

Table 1: Annual Respondent Burden and Cost for Existing Large Solid Fuel Units – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) (Amendments)

Year 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 (F X G)	(I) Clerical Hours per Year (H X 0.1)	(J) Management Hours per Year (H X .05)	(K) Total Labor Costs Per Year*	(L) Total Non-Labor Costs Per Year [(B+C+D)XEG]
1. Applications	NA											
2. Surveys and Studies	NA											
3. Reporting Requirements												
A. Familiarization with Regulatory Requirements *	10	\$0	\$0	\$0	1	10	25	250	25	13	\$33,298	\$0
B. Required Activities												
1) Conduct Energy Audit												
a) Commercial	20	\$854	\$0	\$0	1	20	0	0	0	0	\$0	\$0
b) Industrial	20	\$18,292	\$0	\$0	1	20	0	0	0	0	\$0	\$0
2) Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
3) Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
4) Initial Stack Test and Report (for HCL)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
5) Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
6) Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
7) Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
8) Annual Stack Test and Report (for HCL)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
9) Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
10) Repeat Stack Test and Report if Switch Fuels (for Hg and HCL)	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0
11) Initial Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0
12) Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0
13) Annual Tune-up	12	\$0	\$2,875	\$0	1	12	0	0	0	0	\$0	\$0
14) Continuous Parameter Monitoring												
Update Site-specific monitoring plan (all)	40	\$0		\$0	1	40	0	0	0	0	\$0	\$0
Opacity												
a) initial	10	\$0	\$0	\$25,812	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$9,855	1	10	0	0	0	0	\$0	\$0
PM (only sources greater than 250 mmBtu/hr)												
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0
O2												
a) initial	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0
Scrubber System Monitoring and Operation (for units with wet scrubbers)												
a) initial	10	\$0	\$0	\$25,054	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$5,774	1	10	0	0	0	0	\$0	\$0
Bag Leak Detection System Operation (sources that have fabric filters)												
a) initial	10	\$0	\$0	\$26,300	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$10,000	1	10	0	0	0	0	\$0	\$0
DIFF Monitor												
a) initial	10	\$0	\$0	\$44,858	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$31,500	1	10	0	0	0	0	\$0	\$0
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
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0
CO CEMS												
a) initial	10	\$0	\$0	\$153,700	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$42,600	1	10	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
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0
3) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0
4) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0	\$0
Subtotal for Reporting Requirements										288	\$33,298	\$0
4. Recordkeeping Requirements												
A. Familiarization with Regulatory Requirements	Included in 3a											
B. Implement Activities	NA											
C. Develop Record System	NA											
D. Record Information												
1) Records of Operating Parameter Values	20	\$0	\$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
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0
4) Records of Monitoring Device Calibrations	2	\$0	\$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
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	\$0	1	40	0	0	0	0	\$0	\$0
F. Time for Audits	NA											
Subtotal for Recordkeeping Requirements										0	\$0	\$0
Total Labor Burden and Cost (rounded) *										288	\$33,300	\$0
Total Capital and O&M Cost (rounded) *												\$0
Grand Total (rounded) *												\$33,300

Labor Rates:	
Management	\$141.06
Technical	\$120.27
Clerical	\$58.67

Assumptions:

a This table shows only the additional burden to sources affected by the proposed amendments. All other new and recurring costs for these types of boilers are shown in the previous ICR Renewal (EPA ICR Number 2028.09, OMB Control Number 2060-0551). Since the EPA is proposing a 3-year compliance timeframe no burden is estimated in year 1 or 2.

b This ICR uses the following labor rates: \$141.06 for managerial, \$120.27 for technical, and \$58.67 for clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2019, "Table 2. Civilian Workers, by occupational and industry group." The rates are from column 1, "Total compensation." The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

c We assume that respondents impacted by the proposal will familiarize themselves with the rule in year one and implement the rule in year three. Based on compliance data, we estimate that 25 facilities with existing solid fuel units will be impacted by the proposal.

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

Table 2: Annual Respondent Burden and Cost for Existing Large Solid Fuel Units – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) (Amendments)

Year 2

1. Applications	(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 Year (A X E)	(G) Number of Respondents Per Year*	(H) Technical Hours per Year (F X G)	(I) Clerical Hours per Year (H X 0.1)	(J) Management Hours per Year (H X .05)	(K) Total Labor Costs Per Year*	(L) Total Non-Labor Costs Per Year (B+C+D+E+G)
1. Applications	NA											
2. Surveys and Studies	NA											
3. Reporting Requirements												
A. Familiarization with Regulatory Requirements	10	\$0	\$0	\$0	1	10	0	0	0	0	\$0	\$0
B. Required Activities												
1) Conduct Energy Audit												
a) Commercial	20	\$854	\$0	\$0	1	20	0	0	0	0	\$0	\$0
b) Industrial	20	\$18,292	\$0	\$0	1	20	0	0	0	0	\$0	\$0
2) Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
3) Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
4) Initial Stack Test and Report (for HCl)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
5) Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
6) Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
7) Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
8) Annual Stack Test and Report (for HCl)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
9) Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
10) Repeat Stack Test and Report if Switch Fuels (for Hg and HCl)	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0
11) Initial Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0
12) Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0
13) Annual Tune-up	12	\$0	\$2,875	\$0	1	12	0	0	0	0	\$0	\$0
14) Continuous Parameter Monitoring												
Update Site-specific monitoring plan (all)	40	\$0		\$0	1	40	0	0	0	0	\$0	\$0
Opacity												
a) initial	10	\$0	\$0	\$25,812	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$9,855	1	10	0	0	0	0	\$0	\$0
PM (only sources greater than 250 mmBtu/hr)												
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0
O2												
a) initial	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0
Scrubber System Monitoring and Operation (for units with wet scrubbers)												
a) initial	10	\$0	\$0	\$25,054	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$5,774	1	10	0	0	0	0	\$0	\$0
Bag Leak Detection System Operation (sources that have fabric filters)												
a) initial	10	\$0	\$0	\$26,300	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$10,000	1	10	0	0	0	0	\$0	\$0
DIFF Monitor												
a) initial	10	\$0	\$0	\$44,858	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$31,500	1	10	0	0	0	0	\$0	\$0
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
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0
CO CEMS												
a) initial	10	\$0	\$0	\$153,700	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$42,600	1	10	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
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0
3) Initial Report on results of Energy Audit	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0
4) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0	\$0
Subtotal for Reporting Requirements											\$0	\$0
4. Recordkeeping Requirements												
A. Familiarization with Regulatory Requirements	Included in 3a											
B. Implement Activities	NA											
C. Develop Record System	NA											
D. Record Information												
1) Records of Operating Parameter Values	20	\$0	\$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
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0
4) Records of Monitoring Device Calibrations	2	\$0	\$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
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	\$0	1	40	0	0	0	0	\$0	\$0
F. Time for Audits	NA											
Subtotal for Recordkeeping Requirements											\$0	\$0
Total Labor Burden and Cost (rounded)											\$0	\$0
Total Capital and O&M Cost (rounded)											\$0	\$0
Grand Total (rounded)											\$0	\$0

