

**SUPPORTING STATEMENT
ENVIRONMENTAL PROTECTION AGENCY**

NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters at Major Sources of HAP

1. Identification of the Information Collection

1(a) Title of the Information Collection

NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters at Major Sources of HAP (40 CFR part 63, Subpart DDDDD)

1(b) Short Characterization/Abstract

This supporting statement addresses information collection activities that will be imposed by the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters at Major Sources of HAP, 40 CFR part 63 subpart DDDDD (ICI Boiler and Process Heater NESHAP). On September 13, 2004, under authority of section 112 of the Clean Air Act, EPA promulgated national emission standards for hazardous air pollutants for new and existing industrial/commercial/institutional boilers and process heaters. On June 19, 2007, the United States Court of Appeals for the District of Columbia Circuit vacated and remanded the national emission standards for hazardous air pollutants for industrial/commercial/institutional boilers and process heaters. On June 4, 2010 EPA issued a proposal in response to the vacatur and this ICR documents the recordkeeping and reporting requirements associated with EPA's final rule in response to the court's vacatur and remand as well as adjustments made since the proposal in response to public comments.

The information collection activities in this information collection request (ICR) include initial and annual stack tests, fuel analyses, operating parameter monitoring, one-time and periodic reports, and maintenance of records. Varying levels of requirements apply to each subcategory. The ICI Boiler and Process Heater NESHAP contains fifteen subcategories for existing boilers and in-direct fired process heaters: Pulverized coal/fossil solid units; Stokers designed to burn coal/fossil solid; Fluidized bed units designed to burn coal/fossil solid; (d) Stokers designed to burn biomass/bio-based solid; Fluidized bed units designed to burn biomass/bio-based solid; Suspension burners/Dutch Ovens designed to burn biomass/bio-based solid; Fuel Cells designed to burn biomass/bio-based solid; Hybrid suspension/grate burners designed to burn biomass/bio-based solid; Units designed to burn solid fuel; Units designed to burn liquid fuel; Units designed to burn liquid fuel in non-continental States or territories; Units designed to burn natural gas, refinery gas or other gas 1 fuels; Units designed to burn other (gas 2) gases; Metal process furnaces; and Limited-use boilers and process heaters. These same 15 subcategories apply to new boilers and in-direct fired process heaters. The information collection activities will enable EPA to determine initial and continuous compliance with

emission standards for regulated pollutants, and ensure that facilities conduct proper planning, operation, and unit maintenance.

Records and reports required by the NESHAP for industrial, commercial, and institutional boilers and process heaters at major sources of HAP are necessary to enable EPA to identify sources subject to the standards and to ensure that the standards are being achieved. Records and reports must be maintained at the facility and/or submitted to EPA. All reports are sent to the delegated state or local authority. In the event that there is no such delegated authority, the reports are sent directly to the United States Environmental Protection Agency (EPA) regional office.

Approximately 13,840 existing units at 1,639 facilities and 47 new units at 16 facilities would be subject to the regulation over the next three years. The cost of this Information Collection Request (ICR) will be \$288 million (rounded).

The burden to the “Affected Public” for each boiler subcategory may be found in Tables 1.A-12.C in Attachment A. The burden to the “Federal Government” is attributed entirely to work performed by federal employees or government contractors; this burden may be found in Tables 13.A-13.C of Attachment B.

2. Need for and Use of the Collection

2(a) Need/Authority for the Collection

The EPA is charged under Section 112 of the Clean Air Act, as amended, to establish standards of performance for each category or subcategory of major sources and area sources of hazardous air pollutants. These standards are applicable to new or existing sources of hazardous air pollutants and shall require the maximum degree of emission reduction. In addition, section 114(a) states that the Administrator may require any owner/operator subject to any requirement of this Act to:

- (A) Establish and maintain such records;
- (B) make such reports;
- (C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods;
- (D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Administrator shall prescribe);
- (E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical;
- (F) submit compliance certifications in accordance with Section 114(a)(3);
- and (G) provide such other information as the Administrator may reasonably require.

In the Administrator's judgment, pollutant emissions from industrial, commercial, and

institutional boilers and process heaters cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, the NESHAP are proposed for this source category at 40 CFR part 63, subpart DDDDD.

2(b) Practical Utility/Users of the Data

The information will be used by EPA to: (1) Identify new, modified, reconstructed and existing sources subject to the ICI Boiler and Process Heater NESHAP; (2) ensure that the ICI Boiler and Process Heater NESHAP is being properly applied; (3) ensure that the ICI Boiler and Process Heater NESHAP is being complied with; (4) ensure, on a continuous basis, that the operating parameters established during the initial performance test are not exceeded.

