## SUPPORTING STATEMENT ENVIRONMENTAL PROTECTION AGENCY

#### NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources

#### 1. Identification of the Information Collection

#### 1(a) Title of the Information Collection

NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources (40 CFR part 63, Subpart JJJJJJ)

#### **1(b)** Short Characterization/Abstract

This supporting statement addresses information collection activities that will be imposed by the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources, at 40 CFR part 63 subpart JJJJJJ (Area Boilers NESHAP).

The Area Boilers NESHAP fulfills the requirements of section 112 of the Clean Air Act (CAA), which requires the United States Environmental Protection Agency (EPA) to promulgate national emission standards for industrial, commercial, and institutional boilers.

The information collection activities in this information collection request (ICR) include initial and annual stack tests, fuel analyses, operating parameter monitoring, biennial tune-ups, one-time energy audits, one-time and periodic reports, and maintenance of records. Varying levels of requirements apply to each subcategory. The Area Boilers NESHAP contains six subcategories: existing boilers designed to burn biomass, coal, or liquid fuels and new boilers designed to burn biomass, coal, or liquid fuels. 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 area sources 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 EPA regional office.

Approximately 182,671 existing boilers at 91,336 facilities are anticipated to be subject to the regulation, and an additional 6,779 new boilers at 3,390 facilities are expected to become subject to the standard in the next three years. The cost of this ICR will be \$153 million per year in annualized capital and start-up and O&M costs and 2.7 million burden hours (rounded) per year during the first three years after the rule is promulgated.

The burden to the "Affected Public" for each boiler subcategory may be found in Tables 1.A-8.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 9.A-9.C of Attachment B.

#### 2. Need for and Use of the Collection

## 2(a) Need/Authority for the Collection

Section 112(d) of the CAA requires us to establish NESHAP for both major and area sources of hazardous air pollutants (HAP) that are listed for regulation under CAA section 112(c). A major source emits or has the potential to emit 10 tons per year (tpy) or more of any single HAP or 25 tpy or more of any combination of HAP. An area source is a HAP-emitting stationary source that is not a major source. Mercury (Hg) and polycyclic organic matter (POM) are the 112(c)(6) pollutants listed for the industrial, commercial and institutional area source boiler source category.

CAA section 112(k)(3)(B) calls for EPA to identify at least 30 HAP which, as the result of emissions from area sources, pose the greatest threat to public health in the largest number of urban areas. EPA implemented this provision in 1999 in the Integrated Urban Air Toxics Strategy (Strategy), (64 FR 38715, July 19, 1999). Specifically, in the Strategy, EPA identified 30 HAP that pose the greatest potential health threat in urban areas, and these HAP are referred to as the "30 urban HAP." CAA section 112(c)(3) requires EPA to list sufficient categories or subcategories of area sources to ensure that area sources representing 90 percent of the emissions of the 30 urban HAP are subject to regulation.

Under CAA section 112(d)(5), we may elect to promulgate standards or requirements for area sources "which provide for the use of generally available control technologies or management practices ("GACT") by such sources to reduce emissions of hazardous air pollutants." Additional information on GACT is found in the Senate report on the legislation (Senate Report Number 101-228, December 20, 1989), which describes GACT as:

. . . methods, practices and techniques which are commercially available and appropriate for application by the sources in the category considering economic impacts and the technical capabilities of the firms to operate and maintain the emissions control systems.

Consistent with the legislative history, we can consider costs and economic impacts in determining GACT, which is particularly important when developing regulations for source categories that may have many small businesses such as these.

In the Administrator's judgment, pollutant emissions from industrial, commercial, and institutional boilers at area sources of HAP cause or contribute to air pollution that may

reasonably be anticipated to endanger public health or welfare. Therefore, NESHAP are being proposed for this source category at 40 CFR part 63, subpart JJJJJJ. The NESHAP will propose MACT floor control for Hg from existing and new coal-fired boilers and carbon monoxide (CO) MACT floor control, as a surrogate to POM, for existing and new coal, biomass, and liquid fuel boilers. In addition, this NESHAP will propose GACT level of control for filterable particulate matter (PM) from new units, based on the technologies identified in the New Source Performance Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR part 60, subparts Db, Dc).

## 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 Area Boilers NESHAP; (2) ensure that the Area Boilers NESHAP is being properly applied; (3) ensure that the Boilers Area Source 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 Area 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 and associated control equipment.

