SUPPORTING STATEMENT
ENVIRONMENTAL PROTECTION AGENCY

NSPS for Industrial-Commercial-Institutional Steam Generating Units (40 CFR part 60, subpart Db) (Renewal)

1. Identification of the Information Collection

1(a) Title of the Information Collection

NSPS for Industrial-Commercial-Institutional Steam Generating Units (40 CFR part 60, subpart Db)

1(b) Short Characterization/Abstract

The New Source Performance Standards (NSPS), for the regulations published at 40 CFR part 60, subpart Db for the pollutant sulfur dioxide (SO_2) were proposed on June 19, 1986, and promulgated on December 16, 1987. These regulations, amended on February 27, 2006, apply to industrial-commercial-institutional steam generating units (boilers) that commenced construction, modification, or reconstruction after June 19, 1984, and that have a heat input capacity from fuels combusted in the unit of greater than 29 MW (100 million Btu/hour). This information is being collected to assure compliance with 40 CFR part 60, subpart Db.

In general, all NSPS standards require initial notifications, performance tests, and periodic reports. Owners or operators are also required to maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, or any period during which the monitoring system is inoperative. These notifications, reports, and records are essential in determining compliance, and are required of all sources subject to NSPS.

Any owner or operator subject to the provisions of this part shall maintain a file of these measurements, and retain the file for at least two years following the date of such measurements, maintenance reports, and records. 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.

Size of the Regulated Community

In a study from 1979, EPA modeled the total capacity of U.S. industrial/commercial boilers for 1980, 1985 and 2000, for boilers with capacities greater than 29 MW (100 million BTU/hour) (“Population and Characteristics of Industrial/Commercial Boilers in the United States (U.S.) from 1979"; EPA Number PB80 - 150881).

This model shows an increase of 4,139 new industrial/commercial boilers between 1985 and 2000 with capacities greater than 29 MW (100 million BTU/hour), and these would be subject to NSPS Db. Therefore, according to this model there should be approximately 4,139

steam generating units (or boilers) currently subject to NSPS subpart Db. Assuming one boiler per facility, the number of facilities subject to NSPS subpart Db would be 4,139.

However, during the nitrogen oxide (NOx) NSPS revision, information on industrial boilers subject to NSPS Db was obtained from three sources: a best available technology/ lowest achievable emission rate database search; copies of permits obtained from EPA regional offices; and telephone contacts with EPA regions, state agencies, and boiler vendors. Based on the information obtained, as of 1995 only 45 NSPS Db boilers were identified. Since NSPS Db was in affect for ten years in 1995, 45 boilers is probably a low number and model projects indicate that it may be far from the true regulated universe for 1995. The estimated number of boilers projected for the year 2000 is 4,139, using energy consumption as the basis for the calculation. The previous Information Collection Response (ICR) estimated 957 facilities subject to NSPS Db.

During the NOx NSPS revision mentioned above, an analysis was conducted to determine the projected growth of new industrial boilers over the period between 1996 to 2000. This analysis showed that the growth rate would be 76 new industrial boilers per year. Therefore, using the estimate from the previous ICR of 957 and assuming a growth rate of 76 new industrial boilers per year over the three-year period since the last ICR. The 76 new boilers per year would sum to 228 new industrial boilers. Assuming one boiler per facility this would come out to 228 new NSPS Db facilities added to the estimated number from the last ICR submittal (957) for a total of 1,185 NSPS Db facilities estimated for this ICR.

Growth Rate for the Next Three Years

In the Industrial Boiler Maximum Achievable Control Technology (MACT) rulemaking, a projection of new industrial, commercial, and institutional boilers was performed for economic analysis in October, 2002. This analysis showed that 134 industrial, commercial, and institutional boilers would become subject to NSPS subpart Db over the next three years (or 45 per year). This is the most recent growth projection for these facilities.

Therefore, this ICR is estimating that approximately 1,185 sources are currently subject to the regulation, and it is estimated that an additional 45 sources per year will become subject to the regulation in the next three years.

The Office of Management and Budget (OMB) approved the currently active ICR without any "Terms of Clearance."

2. Need for and Use of the Collection

2(a) Need/Authority for the Collection

The EPA is charged under section 111 of the Clean Air Act (CAA), as amended, to establish standards of performance for new stationary sources that reflect:

> . . . application of the best technological system of continuous emissions reduction which (taking into consideration the cost of achieving such emissions reduction, or any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. Section 111(a)(l)

The Agency refers to this charge as selecting the best demonstrated technology (BDT). Section 111 also requires that the Administrator review and, if appropriate, revise such standards every four years.