Labor Rates:	
Management	\$141.06
Technical	\$120.27
Clerical	\$58.67

Assumptions:
a. This table shows only the additional burden to sources affected by the proposed amendments. All other new and recurring costs for these types of boilers are shown in the previous ICR Renewal (EPA ICR Number 2028.09, OMB Control Number 2060-0551). Since the EPA is proposing a 3-year compliance timeframe no burden is estimated in year 1 or 2.
b. This ICR uses the following labor rates: \$141.06 for managerial, \$120.27 for technical, and \$58.67 for clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2019, "Table 2. Civilian Workers, by occupational and industry group." The rates are from column 1, "Total compensation." The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

Table 3: Annual Respondent Burden and Cost for Existing Large Solid Fuel Units – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) (Amendments)

Year 3

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 (F X G)	(I) Clerical Hours per Year (H X 0.1)	(J) Management Hours per Year (H X .05)	(K) Total Labor Costs Per Year ^a	(L) Total Non-Labor Costs Per Year [(B+C+D)XEG]
1. Applications	NA											
2. Surveys and Studies	NA											
3. Reporting Requirements												
A. Familiarization with Regulatory Requirements	10	\$0	\$0	\$0	1	10	0	0	0	0	\$0	\$0
B. Required Activities												
1) Conduct Energy Audit ^b												
a) Commercial	20	\$854	\$0	\$0	1	20	0	0	0	0	\$0	\$0
b) Industrial	20	\$18,292	\$0	\$0	1	20	0	0	0	0	\$0	\$0
2) Initial Stack Test and Report (for PM) ^b	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
3) Initial Stack Test and Report (for Hg) ^b	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
4) Initial Stack Test and Report (for HCl) ^b	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
5) Initial Stack Test and Report (for CO) ^b	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
6) Annual Stack Test and Report (for PM) ^b	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
7) Annual Stack Test and Report (for Hg) ^b	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
8) Annual Stack Test and Report (for HCl) ^b	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
9) Annual Stack Test and Report (for CO) ^b	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
10) Repeat Stack Test and Report if Switch Fuels (for Hg and HCl) ^b	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0
11) Initial Fuel Analysis for Mercury and HCL Content ^b	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0
12) Monthly Fuel Analysis for Mercury and HCL Content ^b	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0
13) Annual Tune-up ^b	12	\$0	\$2,875	\$0	1	12	0	0	0	0	\$0	\$0
14) Continuous Parameter Monitoring												
Update Site-specific monitoring plan (all) ^c	40	\$0		\$0	1	40	25	1,000	100	50	\$133,190	\$0
Opacity ^d												
a) initial	10	\$0	\$0	\$25,812	1	10	6	60	6	3	\$7,991	\$154,872
b) annual	10	\$0	\$0	\$9,855	1	10	6	60	6	3	\$7,991	\$59,130
PM (only sources greater than 250 mmBtu/hr) ^b												
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0
O ₂ ^b												
a) initial	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0
Scrubber System Monitoring and Operation (for units with wet scrubbers) ^d												
a) initial	10	\$0	\$0	\$25,054	1	10	3	30	3	2	\$3,996	\$75,162
b) annual	10	\$0	\$0	\$5,774	1	10	3	30	3	2	\$3,996	\$17,322
Bag Leak Detection System Operation (sources that have fabric filters) ^d												
a) initial	10	\$0	\$0	\$26,300	1	10	8	80	8	4	\$10,655	\$210,400
b) annual	10	\$0	\$0	\$10,000	1	10	8	80	8	4.0	\$10,655	\$80,000
DIFF Monitor ^d												
a) initial	10	\$0	\$0	\$44,858	1	10	1	10	1	1	\$1,332	\$44,858
b) annual	10	\$0	\$0	\$31,500	1	10	1	10	1	0.5	\$1,332	\$31,500
Carbon Injection Monitoring System (all sources that use ACI to control Hg) ^b												
a) initial	10	\$0	\$0	\$115,000	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0
CO CEMS ^{d,e}												
a) initial	10	\$0	\$0	\$153,700	1	10	8	80	8	4	\$10,655	\$1,229,600
b) annual	10	\$0	\$0	\$42,600	1	10	8	80	8	4	\$10,655	\$340,800
C. Create Information	NA											
D. Gather Information	NA											
E. Report Preparation												
1) Initial Notification that Source is Subject ^b	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0
2) Notification of Compliance Status ^b	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0
3) Initial Report on results of Energy Audit ^b	5	\$0	\$0	\$0	1	5	0	0	0	0	\$0	\$0
4) Semi-annual Compliance Report ^b	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0	\$0
Subtotal for Reporting Requirements								1,748			\$202,449	\$528,752
4. Recordkeeping Requirements												
A. Familiarization with Regulatory Requirements	Included in 3a											
B. Implement Activities	NA											
C. Develop Record System	NA											
D. Record Information												
1) Records of Operating Parameter Values ^f	20	\$0	\$0	\$0	1	20	36	720	72	36	\$95,897	\$0
2) Records of Startup, Shutdown, Malfunction ^b	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0
3) Records of Stack Tests ^b	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0
4) Records of Monitoring Device Calibrations ^f	2	\$0	\$0	\$0	1	2	36	72	7	4	\$9,590	\$0
5) Records of All Compliance Reports Submitted ^b	2	\$0	\$0	\$0	2	4	0	0	0	0	\$0	\$0
6) Records of Monthly Fuel Use ^b	0.5	\$0	\$0	\$0	12	6	0	0	0	0	\$0	\$0
E. Personnel Training ^b	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0
F. Time for Audits	NA											
Subtotal for Recordkeeping Requirements								911			\$105,486	\$0
Total Labor Burden and Cost (rounded)^a								2,660			\$308,000	
Total Annualized Capital and O&M Cost (rounded)^a												\$529,000
Grand Total (rounded)^a												\$837,000