## 3. Nonduplication, Consultations, and Other Collection Criteria

The requested recordkeeping and reporting are required under (40 CFR part 63, subpart JJJJJJ).

## 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 Area Source NESHAP.

## **3(c)** Consultations

The burden estimates were based on Agency experience from similar notification, recordkeeping, and reporting requirements from the vacated NESHAP for Boilers and Process Heaters at Major Sources (140 CFR PART 63, SUBPART DDDDD). Additionally, some limited recordkeeping and reporting requirements were made using estimates from other area source rules that sought to reduce recordkeeping and reporting burden.

The estimated burden for reports related to energy audits were estimated based on comparable audit programs that exist for smaller commercial and institutional entities at two utilities: Pacific Gas and Electric, and CenterPoint Energy. These audits were estimated to consist of a brief pre-screening activity over the phone, a 2 to 4 hour site visit for the audit, and an additional 2 to 4 hours for follow-up calculations and preparation of a report summarizing recommendations and findings from the audit. Since energy audits at industrial facilities tend to require additional time to assess, an alternative estimate for industrial energy audits was provided by Port Townsend Paper Corporation during the 2009 Small Business Regulatory Enforcement Fairness Act (SBREFA) panel for this proposed rulemaking.

The public was also provided with the opportunity to review and comment on the proposed Area Boilers NESHAP and this ICR during the comment period.

## 3(d) Effects of Less Frequent Collection

For sources with applicable emission limits, the Area 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 has a pollutant content that is less than the applicable emission limit, then the Area Boilers NESHAP requires that the source conduct initial fuel analyses, periodic fuel analysis, and initial and semiannual reporting.

For new and existing small sources (i.e., boilers with heat input capacity of less than 10 million Btu per hour (mmBtu/h)), existing large biomass units, and existing large liquid units that demonstrate compliance through biennial tune-ups, the Area Boilers NESHAP requires that the source maintain records of the tune-up including notes on the inspection of the burner, flame pattern, air-to-fuel ratio, and the measured CO concentrations before and after the tune-up was completed. These reports do not need to be submitted unless requested by the Administrator. The EPA chose a biennial recordkeeping frequency to be consistent with the frequency of each tune-up.

If a source demonstrates compliance with an emission limit, during the initial stack tests (for PM or Hg), or performance tests (for CO), 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 tests for filterable PM, Hg, and CO and must always continuously monitor the operating parameters of control devices installed to reduce emissions of PM, CO, or Hg. 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. 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. Sources that demonstrate compliance through performance testing must continuously monitor control device 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.

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 and associated air pollution control equipment are operated properly on a continuous basis. This information assures EPA and the public that the reductions envisioned by the Area Boilers NESHAP are being achieved. Less frequent monitoring would not ensure continuous compliance. The semiannual reporting requirement allows submission of required information and data on established operating parameters so that any potential problems can be identified in a timely fashion.

## **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 Area Boilers NESHAP requires the respondents to maintain all records, including reports and notifications for at least five years. This is consistent with the General Provisions as applied to the standards. EPA believes that the five year records retention requirement is consistent with the Part 70 permit program and the five year statute of limitations on which the permit program is based. The retention of records for five years allows EPA to establish the compliance history of a source, to identify any pattern of non-compliance and to determine the appropriate level of enforcement action. EPA has found that the most flagrant violators have violations extending beyond five years. In addition, EPA would be prevented from pursuing the violators due to the destruction or nonexistence of essential records.

## **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 <u>FR</u> 36902, September 1, 1976; amended by 43 <u>FR</u> 40000, September 8, 1978; 43 <u>FR</u> 42251, September 20, 1978; 44 <u>FR</u> 17674, March 23, 1979).

## **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. The Area Boilers NESHAP affects any industry, federal, 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** 

Standard	NAICS Codes	NAICS Codes
Any area source facility using a boiler as defined in the proposed rule.	321	Wood product manufacturing.
proposed rule.	311	Food manufacturing.
	327	Nonmetallic mineral product manufacturing.
	422	Wholesale trade, nondurable goods.
	531	Real estate.
	611	Educational services.
	813	Religious, grant making, civic, professional, and similar organizations.
	92	Public administration.
	722	Food services and drinking places.
	62	Health care and social assistance.

Based on the distribution of facilities in the boiler inspector inventory for thirteen states, the EPA estimates that 49% of units are located in the private sector and 51% of units are located in the public sector.

#### 4(b) Information Requested

## (i) Data Items

In this ICR, all the data that is recorded or reported is required by 40 CFR part 63, Subpart JJJJJJ.