In addition, section 114(a) states that the Administrator may require any owner or 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, SO_2, particulate matter (PM), and NO_x emissions from Industrial-Commercial-Institutional Steam Generating units cause or contribute to air pollution that may reasonably be anticipated to endanger public health, or welfare. Therefore, the NSPS were promulgated for this source category at 40 CFR part 60, subpart Db.

2(b) Practical Utility/Users of the Data

The control of emissions of SO_2, PM, and NO_x from Industrial-Commercial-Institutional Steam Generating units requires not only the installation of properly designed equipment, but also the operation and maintenance of that equipment. Emissions of SO_2, PM, and NO_x from Industrial-Commercial-Institutional Steam Generating units are the result of operation of the affected facilities. The subject standards are achieved by the capture and/or reduction of SO_2, PM, and NO_x emissions using control technologies such as sorbent injection technologies and wet and dry scrubbers for SO_2; cyclones, electrostatic precipitators, and fabric filters for PM; and low NOx burners and selective catalytic or noncatalytic reduction technologies for NOx. The notifications required in the applicable regulations are used to inform the Agency, or delegated authority, when a source becomes subject to the requirements of the regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated and the regulations are being met. Performance test reports are needed as these are the Agency's record of a source's initial capability to comply with the emission

standards, and serve as a record of the operating conditions under which compliance was achieved. The semiannual reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations. The information generated by the monitoring, recordkeeping and reporting requirements described in this ICR is used by the Agency to ensure that facilities affected by the NSPS continue to operate the control equipment and achieve compliance with the regulation. Adequate monitoring, recordkeeping, and reporting are necessary to ensure compliance with the applicable regulations, as required by the Clean Air Act. The information collected from recordkeeping and reporting requirements also is used for targeting inspections, and is of sufficient quality to be used as evidence in court.

3. Nonduplication, Consultations, and Other Collection Criteria

The requested recordkeeping and reporting are required under 40 CFR part 60, subpart Db.

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

An announcement of a public comment period for the renewal of this ICR was published in the Federal Register on June 21, 2006. No comments were received on the burden published in the Federal Register.

3(c) Consultations

Consultation with an industry representative, the Council of Industrial Boiler Owners (CIBO), was conducted via email. CIBO responded by saying that they polled their members and that they support the renewal of the ICR "as-is" assuming that there is no increase in the time and effort to comply. There has been no revision to the rule over the past three years, hence, no increase in the recordkeeping and reporting requirements in the standard.

To determine the size of the regulated community and the rate of industry growth, the EPA Office of Air Quality Planning and Standards was consulted. The Agency's internal industry experts have been consulted. The Agency's internal data sources and projections of industry growth over the next three years have also been considered.

Another source of information was the information provided by the industry. Information provided in the industry reports is located in the EPA's AFS (Air Facility Subsystem) database. Approximately 1230 respondents are currently subject to the regulation.

It should be noted that industry trade associations and other interested parties were provided an opportunity to comment on the burden associated with the standard as it was being developed, and the standard has been previously reviewed to determine the minimum information needed for compliance purposes.

It is our policy to review carefully any comments received since the last ICR renewal, including those submitted in response to the first federal register notice, and respond appropriately. In this case, no comments were received.

3(d) Effects of Less Frequent Collection

Less frequent information collection would decrease the margin of assurance that facilities are continuing to meet the standards. Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards was collected less frequently, the likelihood of detecting poor operation and maintenance of control equipment and noncompliance would decrease.

3(e) General Guidelines

None of these reporting or recordkeeping requirements violates any of the regulations established by OMB at 5 CFR 1320.5.

3(f) Confidentiality

The required information has been determined not to be confidential. However, 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).

3(g) Sensitive Questions

None of the reporting or recordkeeping requirements contains sensitive questions.

4. The Respondents and the Information Requested

4(a) Respondents/SIC Codes

<u>Characterization and Classification of Boilers and Boiler-Related Industries</u>

Industrial-commercial-institutional boilers (also known as steam generating units) are classified by type, fuel, and method of construction. The three main types are cast iron, fire tube, and water tube. These three categories of boilers are designed and manufactured to meet specific

applications and site requirements. Unit size, design pressure and temperature all depend on boiler application. Each boiler type may burn coal , oil, or natural gas, and increasingly are being designed to burn more than one fuel type.