In addition, records and reports are necessary to enable EPA to identify facilities that may not be in compliance with the Boilers NESHAP. Based on reported information, EPA will decide which facilities should be inspected and what records or units should be inspected at the facilities. The records that facilities maintain will indicate to EPA whether facility personnel are properly operating and maintaining the boiler or process heater and control equipment.

3. Nonduplication, Consultations, and Other Collection Criteria

The requested recordkeeping and reporting will be required under (40 CFR part 63, subpart DDDDD).

3(a) Nonduplication

If the subject standards have not been delegated, the information is sent directly to the appropriate EPA regional office. Otherwise, the information is sent directly to the delegated state or local agency. If a state or local agency has adopted its own similar standards to implement the Federal standards, a copy of the report submitted to the state or local agency can be sent to the Administrator in lieu of the report required by the Federal standards. Therefore, no duplication exists.

3(b) Public Notice Required Prior to ICR Submission to OMB

A public notice of this collection was provided in the notice of proposed rulemaking for the Boilers NESHAP on June 4, 2010 at 75 FR 32006.

3(c) Consultations

In July 2008, the EPA issued a survey, entitled “Information Collection Effort for Facilities with Combustion Units (ICR No. 2286.01).” This ICR was distributed to 3,396 facilities with boilers and process heaters firing any fuel type and other combustion units firing non-fossil solids. In May 2009, the EPA issued a follow-up ICR (ICR No 2286.03) requesting a subset of these facilities to conduct stack testing to fill data gaps. Throughout each of these two

ICRs, the Agency received comments on the estimated costs to conduct stack testing and fuel analysis, and the types of pollutants to request testing from. These comments have been incorporated into the estimates for the ICR on the proposed ICI Boiler and Process Heater NESHAP.

In January 2009, the EPA convened a panel, in compliance with the Small Business Regulatory Fairness Act (SBREFA) to request input about the proposed ICI Boiler and Process Heater NESHAP and the Area Source Boiler NESHAP. During this SBREFA panel EPA received comments from panel members on the cost estimates for work practice standards being proposed in the rulemaking. The comments on the cost to conduct energy audits at industrial facilities have been incorporated into the cost estimates contained in this ICR.

The public was also provided the opportunity to review and comment on the burden estimated in this Information Collection Request during the comment period for the proposed rulemaking. We have reviewed these comments and have adopted several changes to the compliance requirements in the final rule in response to these comments and to minimize the burden on affected entities. Significant items that have reduced the burden on affected entities include removal of the CO CEMS requirement for units with a heat input capacity of 100 mmBtu/hr or greater; instead, these units will install an oxygen monitor. Further, new small unit with a heat input capacity less than 10 mmBtu/hr are subject to the same biennial work practice standard as existing small units, instead of the numeric emission limits contained in the proposal. The preamble and final rule discuss the significant changes made since proposal. In response to specific comments received on the estimated burden we have updated the burden estimates with the new inventory of affected sources, incorporated a burden line item for personnel training on new recordkeeping and reporting requirements of the final rule, and we have also added a line item to consider repeat testing for solid fuel units that may test more than once in order to establish 'worst case' operating conditions for both HCl and Hg emissions. A notification of alternative fuel use for gas units burning liquids during periods of curtailment was also added to be consistent with the requirements in the final rule. In addition, the costs to maintain records of monthly fuel analysis results for gaseous fuels opting to demonstrate they meet the Hg and H₂S fuel specification for gas 1 fuels has also been added to be consistent with requirements in the final rule.

3(d) Effects of Less Frequent Collection

For sources with applicable emission limits, the Boilers NESHAP provides the option of demonstrating compliance through initial and periodic fuel analysis (for sources that burn fuels with pollutant contents lower than the emission limits) or through initial and annual stack testing. If a source can demonstrate that the fuel(s) burned in the boiler or process heater has a pollutant content that is less than the applicable emission limit, then the Boilers NESHAP requires that the source conduct initial fuel analyses, periodic fuel analysis, and initial and semiannual reporting. Sources that demonstrate compliance through performance testing must continuously monitor operating parameters and conduct periodic fuel analyses, and complete initial and semiannual reporting. The EPA chose the frequency of these activities to provide an

adequate margin of assurance that affected facilities will not operate for extended periods in violation of the regulations.