Labor Rates:	
Management	\$141.06
Technical	\$120.27
Clerical	\$58.67

Assumptions:
a This cost is based on the following labor rates: \$141.06 for managerial, \$120.27 for technical, and \$58.67 for clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2019, "Table 2. Civilian Workers, by occupational and industry group, by sex, race, and hispanic or latino ethnicity, by total compensation, by county, by industry, by occupation, by race, by ethnicity, by sex, by state, by time period, by private industry."
b Based on compliance data, we estimate that 25 facilities with existing solid fuel units will be impacted by the proposal and may be required to modify monitoring plans. This burden was assigned to year 3 of the compliance period given that sources have 3 years to demonstrate compliance.
c Based on compliance data, we estimate that 26 additional monitors to be installed, operated, calibrated, and maintained at existing large solid fuel units as a result of additional controls installed to meet the revised emission limits. This includes 6 opacity monitors, 1 monitor for the dry injection rate and bag leak detection (DIFF), 8 bag leak detection monitors, 3 wet scrubber monitors, 8 CO CEMS monitors. The initial costs (capital costs of equipment) and annual costs (annualized capital cost + annual O&M costs) for each monitor are consistent with the costs updated in the impacts analysis for the proposed amendments.
d As a result of some of the CO emission limit changes, EPA anticipates 8 sources will opt to comply with the CO CEMS-based emission limit instead of the stack test limit and as a result these units will need to install and operate CO CEMS. The ICR renewals have assumed that units would comply with stack test CO limits to date since they have the option of either. This was not previously costed out.
e We estimate that 36 existing large solid fuel units will have to change the records associated with operating parameter values. This includes the 26 units that install new monitors as well as 10 additional units that may need to make minor changes to the record system to reflect the new emission limits.
f Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Table 4: Annual Respondent Burden and Cost for New Large Solid Fuel Units – NESHP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) (Amendments)

Year 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 ^a	(H) Technical Hours per Year (F X G)	(I) Clerical Hours per Year (H X 0.1)	(J) Management Hours per Year (H X .05)	(K) Total Labor Costs Per Year ^b	(L) Total Non-Labor Costs Per Year ((B+C+D)xExG)
1. Applications	NA											
2. Surveys and Studies	NA											
3. Reporting Requirements												
A. Familiarization with Regulatory Requirements ^c	10	\$0	\$0	\$0	1	10	3	30	3	2	\$3,996	\$0
B. Required Activities												
1) Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
2) Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
3) Initial Stack Test and Report (for HCl)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
4) Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
5) Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
6) Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
7) Annual Stack Test and Report (for HCl)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
8) Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
9) Repeat Stack Test and Report if Switch Fuels (for Hg and HCl)	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0
10) Initial Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0
11) Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0
12) Annual Tune-up	12	\$0	\$2,875	\$0	1	12	0	0	0	0	\$0	\$0
13) Continuous Parameter Monitoring												
Update Site-specific monitoring plan (all Opacity	40	\$0		\$0	1	40	0	0	0	0	\$0	\$0
a) initial	10	\$0	\$0	\$25,812	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$9,855	1	10	0	0	0	0	\$0	\$0
PM (only sources greater than 250 mmBtu/hr)												
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0
O2												
a) initial	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0
Scrubber System Monitoring and Operation (for units with wet scrubbers)												
a) initial	10	\$0	\$0	\$25,054	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$5,774	1	10	0	0	0	0	\$0	\$0
Bag Leak Detection System Operation (sources that have fabric filters)												
a) initial	10	\$0	\$0	\$26,300	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$10,000	1	10	0	0	0	0	\$0	\$0
DIFF Monitor												
a) initial	10	\$0	\$0	\$44,858	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$31,500	1	10	0	0	0	0	\$0	\$0
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
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0
CO CEMS												
a) initial	10	\$0	\$0	\$153,700	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$42,600	1	10	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
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0
3) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0	\$0
Subtotal for Reporting Requirements									35		\$3,996	\$0
4. Recordkeeping Requirements												
A. Familiarization with Regulatory Requirements	Included in 3a											
B. Implement Activities	NA											
C. Develop Record System	NA											
D. Record Information												
1) Records of Operating Parameter Values	20	\$0	\$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
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0
4) Records of Monitoring Device Calibrations	2	\$0	\$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
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	\$0	1	40	0	0	0	0	\$0	\$0
F. Time for Audits	NA											
Subtotal for Recordkeeping Requirements									0		\$0	\$0
Total Labor Burden and Cost (rounded)^d									35		\$4,000	
Total Capital and O&M Cost (rounded)^d												\$0
Grand Total (rounded)^d												\$4,000

