region (50 states + 10 EPA regions = 60 respondents).

b Number of occurences is based on the total number of affected facilities that are required to submit initial notifications stated they are subject to the standard (all new boilers in the large and small solid, liquid, and gaseous subcategories, plus all existing large and small solid, liquid, and gaseous subcategories). For initial notifications of compliance status, the number of occurences is based on all new boilers in the large and small solid, liquid, and gaseous units have until year 3 to submit this notification.

c Number of occurences is based on the assumption that EPA personnel will observe 20% of the initial performance tests that occur.

d Number of occurences is based on the assumption that of the units that test, 10% will have to retest and EPA personnel will observe all these retests. In addition solid fuel units are expected to re-test to obtain worst-case cor e Number of occurences is based on the number of units that will test and set/submit operating limits.

f Number of occurences begins in year 3 for existing units and in year 1 for new units and is based on the number of units maintaining records of control device parameters.

g Number of occurences is based on the assumption that of the units that test, 10% of them will have exceedances and need enforcement

h Number of occurences is the number of units that will submit these semi-annual compliance reports, 2 reports per year per respondent.

i. Number of occurences is the number of units that will submit these annual compliance reports.

j. Number of occurences is the number units that will submit these biennial compliance reports.

k These rates are from the Office of Personnel Management (OPM), 2010 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees. These rates can be obtained from the OPM web site, http://www.opm.gov/oca/payrates/index/htm.

L Energy audits only occur at existing facilities.

m Total cost is based on the number of trips taken by EPA to observe performance tests in year 1 (4.A. & 4.B.) multiplied by \$1104 per trip. The source for hotel and meals/incidental costs is based on FY' 10 per diem rates, averaged across all locations in the United States. Airfares are estimated based on experience from other rulemakings. See: http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentId=17943&contentType=GSA_BASIC

Table 13.B. Annual Federal Government Burden and Cost of Recordkeeping and Reporting for the Industrial, Commercial, and Institutional Boiler and Process Heater Major Source NESHAP Subpart DDDDD- Year 1 - First Year After Promulgation

	EPA hours				Mangmt			S
	per	Number of occurrences	EPA hours per occurrence per	Technical hours per	hours per year	Clerical hours per year		Footnotes
Burden Item	(A)	per year (B)	year (C=AxB)	year (D=C)	(E=Dx0.05)	(F=Dx0.1)	(H) Costs, \$ ^k	Foc
1. Read and understand rule requirements	40	0	0	0	0	0	\$0	a
2. Enter and update information into agency recordkeeping								
system	2	154	308	308	15	31	\$15,962	b
3. Required activities								
A. Review and approve monitoring plan	20	110	2,200	2,200	110	220	\$114,014	n
B. Review and approve fuel monitoring plan	20	443	8,860	8,860	443	886	\$459,165	0
C. Observe initial stack/performance test	40	605	24,200	24,200	1,210	2,420	\$1,254,153	С
D. Observe repeat performance test	40	359	14,360	14,360	718	1,436	\$744,200	d
E. Review operating parameters	2	3,024	6,048	6,048	302	605	\$313,435	е
F. Review continuous parameter monitoring	2	52	104	104	5	10	\$5,390	f
4 Excess Emissions Enforcement Activities and Inspections	24	302	0	0	0	0	\$0	g
5 Notification requirements								
A. Review initial notification that sources are subject to the standard	2	77	154	154	8	15	\$7,981	b
B. Review notification of initial performance tests and review								
test plan	20	3,024	60,480	60,480	3,024	6,048	\$3,134,346	e
C. Review notification of compliance status	2	77	154	154	8	15	\$7,981	b
6. Reporting requirements			0	0	0	0	\$0	
A. Review semiannual compliance report	4	14	56	56	3	6	\$2,902	h
B. Review annual compliance report	2	0	0	0	0	0	\$0	i
C. Review biennial compliance report	1	21	21	21	1	2	\$1,062	j
D. Review initial report on results of energy audit	2	0	0	0	0	0	\$0	L
7. Travel Expenses for Tests Attended	3 davs * (\$110	hotel + \$58 mea	als/incidentals) + (\$600 round				
	trip) = \$1104 p		/ (\$1,064,256	m
TOTAL BURDEN AND COST (SALARY)				116,945	5,847	11,694	\$7,124,846	
TOTAL ANNUAL HOURS						134,486		

a Number of occurences is the number of states where affected sources will exist and each EPA Region (50 states + 10 EPA regions = 60 respondents).

b Number of occurences is based on the total number of affected facilities that are required to submit initial notifications stated they are subject to the standard (all new boilers in the large and small solid, liquid, and gaseous subcategories, plus all existing large and small solid, liquid, and gaseous subcategories). For initial notifications of compliance status, the number of occurences is based on all new boilers in the large and small solid, liquid, and gaseous subcategories, existing large and small solid, liquid, and gaseous units have until year 3 to submit this notification.

c Number of occurences is based on the assumption that EPA personnel will observe 20% of the initial performance tests that occur.

d Number of occurences is based on the assumption that of the units that test, 10% will have to retest and EPA personnel will observe all these retests. In addition solid fuel units are expected to re-test to obtain worst-case cor e Number of occurences is based on the number of units that will test and set/submit operating limits.

f Number of occurences begins in year 3 for existing units and in year 1 for new units and is based on the number of units maintaining records of control device parameters.

g Number of occurences is based on the assumption that of the units that test, 10% of them will have exceedances and need enforcement.

h Number of occurences is the number of units that will submit these semi-annual compliance reports, 2 reports per year per respondent.

i. Number of occurences is the number of units that will submit these annual compliance reports.

j. Number of occurences is the number units that will submit these biennial compliance reports.

k These rates are from the Office of Personnel Management (OPM), 2010 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees. These rates can be obtained from the OPM web site, http://www.opm.gov/oca/payrates/index/htm.