The annual performance testing, where applicable, will ensure, on an ongoing basis, that the air pollution control device is operating properly and its performance has not deteriorated.

During the initial stack tests (for particulate matter, mercury, hydrogen chloride, carbon monoxide, and dioxins and furans), the owner or operator must establish maximum or minimum values for each applicable operating parameter. Thereafter, the owner or operator must, in some cases, conduct annual stack tests for particulate matter, mercury, hydrogen chloride, carbon monoxide, and dioxins and furans and must always continuously monitor the operating parameters. The activities associated with setting these site-specific operating limits include monitoring of the parameters during the performance test, reviewing and averaging the monitoring data, and, if necessary, calculating average values for fuel pollutant content.

Although continuous monitoring of operating parameters cannot provide a direct measurement of emissions, it is less expensive than continuous emission monitoring systems (CEMS) and the collected information can ensure that the boiler or process heater and associated air pollution control equipment are operated properly. For large boilers greater than 250 mmBtu/hr, PM CEMS are required. This information assures EPA and the public that the reductions envisioned by the Boilers NESHAP are being achieved. Less frequent monitoring would not ensure continuous compliance.

The semiannual reporting requirement allows the submittal of required information and data on established operating parameters so that any potential problems can be identified in a timely fashion.

New and existing small (less than 10 mmBtu/hr) boilers firing solid, liquid, or gaseous fuels and all limited use (operates less than 876 hr/yr) boilers demonstrate compliance with the rule by conducting a biennial tune-up. Since this frequency is less than the semi-annual compliance report frequency typically required from sources in this source category, a biennial compliance report is required. These tune-up reports can be requested by the Administrator upon request but are not required to be submitted.

New and existing large Gas 1 boilers demonstrate compliance by conducting an annual tune-up. These boilers are thus required to submit annual compliance reports. Units firing gaseous fuels other than natural gas and refinery gas must demonstrate that those fuels meet the specifications for H₂S and Hg contained in the final rule in order to qualify under the Gas 1 subcategory. If the content of these constituents are not going to exceed the specifications, these units may conduct an initial testing and include a statement that the gas will not exceed the specification in the initial Notification of Compliance Status. If the gaseous fuel constituents will vary, the unit is required to conduct monthly testing and maintain records to demonstrate that the gaseous fuels meet the specifications. Monthly testing and recordkeeping at units with variable gas quality ensures continuous compliance.

3(e) General Guidelines

These reporting or recordkeeping requirements do not violate any of the regulations promulgated by OMB under 5 CFR part 1320, section 1320.5.

The Boilers NESHAP requires all records to be maintained at the source for a period of five years. In 40 CFR part 63, subpart A, “General Provisions for National Emission Standards for Hazardous Air Pollutants for Source Categories,” owners or operators of facilities are required to keep and maintain records for a period of five years. These records must be kept on file for use, if needed, by the regulating authority to ensure that the plant personnel are operating and maintaining the unit and the control equipment properly. The title V permit programs also require records to be retained for five years. These records must be kept on file for use, if needed, by the regulating authority to ensure that the plant personnel are operating and maintaining the unit and the control equipment properly.

3(f) Confidentiality

Any information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in Title 40, chapter 1, part 2, subpart B - Confidentiality of Business Information (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 40000, September 8, 1978; 43 FR 42251, September 20, 1978; 44 FR 17674, March 23, 1979). In response to public comments with respect to concerns of confidential information contained in the energy assessment report, EPA has modified the requirements to submit the entire results in order to protect potential confidential business information. Instead a signed certification that the energy assessment was completed is to be included in the Notification of Compliance Status.

3(g) Sensitive Questions

The reporting or recordkeeping requirements in the standard do not include sensitive questions.

4. The Respondents and the Information Requested

4(a) Respondents/NAICS Codes

The respondents to the recordkeeping and reporting requirements are owners or operators of new or existing industrial, commercial, or institutional boilers and process heaters. The Boilers Major Source NESHAP affects any industry, state, local, or tribal government, or any institution (e.g., university) using a boiler as defined in the regulation. This includes, but is not limited to, the following North American Industry Classification System (NAICS) codes listed in Table 1 below.