Labor Rates:	
Management	\$141.06
Technical	\$120.27
Clerical	\$58.67

Assumptions:
a This table shows only the additional burden to sources affected by the proposed amendments. All other new and recurring costs for these types of boilers are shown in the previous ICR Renewal (EPA ICR Number 2028.09, OMB Control Number 2060-0551). Since the EPA is proposing a 3-year compliance timeframe no burden is estimated in year 1 or 2.

b This ICR uses the following labor rates: \$141.06 for managerial, \$120.27 for technical, and \$58.67 for clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2019, "Table 2. Civilian Workers, by occupational and industry group." The rates are from column 1, "Total compensation." The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

c We assume that respondents impacted by the proposal will familiarize themselves with the rule in year one and implement the rule in year three. Based on compliance data, we estimate that 3 facilities with new solid fuel units will be impacted by the proposal.

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

Table 5: Annual Respondent Burden and Cost for New Large Solid Fuel Units – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) (Amendments)

Year 2

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) 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 (F X G)	(I) Clerical Hours per Year (H X 0.1)	(J) Management Hours per Year (H X .05)	(K) Total Labor Costs Per Year ¹	(L) Total Non-Labor Costs Per Year [(B+C+D)XEG]
1. Applications	NA											
2. Surveys and Studies	NA											
3. Reporting Requirements												
A. Familiarization with Regulatory Requirements	10	\$0	\$0	\$0	1	10	0	0	0	0	\$0	\$0
B. Required Activities												
1) Initial Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
2) Initial Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
3) Initial Stack Test and Report (for HCl)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
4) Initial Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
5) Annual Stack Test and Report (for PM)	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
6) Annual Stack Test and Report (for Hg)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
7) Annual Stack Test and Report (for HCl)	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
8) Annual Stack Test and Report (for CO)	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
9) Repeat Stack Test and Report if Switch Fuels (for Hg and HCl)	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0
10) Initial Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0
11) Monthly Fuel Analysis for Mercury and HCL Content	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0
12) Annual Tune-up	12	\$0	\$2,875	\$0	1	12	0	0	0	0	\$0	\$0
13) Continuous Parameter Monitoring (all)	40	\$0		\$0	1	40	0	0	0	0	\$0	\$0
Opacity												
a) initial	10	\$0	\$0	\$25,812	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$9,855	1	10	0	0	0	0	\$0	\$0
PM (only sources greater than 250 mmBtu/hr)												
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0
O2												
a) initial	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0
Scrubber System Monitoring and Operation (for units with wet scrubbers)												
a) initial	10	\$0	\$0	\$25,054	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$5,774	1	10	0	0	0	0	\$0	\$0
Bag Leak Detection System Operation (sources that have fabric filters)												
a) initial	10	\$0	\$0	\$26,300	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$10,000	1	10	0	0	0	0	\$0	\$0
DIFF Monitor												
a) initial	10	\$0	\$0	\$44,858	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$31,500	1	10	0	0	0	0	\$0	\$0
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
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0
CO CEMS												
a) initial	10	\$0	\$0	\$153,700	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$42,600	1	10	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
2) Notification of Compliance Status	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0
3) Semi-annual Compliance Report	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0	\$0
Subtotal for Reporting Requirements											\$0	\$0
4. Recordkeeping Requirements												
A. Familiarization with Regulatory Requirements	Included in 3a											
B. Implement Activities	NA											
C. Develop Record System	NA											
D. Record Information												
1) Records of Operating Parameter Values	20	\$0	\$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
3) Records of Stack Tests	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0
4) Records of Monitoring Device Calibrations	2	\$0	\$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
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	\$0	1	40	0	0	0	0	\$0	\$0
F. Time for Audits	NA											
Subtotal for Recordkeeping Requirements											\$0	\$0
Total Labor Burden and Cost (rounded)											\$0	\$0
Total Capital and O&M Cost (rounded)												\$0
Grand Total (rounded)												\$0

Labor Rates:	
Management	\$141.06
Technical	\$120.27
Clerical	\$58.67

Assumptions:
a This table shows only the additional burden to sources affected by the proposed amendments. All other new and recurring costs for these types of boilers are shown in the previous ICR Renewal (EPA ICR Number 2028.09, OMB Control Number 2005-018). Showing the EPA is not a requirement for compliance in 2019 from the end of 2017. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2019, "Table 2. Civilian Workers, by occupational and industry group." The rates are from column 1, "Total compensation." The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

Table 6: Annual Respondent Burden and Cost for New Large Solid Fuel Units – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) (Amendments)