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, and 8.A-C present a summary of the testing, monitoring, recordkeeping and reporting requirements of the Area Boilers NESHAP for each affected subcategory.

#### (ii) Respondent Activities

The respondent activities required by the Area Boilers NESHAP are provided under the first column of tables 1.A-8.C. All respondent burden items are included in tables 1.A-8.C.

## (iii) Summary of Requirements

The information collection activities in this ICR include initial and annual stack tests, fuel analyses, one-time energy audits, biennial tune-ups, control device operating parameter monitoring, preparation of a site-specific 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 thereafter. Sources must conduct additional fuel analyses if they burn a new type of fuel.

For sources that are required to perform an energy audit, the regulation requires an initial report to be submitted to document the energy audit, detail the ways to improve efficiency, list the cost and benefits of specific improvements, and the time frame for recouping those investments.

For sources that can demonstrate compliance through biennial tune-ups, the regulation requires the source to keep records of the tune-up. These records shall include the concentrations of CO (ppmvd), percent oxygen (dry basis) before and after the tune-up adjustments, and a description of any corrective actions taken as part of the tune-up. These sources must provide a biennial compliance report and not semiannual compliance reports.

For existing sources, an initial and annual performance test must be completed for Hg and CO at coal units. For new units, an initial and annual performance test must be completed for Hg and CO at coal units and PM for coal, biomass and liquid units 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 PM, CO, and Hg, and must continuously monitor the control device operating parameters. 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.

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 Area Boilers NESHAP, owners or operators of boilers keep records of certain parameters and information for a period of five years. Owners or operators must maintain records of the initial performance test, audits, tune-ups, 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 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 9A-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 initial notifications and semiannual reports will be tabulated and published for internal EPA use in compliance and enforcement programs. The Area Boilers 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 the Area Boilers NESHAP to adversely affect small entities. In developing the regulation, small entity is defined as: (1) A small business according to Small Business Administration size standards by the NAICS category of the owning entity. The small business size standard for manufacturing sectors in the expected industries potentially affected by this rule is less than 500 employees. For trade sectors, the size standard is less than 100 employees; (2) A small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field. For non-profit and service industries the small business size range for potentially affected sources is based on total sales of the entity, which range from sales less than \$10 to \$50 million dollars; (3) 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.

The EPA has determined that there are approximately 182,671 existing affected sources at 91,336 facilities. Of these affected units, the EPA has reduced testing, monitoring, recordkeeping and reporting requirements for 169,403 units with design heat capacities less than 10 mmBtu/hr because the Agency found it is impracticable to enforce the emission standards for these small units due to technical or economic limitations. Instead of requiring small sources to conduct and submit stack test reports, the proposed rule requires small units to comply with the rule by conducting a biennial tune-up and preparing a summary report of the procedures followed during the tune-up. Based on the definition for sectors potentially affected by this rule, EPA computed the overall share of small entities to the overall number of affected entities. The overall share of small entities from manufacturing, trading, service, not-for-profit, and state, local, and tribal governments is estimated to be 97 percent, or 177,191 existing units subject to recordkeeping and reporting requirements. By reducing the requirements for small sources, the EPA has substantially reduced the burden on small entities. Further, EPA is not requiring MACT floor control for mercury from biomass and liquid units. This reduces the compliance,

testing, monitoring, recordkeeping and reporting requirements on nearly all units. Mercury control testing and monitoring will be required at 573 large coal-fired boilers out of the 182,671 total boilers, but will be achieving 95 percent reduction of the estimated mercury emissions from the entire source category. By not requiring MACT control for mercury from biomass and liquid-fired units we are providing flexibility to over 99 percent of affected units, including the small entities.

The Area 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. The alternative work practice standards provide for enhanced compliance flexibility and reduced recordkeeping and reporting requirements for affected sources with small boilers.

## 5(d) Collection Schedule

Information collected includes the following one-time-only activities: reading the regulation, initial performance tests (for PM, Hg, and CO for units with applicable emission limits), initial fuel analyses, setting of operating parameter values, report following initial stack tests (includes operating parameter values), development of a site-specific monitoring plan, and conducting an energy audit. Compliance is not required until year 3 for existing facilities. In order to ensure compliance by the compliance date, EPA assumed that half of the existing facilities will conduct necessary compliance activities such as energy audits 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 of sources used in the development of the Area Boilers NESHAP indicates that each affected facility has, on average, two boilers. This is a conservative estimate of recordkeeping and reporting burden, as EPA knows that some of the affected facilities have more than two sources and will be able to benefit from consolidated reporting. During year 1, new sources would also submit a one-time notification of compliance status.