Table 1: NAICS Categories for Various Affected Sources

NAICS Codes	NAICS Codes
211	Extractors of crude petroleum or natural gas.
321	Wood product manufacturing.
322	Pulp and paper mills.
325	Chemical manufacturers.
324	Petroleum refineries and manufacturers of coal products.
316/326/339	Manufacturers of rubber and miscellaneous plastic products.
331	Steel works, blast furnaces.
332	Electroplating, plating, polishing, anodizing, and coloring.
336	Manufacturers of motor vehicle parts and accessories.
221	Electric, gas, and sanitary services.
622	Health services.
611	Educational services

Based on the distribution of major source facilities with affected boilers or process heaters reported in the 2008 survey entitled “Information Collection Effort for Facilities with Combustion Units.(ICR No. 2286.01),” there are 1,639 existing facilities with affected boilers or process heaters. Of these, 94 percent are located in the private sector and the remaining 6 percent are located in the public sector. The agency is projecting 16 new facilities with 47 affected boilers and process heaters. The EPA is estimating that all new facilities will be in the private sector. Considering new and existing sources together, 95 percent of facilities are estimated to be in the private sector.

4(b) Information Requested

(i) Data Items

In this ICR, all the data that is recorded or reported will be required by (40 CFR part 63, Subpart DDDDD).

In Attachment B, tables 1.A-C, 2.A-C, 3.A-C, 4.A-C, 5.A-C, 6.A-C, 7.A-C, 8.A-C, 9.A-C, 10.A-C, 11.A-C, and 12.A-C present a summary of the testing, monitoring, recordkeeping and reporting requirements of the ICI Boiler and Process Heater NESHAP.

(ii) Respondent Activities

The respondent activities proposed by the ICI Boiler and Process Heater NESHAP are provided under the first column of tables 1.A-12.C. All respondent burden items are included in tables 1.A-12.C.

(iii) Summary of Requirements

The information collection activities in this ICR include initial and annual stack tests, fuel analyses, operating parameter monitoring, continuous O₂ monitoring for all large units, continuous emission monitoring for PM at units greater than 250 mmBtu/hr, certified energy audits, annual or biennial tune-ups (depending on the size of the combustion equipment) and a site-specific fuel monitoring plan, one-time and periodic reports, and the maintenance of records.

For sources that can demonstrate compliance through fuel analysis, the regulation requires an initial fuel analysis and monthly fuel analyses. Sources must conduct additional fuel analyses if they burn a new type of fuel. For sources that are demonstrating that their gaseous fuels other than natural gas and refinery gas meet the specifications for H₂S and Hg contained in the final rule, they must conduct either an initial or monthly fuel analysis to remain in the gas 1 subcategory. If the content of these constituents are not going to exceed the specifications, these units may conduct an initial testing and include a statement that the gas will not exceed the specification in the initial Notification of Compliance Status. If the gaseous fuel constituents will vary, the unit is required to conduct monthly testing and maintain records to demonstrate that the gaseous fuels meet the specifications.

An initial performance test must be completed for particulate matter, mercury, hydrogen chloride, carbon monoxide, and dioxin and furans for affected sources with applicable emission limits. During the initial performance test, the owner or operator must establish maximum or minimum values for each operating parameter. Thereafter, the owner or operator must, in some cases, conduct annual stack tests for particulate matter, mercury, hydrogen chloride, carbon monoxide, and dioxin and furans and must continuously monitor the operating parameters. If a source is required to use PM CEMS, performance testing is not required for particulate matter.

Following the initial performance test, the owner or operator must submit a report that documents the performance test results and the values for their required operating parameters.

All existing units will be required to conduct an initial certified energy audit by qualified personnel which includes a visual inspection of the boiler system, establishing operating characteristics, identifying major energy consuming systems and energy savings potential, reviewing available engineering plans, and listing major energy conservation measures. A signed certification that an audit has been completed should be submitted to the Agency for each energy audit.

All new and existing small and limited use units, and all large units firing natural gas, refinery gas, or other gas 1 fuels meeting the fuel spec can demonstrate compliance by conducting a tune-up of the boiler. Small and limited use units are requested to conduct a tune-up biennially and large natural gas, refinery gas, or other gas 1 units will conduct a tune-up annually. Any large natural gas, refinery gas, or other gas 1 unit will also submit a notification of alternative fuel use if the unit fires alternative fuels during periods of gas curtailment or gas supply emergencies.

For all units other than small and limited use boilers and process heaters and units firing natural gas a semiannual report is required that documents the values for the operating parameters; any deviation; the results of any annual stack tests; the results of any fuel analysis and emissions calculations; fuel usage, and if no deviation occurred, a statement that no deviations occurred.