Year 3

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 (F X G)	(I) Clerical Hours per Year (H X 0.1)	(J) Management Hours per Year (H X .05)	(K) Total Labor Costs Per Year ^a	(L) Total Non- Labor Costs Per Year [(B+C+D)xExG]
1. Applications	NA											
2. Surveys and Studies	NA											
3. Reporting Requirements												
A. Familiarization with Regulatory Requirements	10	\$0	\$0	\$0	1	10	0	0	0	0	\$0	\$0
B. Required Activities												
1) Initial Stack Test and Report (for PM) ^b	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
2) Initial Stack Test and Report (for Hg) ^b	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
3) Initial Stack Test and Report (for HCl) ^b	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
4) Initial Stack Test and Report (for CO) ^b	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
5) Annual Stack Test and Report (for PM) ^b	12	\$0	\$5,000	\$0	1	12	0	0	0	0	\$0	\$0
6) Annual Stack Test and Report (for Hg) ^b	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
7) Annual Stack Test and Report (for HCl) ^b	12	\$0	\$8,000	\$0	1	12	0	0	0	0	\$0	\$0
8) Annual Stack Test and Report (for CO) ^b	12	\$0	\$7,000	\$0	1	12	0	0	0	0	\$0	\$0
9) Repeat Stack Test and Report if Switch Fuels (for Hg and HCl) ^b	24	\$0	\$16,000	\$0	1	24	0	0	0	0	\$0	\$0
10) Initial Fuel Analysis for Mercury and HCL Content ^b	5	\$0	\$400	\$0	1	5	0	0	0	0	\$0	\$0
11) Monthly Fuel Analysis for Mercury and HCL Content ^b	5	\$0	\$400	\$0	12	60	0	0	0	0	\$0	\$0
12) Annual Tune-up ^b	12	\$0	\$2,875	\$0	1	12	0	0	0	0	\$0	\$0
13) Continuous Parameter Monitoring												
Update Site-specific monitoring plan (all) ^c	40	\$0		\$0	1	40	3	120	12	6	\$15,983	\$0
Opacity ^b												
a) initial	10	\$0	\$0	\$25,812	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$9,855	1	10	0	0	0	0	\$0	\$0
PM (only sources greater than 250 mmBtu/hr) ^b												
a) initial	10	\$0	\$0	\$158,000	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$56,100	1	10	0	0	0	0	\$0	\$0
O ₂ ^b												
a) initial	10	\$0	\$0	\$8,523	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$1,436	1	10	0	0	0	0	\$0	\$0
Scrubber System Monitoring and Operation (for units with wet scrubbers) ^d												
a) initial	10	\$0	\$0	\$25,054	1	10	2	20	2	1	\$2,664	\$50,108
b) annual	10	\$0	\$0	\$5,774	1	10	2	20	2	1	\$2,664	\$11,548
Bag Leak Detection System Operation (sources that have fabric filters) ^b												
a) initial	10	\$0	\$0	\$26,300	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$10,000	1	10	0	0	0	0	\$0	\$0
DIFF Monitor ^b												
a) initial	10	\$0	\$0	\$44,858	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$31,500	1	10	0	0	0	0	\$0	\$0
Carbon Injection Monitoring System (all sources that use ACI to control Hg) ^b												
a) initial	10	\$0	\$0	\$115,000	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$9,700	1	10	0	0	0	0	\$0	\$0
CO CEMS ^b												
a) initial	10	\$0	\$0	\$153,700	1	10	0	0	0	0	\$0	\$0
b) annual	10	\$0	\$0	\$42,600	1	10	0	0	0	0	\$0	\$0
C. Create Information	NA											
D. Gather Information	NA											
E. Report Preparation												
1) Initial Notification that Source is Subject ^b	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0
2) Notification of Compliance Status ^b	8	\$0	\$0	\$0	1	8	0	0	0	0	\$0	\$0
3) Semi-annual Compliance Report ^b	20	\$0	\$0	\$0	2	40	0	0	0	0	\$0	\$0
Subtotal for Reporting Requirements										184	\$21,310	\$11,548
4. Recordkeeping Requirements												
A. Familiarization with Regulatory Requirements	Included in 3a											
B. Implement Activities	NA											
C. Develop Record System	NA											
D. Record Information												
1) Records of Operating Parameter Values ^e	20	\$0	\$0	\$0	1	20	3	60	6	3	\$7,991	\$0
2) Records of Startup, Shutdown, Malfunction ^b	15	\$0	\$0	\$0	1	15	0	0	0	0	\$0	\$0
3) Records of Stack Tests ^b	2	\$0	\$0	\$0	1	2	0	0	0	0	\$0	\$0
4) Records of Monitoring Device Calibrations ^e	2	\$0	\$0	\$0	1	2	3	6	0.6	0.3	\$799	\$0
5) Records of All Compliance Reports Submitted ^b	2	\$0	\$0	\$0	2	4	0	0	0	0	\$0	\$0
6) Records of Monthly Fuel Use ^b	0.5	\$0	\$0	\$0	12	6	0	0	0	0	\$0	\$0
E. Personnel Training ^b	40	\$0	\$0	\$0	1	40	0	0	0	0	\$0	\$0
F. Time for Audits	NA											
Subtotal for Recordkeeping Requirements										76	\$8,791	\$0
Total Labor Burden and Cost (rounded)^f										260	\$30,100	
Total Capital and O&M Cost (rounded)^f												\$11,500
Grand Total (rounded)^f												\$41,600

Labor Rates:	
Management	\$141.06
Technical	\$120.27
Clerical	\$58.67

\$188,827.20
\$540,000.00
\$728,827.20

Assumptions:

- a This cost is based on the following labor rates: \$141.06 for managerial, \$120.27 for technical, and \$58.67 for clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2019, "Table 2. Civilian Workers, by occupational and industry group." The rates are from column 1, "Total compensation." The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.
- b This line item is not changed by proposed amendments and is accounted for in the previous ICR Renewal (EPA ICR Number 2028.09, OMB Control Number 2060-0551).
- c Based on compliance data, we estimate that 3 facilities with new solid fuel units will be impacted by the proposal and may be required to modify monitoring plans. This burden was assigned to year 3 of the compliance period given that sources have 3 years to demonstrate compliance.
- d Based on compliance data, we estimate that 2 additional wet scrubber monitors to be installed, operated, calibrated, and maintained at new large solid fuel units as a result of additional controls installed to meet the revised emission limits. The initial costs (capital costs of equipment) and annual costs (annualized capital cost + annual O&M costs) for each monitor are consistent with the costs updated in the impacts analysis for the proposed amendments.
- e We estimate that 3 existing large solid fuel units will have to change the records associated with operating parameter values. This includes the 2 units that install new monitors as well as an additional unit that may need to make minor changes to the record system to reflect the new emission limits.
- f Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Table 7: Summary of Annual Respondent Burden and Cost – NESHAP for Industrial, Commercial and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) (Amendment)