Also in year 1, new facilities will begin activities to comply with the subpart such as conducting performance tests, setting operating limits, developing a site-specific monitoring plan, installing and operating applicable monitoring equipment, and submitting the notification of compliance status. New facilities will also submit semiannual compliance reports and begin keeping records of all compliance activities.

In year 2, the new sources from year 1 will conduct annual performance tests, if applicable, and submit semiannual compliance reports, and the new sources in year 2 will conduct initial performance tests and fuel analyses, and submit all initial notifications and semiannual compliance reports. Also in year 2, half of the existing affected sources will conduct an energy audit, boiler tune-up, and initial performance tests, as applicable to each subcategory.

In year 3, the new sources from year 1 and from year 2 will conduct annual performance tests, if applicable, and will submit semiannual compliance reports. The new sources from year 3 will conduct initial performance tests, fuel analyses, and submit all initial notifications and semiannual compliance reports. Also in year 3, the remaining half of existing affected sources will conduct an energy audit, initial compliance tests, and tune-ups. For all existing sources for which an energy audit is required, the report from the energy audit and/or tune-up, and the initial notification of compliance status will be submitted.

In year 1, new sources will begin keeping records of data such as operating limits, fuel usage, and any reports submitted to EPA. 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 that are subject to recordkeeping requirements will keep records of such data.

## 6. Estimating the Burden and Cost of the Collection

Tables 1.A-8.A document the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry 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 \$406.8 million, including \$253.7 million in labor costs and \$153.1 million in non-labor capital/start-up and operation and maintenance (O&M) costs. The average annual recordkeeping hours shown in Tables 1.A-8.C is 201,400. The average annual reporting requirement hours shown in Tables 1.A-8.C is 2.5 million. 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 devices, 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 tests 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 tune-ups. Below is the estimated total annualized capital and startup costs and O&M costs for the affected units for the first 3 years after promulgation.

The total capital/startup costs for this ICR are \$22.7 million for the three years following promulgation. This is the total of column D in the table below. This reflects the initial costs to purchase monitoring equipment.

The total annualized capital/startup and O&M costs for this ICR are \$459.4 million, or an average of \$153.1 million per year. These are recordkeeping costs. This reflects the capital recovery of purchasing the monitoring equipment, costs to operate the monitoring equipment, and fees paid to third parties to conduct initial and annual stack testing, biennial tune-ups, and one-time energy audits at facilities with large boilers.

Table 2:	Capital/Start-u	p vs. O&M	Costs
----------	-----------------	-----------	-------

(A)	(B)	(C)	(D)	(E)
Boiler Type	Number of Respondents (facilities)	al Annualized al and O&M over 3 years	Total bital/Startup over 3 years	erage Annual O&M Annualized Capital Costs per year
Existing Large Solid Units	2,020	\$ 20,730,258	\$ 2,040,000	\$ 6,910,086
New Large Solid Units	30	\$ 313,700	\$ 474,100	\$ 104,567

Existing Small Solid Units	5,314	\$	11,840,706	\$		\$	3,946,902
	5,514	Φ	11,040,700	Ψ		φ	3,340,302
New Small Solid Units	148	\$	657,260	\$	-	\$	219,087
Existing			·				
Large Liquid							
Units	4,615	\$	37,226,090	\$	-	\$	12,408,697
New Large							
Liquid Units	244	\$	21,622,400	\$	20,154,600	\$	7,207,467
Existing Small Liquid							
Units	79,387	\$	353,748,472	\$	-	\$	117,916,157
New Small							
Liquid Units	2,968	\$	13,227,636	\$	-	\$	4,409,212
TOTAL	94,726	\$	459,366,522	\$	22,668,700	\$	153,122,174

## iv) Potential Burden under Affirmative Defense

When a malfunction occurs, sources must report them according to the applicable reporting requirements of this Subpart. 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.

		Time			
	Number of	Requirement	Total	Hourly Rate	
Personnel	Personnel	(hours)	Hours	(\$/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 \$13.1 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 database of industrial, commercial, and institutional boilers at area source facilities. For a description of how EPA estimated the number of affected sources, see memorandum entitled "Development of Model Units for the Area Source Industrial/Commercial/Institutional Boilers National Emissions Standards for Hazardous Air Pollutants."