As specified in the ICI Boiler and Process Heater NESHAP, owners or operators of boilers and process heaters must keep records of certain parameters and information for a period of five years. Owners or operators must maintain records of the initial performance test, annual stack tests, fuel analyses, and any subsequent stack tests or fuel analyses. Owners or operators must also maintain records of the monitoring data for the operating parameters and daily fuel usage.

Owners or operators must also maintain records for boiler or process heater malfunctions and any deviations from the operating parameters. Records must also be maintained of all monitoring device calibration data.

As an administrative addition to this ICR, EPA is also including an illustrative estimate of the burden associated with performing a Root Cause Analysis (RCA) associated with affirmative defense of malfunctions if the source elects to avail themselves to this defense in court. EPA is providing this as an illustrative example of the potential additional administrative burden a source may incur to assert an affirmative defense in response to an action to enforce the standards set forth in the applicable subpart. If a source is in compliance and does not encounter malfunctions that cause a violation of the standard, EPA does not expect this activity to be routinely performed by a source. Our decision to include this record keeping and reporting in the ICR burden is not to assert that EPA assumes less than full compliance. EPA cannot

estimate whether an affirmative defense would be necessary for any source or class of sources. It is not an enforceable requirement of compliance.

5. The Information Collected: Agency Activities, Collection Methodology, and Information Management

5(a) Agency Activities

A list of agency activities is provided in section 6(c) and in tables 13A-C (see Attachment B).

5(b) Collection Methodology and Management

Data obtained during periodic visits by EPA personnel, from records maintained by the respondents, and from information provided in semiannual reports will be tabulated and published for internal EPA use in compliance and enforcement programs. The ICI Boiler and Process Heater NESHAP allows records to be retained in hardcopy or electronic format to allow flexibility and minimize burden.

Information contained in the reports is entered into the AFS which is operated and maintained by EPA's Office of Compliance. AFS is EPA's database for the collection, maintenance, and retrieval of compliance data for approximately 125,000 industrial and government-owned facilities. EPA uses the AFS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. EPA and its delegated Authorities can edit, store, retrieve and analyze the data.

The records required by this regulation must be retained by the owner/operator for five years.

5(c) Small Entity Flexibility

The EPA expects that the ICI Boilers and Process Heater NESHAP will have a substantial impact on a significant number of small entities. In developing the regulation, small entity is defined as: (1) A small business according to Small Business Administration size standards by the North American Industry Classification System (NAICS) category of the owning entity. The range of small business size standards for the 44 affected 3-digit NAICS industries ranges from 500 to 1,000 employees, except for petroleum refining and electric utilities. In these latter two industries, the size standard is 1,500 employees and a mass throughput of 75,000 barrels/day or less or 4 million kilowatt-hours of production or less, respectively; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

Based on responses to the 2008 survey “Information Collection Effort for Facilities with Combustion Units (ICR No. 2286.01),” the EPA has determined that 147 of the 1,639 facilities with existing boilers or process heaters, or 9 percent of the total, affected by the regulation may be small entities.

The Boilers NESHAP does not contain any provisions reserved exclusively for the benefit of small entities. However, the regulation does contain several provisions that reduce the impact on all regulated entities, which include small entities. For instance, operating parameter monitoring is required instead of continuous emissions monitoring systems (CEMS) for units less than 250 mmBtu/hr, the rule provides an option to demonstrate compliance with fuel analysis in lieu of stack testing for boilers combusting fuels with mercury and chlorine contents less than their associated emission limit. In addition, providing a work practice standard for small and limited use boilers and process heaters firing all fuel types and for boilers of all sizes firing natural gas, refinery gas, or other gas 1 fuels, the EPA has substantially reduced the burden of the rulemaking, including reducing the burden on small entities. For example, 34 of the 147 small entities have only small or limited use boilers and process heaters installed at the facilities. The option to demonstrate compliance using an annual or biennial tune-up is a substantial savings compared with the requiring stack testing and add-on air pollution control devices.

5(d) Collection Schedule

Information collected includes the following one-time-only activities: reading the regulation, initial performance tests (for particulate matter, mercury, hydrogen chloride, carbon monoxide, and dioxins and furans for units with applicable emission limits), initial fuel analyses (for mercury and chlorine for units demonstrating compliance using fuel analysis), setting of operating parameter values, report prior to initial startup, report following initial stack tests (includes operating parameter values), development of a SSMP, conducting an energy audit, and development of a site-specific monitoring plan and fuel analysis plan. Since compliance is not required until year 3 for existing facilities, EPA assumes that half of the existing facilities will conduct initial performance tests and related activities in year 2 and the other half will conduct such activities in year 3.