Boiler Type & Year	Technical Hours	Clerical Hours	Management Hours	Total Labor Hours	Labor Costs
Existing Large Solid Fuel Units					
Year 1	250	25	13	288	\$33,298
Year 2	0	0	0	0	\$0
Year 3	2,312	231	116	2,659	\$307,935
New Large Solid Fuel Units					
Year 1	30	3	2	35	\$4,000
Year 2	0	0	0	0	\$0
Year 3	226	23	11	260	\$30,100
Total	2,818	282	141	3,241	\$375,000
Average	939	94	47	1,080	125,000

Boiler Type & Year	Number of Respondents	Number of Responses	Reporting Hours	Recordkeeping Hours	Total Hours
Existing Large Solid Fuel Units					
Year 1	0	0	288	0	288
Year 2	0	0	0	0	0
Year 3	25	51	1,748	911	2,659
New Large Solid Fuel Units					
Year 1	0	0	35	0	35
Year 2	0	0	0	0	0
Year 3	3	5	184	76	260
Total	28	56	2,254	987	3,241
Average	9	19	751	329	1,080

Average annual additional costs per respondent:	\$33,000
Average annual additional hours per respondent:	115.7
Average annual additional hours per response:	58

Commercial, and
s)

Non-Labor (Annualized Capital/Startup Cost + Annual O&M Cost) Costs	Total Costs
\$0	\$33,298
\$0	\$0
\$528,752	\$836,687
\$0	\$4,000
\$0	\$0
\$11,548	\$41,648
\$540,000	\$920,000
\$180,000	\$307,000

Hours per Response	Hours Per Respondent
-	-
-	-
52	106
-	-
-	-
52	87
-	-
57.9	115.7

Table 8: Average Annual EPA Burden and Cost – NESHP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) (Amendments)

Year 1

Burden Item	(A)	(B)	(C)	(E)	(F)	(G)	(H)
	EPA hours per occurrence	Number of occurrences per year	EPA hours per occurrence per year (C=AxB)	Technical hours per year	Management hours per year (F=Ex0.05)	Clerical hours per year (G=Ex0.1)	Costs per year, \$ ^a
1. Familiarization with regulatory requirements	10	0	0	0	0	0	\$0
2. Enter and update information into agency recordkeeping system ^b	2	0	0	0	0	0	\$0
3. Required activities							\$0
A. Review and approve monitoring plan ^c	20	0	0	0	0	0	\$0
B. Review and approve fuel monitoring plan ^b	20	0	0	0	0	0	\$0
C. Observe initial stack/performance test ^b	40	0	0	0	0	0	\$0
D. Observe repeat performance test ^b	40	0	0	0	0	0	\$0
E. Review operating parameters ^d	2	0	0	0	0	0	\$0
F. Review continuous parameter monitoring ^d	2	0	0	0	0	0	\$0
4. Excess Emissions Enforcement Activities and Inspections ^b	24	0	0	0	0	0	\$0
5. Notification requirements							\$0
A. Review initial notification that sources are subject to the standard ^b	2	0	0	0	0	0	\$0
B. Review notification of initial performance tests and review test plan ^b	20	0	0	0	0	0	\$0
C. Review notification of compliance status ^b	2	0	0	0	0	0	\$0
6. Reporting requirements							\$0
A. Review semiannual compliance report ^b	4	0	0	0	0	0	\$0
B. Review annual compliance report ^b	2	0	0	0	0	0	\$0
C. Review biennial compliance report ^b	1	0	0	0	0	0	\$0
D. Review initial report on results of energy audit ^b	2	0	0	0	0	0	\$0
7. Travel Expenses for Tests Attended ^b	3 days * (\$201 hotel + \$93 meals/incidentals) + (\$600 round trip) = \$1482 per trip			0	0	0	\$0
TOTAL (rounded)^e					0		\$0

Assumptions:

a This cost is based on the following labor rates: \$66.62 for managerial, \$49.44 for technical, and \$26.75 for clerical labor. These rates are from the Office of Personnel Management (OPM), 2019 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.

b This line item is not changed by proposed amendments and is accounted for in the previous ICR Renewal (EPA ICR Number 2028.09, OMB Control Number 2060-0551).

c Based on compliance data, we estimate that 25 facilities with existing solid fuel units and 3 facilities with new solid fuel units will be impacted by the proposal and may be required to modify monitoring plans. This burden was assigned to year 3 of the compliance period given that sources have 3 years to demonstrate compliance.

d Based on compliance data, we estimate that 26 existing solid fuel units and 3 new solid fuel units will have additional operating parameters and continuous parameter monitoring results to be reviewed based on the changes to the emission limits. This burden was assigned to year 3 of the compliance period given that sources have 3 years to demonstrate compliance.

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

Table 9: Average Annual EPA Burden and Cost – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) (Amendments)