All boilers subject to NSPS subpart Db are water tubed boilers. Water tubed boilers are used in a variety of applications ranging from supplying large amounts of process steam to providing space heat for industrial facilities, or commercial buildings. Water tubed boilers are fueled by coal, 25 percent; oil, 32 percent, and natural gas, 43 percent. Process steam accounts for the largest use of fuel to fire boilers, using about one third of all industrial fuel.

The following industries use water tubed boilers with capacities greater than 29 MW (100 mmBtu/hr). In EPA studies, energy usage was used to estimate the potential for industry boiler usage. The chemical and paper industries use the most energy accounting for about a third of all U.S. industrial fuel usage. Petroleum refineries, steel and aluminum manufacturers, and food processing industries use most of the remainder of industrial fuel. Other industries using smaller, but significant amounts of fuel are the textiles, lumber, and rubber manufacturers, and metal fabrication and transportation industries. The other two industries that would be expected to have boilers large enough to be subject to NSPS subpart Db are office and shopping center heating and boiler rentals.

The respondents to the recordkeeping and reporting requirements are facilities subject to NSPS subpart Db that commenced construction, modification, or reconstruction after June 19, 1984, and that have a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 mmBtu/hr).

Regulation	SIC Codes	NAICS Codes
40 CFR part 60, subpart Db	1531	23332
	2033	311421
	Major Group 22	Major Group 313
	Major Group 24	Major Group 321
	2611	322110
	Major Group 28	Major Group 325
	2911	324110
	Major Group 30	Major Group 326
	Major Group 33	Major Group 331
	Major Group 34	Major Group 332
	Major Group 37	Major Group 336

Regulation	SIC Codes	NAICS Codes
	7299	81299

4(b) Information Requested

(i) Data Items

All data in this ICR that are recorded and/or reported are required by 40 CFR part 60, subpart Db.

A source must make the following reports:

Reports for 40 CFR part 60, subpart Db	
Construction/reconstruction	60.7(a)(1)
Actual startup	60.7(a)(3), 60.49b(a)
Initial performance test results	60.8 (a), 60.49b(b)
Initial performance test	60.8(d)
Demonstration of continuous monitoring system	60.7(a)(5)
Physical or operational change	60.7(a)(4)
Operating conditions for compliance with NOx standard	60.49b(c)
Monitoring results	60.49b(i)-(n), (q)-(t)
Excess emissions (semiannual)	60.7(c), 60.49b(h), 60.49b(w)
Quarterly reporting for Cytec Industries Fortier Plant's C.AOG incinerator, Westwego, LA	60.49b(s)
Quarterly reporting for Rohm and Haas Kentucky Incorporated's Boiler Number 100, Louisville, KY	60.49b(t)
Quarterly reporting (electronic)	60.49b(v)

A source must maintain the following records:

Recordkeeping for 40 CFR part 60, subpart Db	
Startups, shutdowns, malfunctions, and periods when the continuous monitoring system is inoperative.	60.7(b)

Recordkeeping for 40 CFR part 60, subpart Db	
Fuel Monitoring	60.49b(d), 60.49b(r)
Nitrogen content of residual oil combusted	60.49b(e)
Opacity	60.49b(f)
Nitrogen oxide emission rates	60.49b(g), (p)
Records are required to be retained at the facility for two years.	60.7(f), 60.49b(o)

(ii) Respondent Activities

Respondent Activities
Read instructions.
Install, calibrate, maintain, certify, and operate Continuous Emission Monitoring Systems for NOx, SO2, and opacity or alternative monitoring methods.
Perform initial performance test,
Write the notifications and reports listed above.
Enter information required to be recorded above.
Submit the required reports developing, acquiring, installing, and utilizing technology and systems for the purpose of collecting, validating, and verifying information.
Develop, acquire, install, and utilize technology and systems for the purpose of processing and maintaining information.
Develop, acquire, install, and utilize technology and systems for the purpose of 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.
Transmit, or otherwise disclose the information.

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

5(a) Agency Activities

EPA conducts the following activities in connection with the acquisition, analysis, storage, and distribution of the required information.

Agency Activities
Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry.
Audit facility records.
Input, analyze, and maintain data in the Air Facility Subsystem (AFS) database.