Year 1 for new and existing sources includes the one-time activity of reading the regulation and submitting the initial notification that the source is subject to the regulation. The burden associated with this activity is estimated on a facility basis. The database developed from the 2008 survey “Information Collection Effort for Facilities with Combustion Units (ICR No. 2286.01),” and subsequent public comments to adjust the inventory indicates that each affected facility has on average eight boilers or process heaters. This is a conservative estimate of recordkeeping and reporting burden, as EPA knows that some of the affected facilities have more than eight sources and will be able to benefit from consolidated reporting. New major sources would also submit the following one-time only notifications: intent to construct, start of construction date, anticipated start-up date, and actual start-up date. These notifications generally would be submitted within 60 days of the activity.

In year 1, new facilities will begin training their personnel regarding the use of monitoring equipment and the startup, shutdown, and malfunction plan. Half of the existing facilities will train personnel in year 2 and the other half will train personnel in year 3.

Also in year 1, new sources will begin activities to comply with the subpart such as conducting performance tests, conducting tune-ups, setting operating limits, developing a site-specific monitoring plan and fuel analysis plan, installing and operating applicable monitoring equipment, and submitting the notification of compliance status.

In year 2, the new sources from year 1 will conduct annual performance tests, or tune-ups, if applicable, and submit semiannual compliance reports and the new sources in year 2 will conduct initial performance tests and other initial compliance activities and will also submit all initial notifications. Also in year 2, half of the existing large affected sources will conduct initial performance tests, fuel analyses, certified energy audits, related activities, and submit initial notifications of compliance status. Half of the existing small and limited use affected sources will conduct certified energy audits and biennial tune-ups.

In year 3, the new sources from year 1 and from year 2 and half of the existing sources that began complying with the subpart in year 2 will conduct annual performance tests, if applicable, and will submit semiannual compliance reports. The new sources from year 3 will conduct performance tests, and fuel analyses. Also in year 3, the other half of existing affected sources for which testing is required will conduct performance tests, fuel analyses, and certified energy audits. The remaining half of existing small and limited use sources will conduct initial biennial tune-ups and certified energy audits. Finally, in year 3 all facilities with affected boilers or process heaters will submit the notification of compliance status and those required to submit semi-annual compliance reports will begin submitting these in year 3.

In year 1, new sources will begin keeping records of data such as operating limits, start-up shutdown and malfunctions, tune-up procedures, monitoring device calibrations, stack test results, submitted reports, and fuel usage. In year 2, the new sources from years 1 and 2 will keep records of such data. In year 3, all new and existing affected facilities will keep records of such data.

6. Estimating the Burden and Cost of the Collection

Tables 1.A-12.C document the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for each year for the subpart included in this ICR. The individual burdens are expressed under standardized headings believed to be consistent with the concept of burden under the Paperwork Reduction Act. Where appropriate, specific tasks and major assumptions have been identified. Responses to this information collection are mandatory.

The Agency may not conduct or sponsor, and a person is not required to respond to, a

collection of information unless it displays a currently valid OMB Control Number.

6(a) Estimating Respondent Burden

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated to be \$95.8 million. The average annual recordkeeping hours shown in Tables 1.A-12.C is 73,100. The average annual reporting requirement hours shown in Tables 1.A-12.A is 207,400. These hours are based on Agency studies and background documents from the development of the regulation, Agency knowledge and experience with the NESHAP program, and any comments received.

6(b) Estimating Respondent Costs

(i) Estimating Labor Costs

This ICR uses the following labor rates:

Managerial	\$114.49 (\$54.52 + 110%)
Technical	\$98.20 (\$46.76 + 110%)
Clerical	\$48.53 (\$23.11 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2009, "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.

(ii) Estimating Capital/Startup and Operation and Maintenance Costs

The type of industry costs associated with the information collection activities in the subject standard(s) are both labor costs which are addressed elsewhere in this ICR and the costs associated with continuous monitoring, hiring third party contractors to perform stack tests, energy audits, and/or boiler tune-ups. The capital/startup costs are one time costs when a facility becomes subject to the regulation. The annual operation and maintenance costs are the ongoing costs to maintain the monitor(s) conduct subsequent testing or tune-ups, and other costs such as photocopying and postage.

(iii) Capital/Startup vs. Operation and Maintenance (O&M) Costs

Costs associated with O&M include the annual operation and maintenance costs associated with the continuous parameter monitoring equipment, initial and annual stack and performance testing and/or fuel analysis, and certified energy audits and/or annual/biennial tune-ups. Below are the estimated total annualized capital and startup costs and O&M costs for the affected units for the first 3 years after promulgation.