Year 2

Burden Item	(A)	(B)	(C)	(E)	(F)	(G)	(H)
	EPA hours per occurrence	Number of occurrences per year	EPA hours per occurrence per year (C=AxB)	Technical hours per year	Management hours per year (F=Ex0.05)	Clerical hours per year (G=Ex0.1)	Costs per year, \$ ^a
1. Familiarization with regulatory requirements	10	0	0	0	0	0	\$0
2. Enter and update information into agency recordkeeping system ^b	2	0	0	0	0	0	\$0
3. Required activities							\$0
A. Review and approve monitoring plan ^c	20	0	0	0	0	0	\$0
B. Review and approve fuel monitoring plan ^b	20	0	0	0	0	0	\$0
C. Observe initial stack/performance test ^b	40	0	0	0	0	0	\$0
D. Observe repeat performance test ^b	40	0	0	0	0	0	\$0
E. Review operating parameters ^d	2	0	0	0	0	0	\$0
F. Review continuous parameter monitoring ^d	2	0	0	0	0	0	\$0
4. Excess Emissions Enforcement Activities and Inspections ^b	24	0	0	0	0	0	\$0
5. Notification requirements							\$0
A. Review initial notification that sources are subject to the standard ^b	2	0	0	0	0	0	\$0
B. Review notification of initial performance tests and review test plan ^b	20	0	0	0	0	0	\$0
C. Review notification of compliance status ^b	2	0	0	0	0	0	\$0
6. Reporting requirements							\$0
A. Review semiannual compliance report ^b	4	0	0	0	0	0	\$0
B. Review annual compliance report ^b	2	0	0	0	0	0	\$0
C. Review biennial compliance report ^b	1	0	0	0	0	0	\$0
D. Review initial report on results of energy audit ^b	2	0	0	0	0	0	\$0
7. Travel Expenses for Tests Attended ^b	3 days * (\$201 hotel + \$93 meals/incidentals) + (\$600 round trip) = \$1482 per trip			0	0	0	\$0
TOTAL (rounded)^e					0		\$0

Assumptions:

a This cost is based on the following labor rates: \$66.62 for managerial, \$49.44 for technical, and \$26.75 for clerical labor. These rates are from the Office of Personnel Management (OPM), 2019 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.

b This line item is not changed by proposed amendments and is accounted for in the previous ICR Renewal (EPA ICR Number 2028.09, OMB Control Number 2060-0551).

c Based on compliance data, we estimate that 25 facilities with existing solid fuel units and 3 facilities with new solid fuel units will be impacted by the proposal and may be required to modify monitoring plans. This burden was assigned to year 3 of the compliance period given that sources have 3 years to demonstrate compliance.

d Based on compliance data, we estimate that 26 existing solid fuel units and 3 new solid fuel units will have additional operating parameters and continuous parameter monitoring results to be reviewed based on the changes to the emission limits. This burden was assigned to year 3 of the compliance period given that sources have 3 years to demonstrate compliance.

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

Table 10: Average Annual EPA Burden and Cost – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) (Amendments)

Year 3

Burden Item	(A)	(B)	(C)	(E)	(F)	(G)	(H)
	EPA hours per occurrence	Number of occurrences per year	EPA hours per occurrence per year (C=AxB)	Technical hours per year	Management hours per year (F=Ex0.05)	Clerical hours per year (G=Ex0.1)	Costs per year, \$ ^a
1. Familiarization with regulatory requirements ^b	10	1	10	10	1	1	\$554.46
2. Enter and update information into agency recordkeeping system ^b	2	0	0	0	0	0	\$0
3. Required activities							\$0
A. Review and approve monitoring plan ^c	20	28	560	560	28	56	\$31,049.76
B. Review and approve fuel monitoring plan ^b	20	0	0	0	0	0	\$0
C. Observe initial stack/performance test ^b	40	0	0	0	0	0	\$0
D. Observe repeat performance test ^b	40	0	0	0	0	0	\$0
E. Review operating parameters ^d	2	28	56	56	2.8	5.6	\$3,104.98
F. Review continuous parameter monitoring ^d	2	28	56	56	2.8	5.6	\$3,104.98
4. Excess Emissions Enforcement Activities and Inspections ^b	24	0	0	0	0	0	\$0
5. Notification requirements							
A. Review initial notification that sources are subject to the standard ^b	2	0	0	0	0	0	\$0
B. Review notification of initial performance tests and review test plan ^b	20	0	0	0	0	0	\$0
C. Review notification of compliance status ^b	2	0	0	0	0	0	\$0
6. Reporting requirements							\$0
A. Review semiannual compliance report ^b	4	0	0	0	0	0	\$0
B. Review annual compliance report ^b	2	0	0	0	0	0	\$0
C. Review biennial compliance report ^b	1	0	0	0	0	0	\$0
D. Review initial report on results of energy audit ^b	2	0	0	0	0	0	\$0
7. Travel Expenses for Tests Attended ^b	3 days * (\$201 hotel + \$93 meals/incidentals) + (\$600 round trip) = \$1482 per trip			0	0	0	\$0
TOTAL (rounded) ^e				784			\$37,800

Assumptions:

a This cost is based on the following labor rates: \$66.62 for managerial, \$49.44 for technical, and \$26.75 for clerical labor. These rates are from the Office of Personnel Management (OPM), 2019 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.

b This line item is not changed by proposed amendments and is accounted for in the previous ICR Renewal (EPA ICR Number 2028.09, OMB Control Number 2060-0551).

c Based on compliance data, we estimate that 25 facilities with existing solid fuel units and 3 facilities with new solid fuel units will be impacted by the proposal and may be required to modify monitoring plans. This burden was assigned to year 3 of the compliance period given that sources have 3 years to demonstrate compliance.

d Based on compliance data, we estimate that 26 existing solid fuel units and 3 new solid fuel units will have additional operating parameters and continuous parameter monitoring results to be reviewed based on the changes to the emission limits. This burden was assigned to year 3 of the compliance period given that sources have 3 years to demonstrate compliance.