L Energy audits only occur at existing facilities.

m Total cost is based on the number of trips taken by EPA to observe performance tests in year 1 (4.A. & 4.B.) multiplied by \$1104 per trip. The source for hotel and meals/incidental costs is based on FY' 10 per diem rates, averaged across all locations in the United States. Airfares are estimated based on experience from other rulemakings. See: http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentId=17943&contentType=GSA_BASIC

Table 13.C. Annual Federal Government Burden and Cost of Recordkeeping and Reporting for the Industrial, Commercial, and Institutional Boiler and Process Heater Major Source NESHAP Subpart DDDDD- Year 1 - First Year After Promulgation

Burden Item	EPA hours per occurrence (A)	Number of occurrences per year (B)	EPA hours per occurrence per year (C=AxB)	Technical hours per year (D=C)	Mangmt hours per year (E=Dx0.05)	Clerical hours per year (F=Dx0.1)	(H) Costs, \$ ^k	Footnotes
1. Read and understand rule requirements	40	0	0	0	0	0	\$0	a
2. Enter and update information into agency recordkeeping system	2	1,858	3,716	3,716	186	372	\$192,580	b
3. Required activities								
A. Review and approve monitoring plan	20	107	2,140	2,140	107	214	\$110,904	n
B. Review and approve fuel monitoring plan	20	442	8,840	8,840	442	884	\$458,129	0
C. Observe initial stack/performance test	40	604	24,160	24,160	1,208	2,416	\$1,252,080	С
D. Observe repeat performance test	40	359	14,360	14,360	718	1,436	\$744,200	d
E. Review operating parameters	2	3,022	6,044	6,044	302	604	\$313,227	е
F. Review continuous parameter monitoring	2	1,831	3,662	3,662	183	366	\$189,781	f
4 Excess Emissions Enforcement Activities and Inspections	24	302	0	0	0	0	\$0	g
5 Notification requirements								
A. Review initial notification that sources are subject to the standard	2	77	154	154	8	15	\$7,981	b
B. Review notification of initial performance tests and review test plan	20	3,022	60,440	60,440	3,022	6,044	\$3,132,273	e
C. Review notification of compliance status	2	1,781	3,562	3,562	178	356	\$184,599	b
6. Reporting requirements			0	0	0	0	\$0	
A. Review semiannual compliance report	4	442	1,768	1,768	88	177	\$91,626	h
B. Review annual compliance report	2	540	1,080	1,080	54	108	\$55,970	i
C. Review biennial compliance report	1	518	518	518	26	52	\$26,845	i
B. Review initial report on results of energy audit	2	1,704	3,408	3,408	170	341	\$176,618	Ĺ
		hotel + \$58 mea	als/incidentals) + (,			\$1,063,152	m
TOTAL BURDEN AND COST (SALARY)				133,852	6,693	13,385	\$7,999,965	
TOTAL ANNUAL HOURS						153,930		

a Number of occurences is the number of states where affected sources will exist and each EPA Region (50 states + 10 EPA regions = 60 respondents).

b Number of occurences is based on the total number of affected facilities that are required to submit initial notifications stated they are subject to the standard (all new boilers in the large and small solid, liquid, and gaseous subcategories, plus all existing large and small solid, liquid, and gaseous subcategories). For initial notifications of compliance status, the number of occurences is based on all new boilers in the large and small solid, liquid, and gaseous subcategories, existing large and small solid, liquid, and gaseous units have until year 3 to submit this notification.

c Number of occurences is based on the assumption that EPA personnel will observe 20% of the initial performance tests that occur.

d Number of occurences is based on the assumption that of the units that test, 10% will have to retest and EPA personnel will observe all these retests. In addition solid fuel units are expected to re-test to obtain worst-case cor e Number of occurences is based on the number of units that will test and set/submit operating limits.

f Number of occurences begins in year 3 for existing units and in year 1 for new units and is based on the number of units maintaining records of control device parameters.

g Number of occurences is based on the assumption that of the units that test, 10% of them will have exceedances and need enforcement.

h Number of occurences is the number of units that will submit these semi-annual compliance reports, 2 reports per year per respondent.

i. Number of occurences is the number of units that will submit these annual compliance reports.

j. Number of occurences is the number units that will submit these biennial compliance reports.

k These rates are from the Office of Personnel Management (OPM), 2010 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees. These rates can be obtained from the OPM web site, http://www.opm.gov/oca/payrates/index/htm.

L Energy audits only occur at existing facilities.

m Total cost is based on the number of trips taken by EPA to observe performance tests in year 1 (4.A. & 4.B.) multiplied by \$1104 per trip. The source for hotel and meals/incidental costs is based on FY' 10 per diem rates, averaged across all locations in the United States. Airfares are estimated based on experience from other rulemakings. See: http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentId=17943&contentType=GSA_BASIC