Capital/Startup vs. Operation and Maintenance (O&M) Costs				
(A) Boiler Type	(B) Number of Respondents (facilities)	(C) Total Annualized Capital and O&M over 3 years	(D) Total Capital/Startup Cost over 3 years	(E) Average Annual O&M and Annualized Capital Costs per year
Existing Large Solid Units	119	\$110,349,070	\$ 99,173,831	\$ 36,783,023
New Large Solid Units	0	\$0	\$ -	\$ -
Existing Small and Limited Use Solid Units	4	\$153,376	\$ -	\$ 51,125
New Small Solid Units	0	\$0	\$ -	\$ -
Existing Large Liquid Units	58	\$36,026,848	\$ 36,889,238	\$ 12,008,949
New Large Liquid Units	4	\$1,198,056	\$ 1,508,230	\$ 399,352
Existing Small and Limited Use Liquid Units	42	\$1,461,260	\$ -	\$ 487,087
New Small Liquid Units	1	\$6,684	\$ -	\$ 2,228
Existing Large Gaseous Units	529	\$32,570,074	\$ 381,388	\$ 10,856,691
New Large Gaseous Units	2	\$43,125	\$ -	\$ 14,375
Existing Small and Limited Use Gaseous Units	887	\$26,099,949	\$ -	\$ 8,699,983
New Small Gaseous Units	9	\$62,384	\$ -	\$ 20,795
Total	1655	\$207,970,826	\$ 137,952,687	\$ 69,323,609

The total capital/startup costs for this ICR are \$138 million. This is the total of column D in the above table. This reflects the initial costs to purchase monitoring equipment.

The total operation and maintenance (O&M) costs for this ICR are \$208 million. This is the total of column C. This reflects the costs to operate the monitoring equipment, and fees paid to third parties to conduct initial and annual stack testing, annual tune-ups, and one-time energy audits.

The average annual cost for capital/startup and operation and maintenance costs to industry over the next three years of the ICR is estimated to be \$69 million as shown in column E. These are recordkeeping costs.

(iv) Potential Burden under Affirmative Defense

When a malfunction occurs, sources must report them according to the applicable reporting requirements of this Subpart DDDDD. An affirmative defense to civil penalties for exceedances of emission limits that are caused by malfunctions is available to a source if it can demonstrate that certain criteria and requirements are satisfied. The criteria ensure that the affirmative defense is available only where the event that causes an exceedance of the emission limit meets the narrow definition of malfunction in 40 C.F.R. 63.2 (sudden, infrequent, not reasonable preventable and not caused by poor maintenance and or careless operation) and where the source took necessary actions to minimize emissions. In addition, the source must meet certain notification and reporting requirements. For example, the source must prepare a written root cause analysis and submit a written report to the Administrator documenting that it has met the conditions and requirements for assertion of the affirmative defense.

To provide the public with an estimate of the relative magnitude of the burden associated with an assertion of the affirmative defense position adopted by a source, EPA provides an administrative adjustment to this ICR that shows the notification, recordkeeping and reporting requirements associated with the assertion of the affirmative defense might entail. EPA’s estimate for the required notification, reports and records, including the root cause analysis, totals \$3,141 and is based on the time and effort required of a source to review relevant data, interview plant employees, and document the events surrounding a malfunction that has caused an exceedance of an emission limit. The estimate also includes time to produce and retain the record and reports for submission to EPA. EPA provides this illustrative estimate of this burden because these costs are only incurred if there has been a violation and a source chooses to take advantage of the affirmative defense.

Personnel	Number of Personnel	Time Requirement (hours)	Total Hours	Hourly Rate (\$/hr)	Total
Technical Personnel	3	6	18	98.20	\$ 1,768
Managerial Personnel	2	6	12	114.49	\$ 1,374
Total	5		30		\$ 3,141

6(c) Estimating Agency Burden and Cost

The only costs to the Agency are those costs associated with analysis of the reported information. EPA's overall compliance and enforcement program includes activities such as the examination of records maintained by the respondents, periodic inspection of sources of emissions, and the publication and distribution of collected information.

The average annual Agency cost during the three years of the ICR is estimated to be \$5.2 million.

This cost is based on the average hourly labor rate as follows:

Managerial	\$62.27 (GS-13, Step 5, \$38.92 + 60%)
Technical	\$46.21 (GS-12, Step 1, \$28.88 + 60%)
Clerical	\$25.01 (GS-6, Step 3, \$15.63 + 60%)

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.