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

Table 11 - Summary of Annual Agency Burden and Cost - NESHAP for Industrial, Co and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) (An

Year	Technical Hours	Management Hours	Clerical Hours	Total Hours	Labor Costs	Non-Labor Costs
1	0	0	0	0	\$0	\$0
2	0	0	0	0	\$0	\$0
3	682	34	68	784	\$37,800	\$0
Total	682	34	68	784	\$37,800	\$0
Average	227	11.4	23	261	\$12,600	\$0

Year	Number of Responses	Total Hours
1	0	0
2	0	0
3	85	784
Total	85	784
Average	28	261

**Commercial,
Amendments)**

Total Costs
\$0
\$0
\$37,800
\$37,800
\$12,600

Capital/Startup vs. Operation and Maintenance (O&M) Costs				
(A)	(B)	(C)	(D)	(E)
Boiler Type & CPMS	Capital/Startup Cost	Number of Units	Total Capital/Startup Cost (B x C)	Annualized Capital Cost + Annual O&M Costs for One Unit ^a
YEAR 1				
Existing Large Solid Units				
Opacity	\$25,812	0	\$0	\$9,855
Scrubber System	\$25,054	0	\$0	\$5,774
Bag Leak Detection System	\$26,300	0	\$0	\$10,000
DIFF Monitor	\$44,858	0	\$0	\$31,500
CO CEMS	\$153,700	0	\$0	\$42,600
New Large Solid Units				
Scrubber System	\$25,054	0	\$0	\$5,774
YEAR 2				
Existing Large Solid Units				
Opacity	\$25,812	0	\$0	\$9,855
Scrubber System	\$25,054	0	\$0	\$5,774
Bag Leak Detection System	\$26,300	0	\$0	\$10,000
DIFF Monitor	\$44,858	0	\$0	\$31,500
CO CEMS	\$153,700	0	\$0	\$42,600
New Large Solid Units				
Scrubber System	\$25,054	0	\$0	\$5,774
YEAR 3				
Existing Large Solid Units				
Opacity	\$25,812	6	\$154,872	\$9,855
Scrubber System	\$25,054	3	\$75,162	\$5,774
Bag Leak Detection System	\$26,300	8	\$210,400	\$10,000
DIFF Monitor	\$44,858	1	\$44,858	\$31,500
CO CEMS	\$153,700	8	\$1,229,600	\$42,600
New Large Solid Units				
Scrubber System	\$25,054	2	\$50,108	\$5,774
Total (Rounded) ^b			\$1,770,000	

^a This figure represents the annualized capital cost of the new equipment plus the annual O&M costs of the new equipment annualized cost, see: "XXXXXX" in EPA Docket ID Number EPA-HQ-OAR-2002-0058.

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

Total Annual Responses		
(A)	(B)	(C)

Information Collection Activity	Number of Respondents ^a		Number of Responses ^b	
	Existing Sources	New Sources	Existing Sources	New Sources
Total Annual Responses, In Year One				
Reporting: Update Site-specific monitoring plan	0	0	0	0
Reporting: CPMS: Opacity: Annual	0	0	0	0
Reporting: CPMS: Scrubber: Annual	0	0	0	0
Reporting: CPMS: Bag Leak Detection: Annual	0	0	0	0
Reporting: CPMS: DIFF Monitor: Annual	0	0	0	0
Reporting: CPMS: CO CEMS: Annual	0	0	0	0

Total Annual Responses, In Year Two				
Reporting: Update Site-specific monitoring plan	0	0	0	0
Reporting: CPMS: Opacity: Annual	0	0	0	0
Reporting: CPMS: Scrubber: Annual	0	0	0	0
Reporting: CPMS: Bag Leak Detection: Annual	0	0	0	0
Reporting: CPMS: DIFF Monitor: Annual	0	0	0	0
Reporting: CPMS: CO CEMS: Annual	0	0	0	0

Total Annual Responses, In Year Three				
Reporting: Update Site-specific monitoring plan	25	3	1	1
Reporting: CPMS: Opacity: Annual	6	0	1	0
Reporting: CPMS: Scrubber: Annual	3	2	1	1
Reporting: CPMS: Bag Leak Detection: Annual	8	0	1	0
Reporting: CPMS: DIFF Monitor: Annual	1	0	1	0
Reporting: CPMS: CO CEMS: Annual	8	0	1	0

^a EPA estimates that, as a result of the proposed amendments, 26 continuous parameter monitoring systems (CPMS) on will be required to be installed. EPA also estimates that, as a result of the proposed amendments, 2 new sources will be r scrubbers. Additionally, EPA estimates that 25 existing sources and 3 new sources will update site-specific monitoring p changes to the emission limits.

^b Facilities have three years to come into compliance after the proposed amendments are promulgated. EPA assumes that three. Therefore, all additional responses as a result of these amendments are assumed to occur in year three.

(F)	(G)
Number of Units	Total Annualized Capital Cost + Annual O&M Costs (E x F)

0	\$0
0	\$0
0	\$0
0	\$0
0	\$0
0	\$0

0	\$0
0	\$0
0	\$0
0	\$0
0	\$0
0	\$0

6	\$59,130
3	\$17,322
8	\$80,000
1	\$31,500
8	\$340,800
2	\$11,548
	\$540,000

ent. For a detailed explanation of the

(D)	(E)
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Number of Existing Respondents That Keep Records But Do Not Submit Reports	Total Annual Responses $E=(B \times C)+D$
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0	0
0	0
0	0
0	0
0	0
0	0
Total	0

0	0
0	0
0	0
0	0
0	0
0	0
Total	0

0	28
0	6
0	5
0	8
0	1
0	8
Total	56

existing pollution control devices
 required to install CPMS on
 lans as a result of the proposed

all facilities will comply in year

of facilities with units in one of the impacted subcategories in the first 3 years of compliance

Existing Large Solid	New Large Solid
25	3

of units with additional monitoring, includes the list from compliance data plus model boilers to account for units where we do not have data for existing sources. For new sources includes an extra unit with scrubber, recognizing potential growth in new units. The 3rd new unit is estimated to only require an increase in sorbent injection rate to meet the HCl limit.

Monitors	Existing Large Solid	New Large Solid
Opacity	6	
Wet Scrubber	3	2
BLD	8	
DIFF	1	
CO CEMS	8	
Total	26	2
Units that don't require new monitors but may need to adjust monitoring plan to account for new limits	10	1
Total for monitoring changes	36	3