Based on data available from state boiler inspector databases, the EPA estimates there are approximately 21.97 million existing boilers at area source facilities nationwide. Further, the EPA estimates the Area Boilers NESHAP to affect approximately 182,671 of these units. The remaining boilers at area sources of HAP are gas-fired boilers and not covered under the proposed rulemaking. The industry burden for existing units is based on these 182,671 units.

An additional 6,779 solid and liquid fuel boilers at area source facilities are expected to be constructed in the 3 years after promulgation of this rule, or 2,260 new boilers per year.

The respondent universe is 189,450 units, which is the total of all existing and new units through the first three years after promulgations of this rule. Many of these units have reduced

reporting requirements (i.e., biennial records and reports to the Administrator upon request). A table showing the estimated number of sources for each category is shown below.

**Table 3: 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	2,0	101 3-year Feriou	Kesponses
Solid Units	20	6,347	2,116
New Large Solid Units	30	120	40
Existing Small Solid Units	5,3 14	13,285	4,428
New Small Solid Units	1 48	444	148
Existing Large Liquid Units	<b>4,</b> 6	11,538	3,846
New Large Liquid Units	2 44	975	325
Existing Small Liquid Units	79,3 87	198,468	66,156
New Small Liquid Units	2,9 68	8,904	2,968
Affirmative Defense	0	0	0
TOTAL	94,7 26	240,079	80,026

<sup>\*</sup> 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 intial 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-8.C and 9.A-9.C in Appendix A and B respectively, and summarized below.

## (i) Respondent Tally

A breakdown for each of the collection, reporting, and recordkeeping activities required by the Area Boilers NESHAP is presented in tables 1.A-8.C. The estimate of total annual hours requested from the respondents is based on the assumptions outlined in section 6(d) of this supporting statement. The EPA estimates the respondent burden by totaling the hours for the first 3 years after the implementation of the Area Boilers NESHAP for technical, managerial, and clerical staff at the facility, and for the labor hours of the contractors doing the performance

testing. This total is divided by three to arrive at the average annualized burden (see ICRAS summary table 10). A similar approach is taken for estimating average annual labor and non-labor costs. For the first 3 years after the implementation of the Area Boilers NESHAP, EPA estimates that industry would expend 2.7 million hours annually at a cost of \$406.8 million per year to meet the monitoring, recordkeeping, and reporting requirements. Excluding labor costs, the annualized capital/startup and O&M is expected to be \$153.1 million. The annualized capital/startup and O&M costs for the respondents includes the cost of monitoring equipment, and cost to hire third parties to conduct audits, testing, and tune-ups. These testing, monitoring, audit, and tune-up costs are also included in the total control cost impacts estimated for the Area Boilers NESHAP such that adding these burden estimates to the total cost of the regulation would overestimate the total costs incurred by affected sources.

Table 4: Annual Average Burden for all Affected Boilers

	Total Recordkeeping and Reporting Costs				
	Number of Responses	Annual Burden Hours	Annualized Capital/Star up and O&M		
Year 1	94,204	4,520,641	\$	8,288,756	
Year 2	3,478	930,921	\$	222,157,049	
Year 3	142,397	2,593,917	\$	228,920,717	
Overall Average Annual					
Estimates	80,026	2,681,826	\$	153,122,174	

## (ii) The Agency Tally

The bottom line agency burden hours and costs, presented in table 5 below and in Attachments 9A-9C, are calculated by totaling the hours per year for technical, managerial, and clerical staff, and by totaling the cost column. The table summarizes the agency burden for each of the first 3 years and calculates the average annual burden by dividing the 3-year total by three. The estimated average annual burden over the first 3 years for the agency is 285,900 hours at a cost of \$13.1 million (including travel expenses for observing stack tests) per year.

**Table 5: Annual Average Burden for the Federal Government** 

AGENCY Burden	Hours	Cost	s (labor + travel)
Year 1	439,226	\$	19,848,842
Year 2	49,445	\$	2,473,334
Year 3	368,891	\$	16,869,092
Total	857,563	\$	39,191,268
Annual Average	285,854	\$	13,063,756

## 6(f) Reasons for Change in Burden

The decrease in burden from the proposal ICR to this final ICR is due to changes in the rule. The most substantial change was the elimination of floor limits for several subcategories; the limits were replaced with a work practice standard of biennial tune-ups. Additionally, the

use of CO CEMS for units >100 mmBtu/hr was removed.

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 average 34 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-2006-0790. 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-2006-0790 in any correspondence.

## **Part B of the Supporting Statement**

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