6(d) Estimating the Respondent Universe and Total Burden and Costs

The total number of respondents is referred to as the respondent universe. The respondent universe for this ICR is based on the EPA's population database of industrial, commercial, and institutional boilers and process heaters. Industry burden is calculated based on 13,840 existing units in the database, however, many units have minimal reporting requirements (i.e., initial reporting requirement) and many other units have no requirements under the Boilers NESHAP. Approximately 47 new units will be constructed or reconstructed, but many of those sources will have minimal or no requirements. Units that demonstrate continuous compliance through continuous parameter monitoring must establish a site-specific monitoring plan. A table showing the estimated number of sources for each category is shown below.

Table 2 Number of Responses for New and Existing Units

(A)	(B)	(C)	(D)*
Boiler Type	Number of Respondents (facilities)	Total Number Responses for 3-year Period	Average Annual Number of Responses
Existing Large Solid Units	119	595	198
New Large Solid Units	0	0	0
Existing Small and Limited Use Solid Units	4	14	5

New Small Solid Units	0	0	0
Existing Large Liquid Units	58	290	97
New Large Liquid Units	4	26	9
Existing Small and Limited Use Liquid Units	42	147	49
New Small Liquid Units	1	5	2
Existing Large Gaseous Units	529	2,905	968
New Large Gaseous Units	2	25	8
Existing Small Gaseous Units	887	3,105	1035
New Small Gaseous Units	9	27	9
Affirmative Defense	0	0	0

* Some responses are one-time only requirements and do not occur each year. Initial one-time requirements are included in the annual average for this initial 3-year ICR period.

6(e) Bottom Line Burden Hours and Cost Tables

The detailed bottom line burden hours and cost calculations for the respondents and the Agency are shown in Tables 1.A-12.C and 13.A-13.C in Appendix A and B respectively, and summarized below.

(i) Respondent Tally

The total annual labor hours are 280,459. Details regarding these estimates may be found in tables 1.A-12.C in Appendix A. Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 118 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are \$69 million. The cost calculations are detailed in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance (O&M) Costs.

(ii) The Agency Tally

The average annual Agency burden and cost over next three years is estimated to be 97,563

labor hours at a cost of \$5.2 million. See tables 13.A-C in Appendix B.

6(f) Reasons for Change in Burden

The increase in burden from the proposal ICR to this final ICR is due to changes in the rule and the boiler population. There were increases of 285 existing boilers and one additional new boiler. Additionally, with the floor limits changing between proposal and final rule, the count for control devices needed to meet limits and their associated monitoring equipment has changed. Floor limits were eliminated for new small units and all limited use units and replaced with a tune-up requirement. The use of CO CEMS for units >100 mmBtu/hr was removed, but O₂ monitors were added for all units subject to emission limits that are 10 mmBtu/hr or greater. An estimate for repeat stack tests to establish worst-case operating conditions was added to capture those facilities firing solid fuels which may co-fire or switch fuel types and the Notification of Alternative Fuel Use for gas units firing alternative fuels during periods of curtailment and a fuel spec analysis for Hg and H₂S were also estimated. For those liquid units which comply by Hg and HCl fuel analysis, monthly fuel analyses are now included in addition to the initial analysis to be consistent with rule requirements. In order to capture the on-going training which will be necessary for the facilities to educate their personnel on the rule's recordkeeping and reporting details, training hours have also been added in response to public comments about underestimating the burden hours for affected sources.

To provide the public with an estimate of the relative magnitude of the burden associated with a source asserting the affirmative defense position, EPA is providing an administrative adjustment to this ICR. The adjustment shows the notification, recordkeeping and reporting requirements associated with the assertion of the affirmative defense. This illustrative example does not result in an increase in the burden for this rule. EPA provides this estimate of the burden because these costs are only incurred if the source believes that there has been a violation, and chooses to take advantage of the affirmative defense.

6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to be 118 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB Control Number. The OMB Control

Numbers for EPA regulations are listed at 40 CFR part 9 and 48 CFR chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2002-0058. An electronic version of the public docket is available at <http://www.regulations.gov/> which may be used to obtain a copy of the draft collection of information, submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the docket ID number identified in this document. The documents are also available for public viewing at the Enforcement and Compliance Docket and Information Center in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the docket center is (202) 566-1927. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OAR-2002-0058 in any correspondence.

Part B of the Supporting Statement

This part is not applicable because no statistical methods were used in collecting this information.