5(b) Collection Methodology and Management

Following notification of startup, the reviewing authority might inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the Agency to discern a source's initial capability to comply with the emission standard. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The semiannual reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations.

Information contained in the reports is entered into AFS which is operated and maintained by EPA's Office of Air Quality Planning and Standards. AFS is EPA's database for the collection, maintenance, and retrieval of compliance and annual emission inventory data for over 100,000 industrial and government-owned facilities. EPA uses 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 or operator for two years.

5(c) Small Entity Flexibility

There are no small businesses affected by this regulation.

5(d) Collection Schedule

The specific frequency for each information collection activity within this request is shown in Table 2: Average Annual EPA Resource Requirement for Fossil Fuel Fired Steam Generating Units/ NSPS subpart Db.

6. Estimating the Burden and Cost of the Collection

Table 1 documents 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 591,389 person-hours ("Total annual person hours" from Table 1). These hours are based on Agency studies and background documents from the development of the regulation, Agency knowledge and experience with the NSPS program, the previously approved ICR, and any comments received.

6(b) Estimating Respondent Costs

(i) Estimating Labor Costs

This ICR uses a Technical Labor Rate of $57.12 per hour. This rate is from the United States Department of Labor, Bureau of Labor Statistics, March 2001, "Table 10. Private industry, by occupational and industry group." The rates are from column 1, "Total compensation." The wage rate of $27.20 has been increased by 110 percent to account for the benefit packages available to those employed by private industry for a labor rate of $57.12 per hour.

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

The type of industry costs associated with the information collection activity in the regulations is for labor and continuous emission monitoring (CEM). 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 and other costs such as photocopying and postage.

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

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

(A) Continuous Monitoring Device	(B) Startup Cost ($) for One Affected Facility	(C) Number of New Affected Facilities to Startup	(D) Total Startup (B X C)	(E) Annual O&M Costs ($) for One Affected Facility	(F) Number of Affected Facilities with O&M	(G) Total O&M (E X F)
SO_2, PM, and NOx	$200,000	45	$9,000,000	$15,000	1,230	$17,775,000

The total capital/startup costs for this ICR are $9,000,000. This is the total of column D in the above table.

The total operation and maintenance costs for this ICR are $17,775,000 . This is the total of column G.

The total respondent non-labor costs in block 14 have been calculated as the addition of the capital/startup costs, and the annual operation and maintenance costs. 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 $26,775,000.

6(c) Estimating Agency Burden and Cost

The only costs to the Agency are those costs associated with analysis of the reported information. Publication and distribution of the information are part of the AFS program. Examination of records to be maintained by the respondents will occur as part of the periodic inspection of sources, which is part of EPA's overall compliance and enforcement program.

The average annual Agency cost during the three years of the ICR is estimated to be $22,691,832 [see Table 2]. This cost is based on the average hourly labor rate at a GS-12, Step 1, times a 1.6 benefits multiplication factor to account for government overhead expenses for a total of $38.30 ($23.94 x 1.6). These rates are from the Office of Personnel Management (OPM) "2002 General Schedule" which excludes locality rates of pay. Details upon which this estimate is based appear in Table 2 Annual EPA Resource Requirement for Industrial-Commercial-Institutional Steam Generating Units/ NSPS subpart Db, below.

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

Approximately 1,185 sources are currently subject to the regulation, and it is estimated that an additional 45 sources per year will become subject to the regulation in the next three years.

Respondent Universe and Number of Responses Per Year

Regulation Citation	(A) Average Number of New Respondents per Year	(B) Number of Reports for New Sources	(C) Number of Existing Respondents	(D) Number of Reports for Existing Sources	(E) Number of Respondents that keep records but do not submit reports	(F) Total Annual Responses = (AxB)+(CxD)+ E
40 CFR 60.49b (w)	36	2	948	2	0	1,968
40 CFR 60.49b (v)	9	4	237	4	0	984
Total	45		1,185			2,952

The number of total respondents is 1,230. This number is the sum of column A and column C of the Respondent Universe and Number of Responses Per Year table. This represents the number of existing sources and the number of new sources averaged over the three-year period (i.e., the number of new respondents over the three-year period divided by three years).

The number of Total Annual Responses is 2,952.

The total annual labor costs are $32,609,435. Details upon which this estimate is based appear in Table 1: Annual Respondent Burden and Cost - NSPS subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.

The total annual capital and O&M costs to the regulated entities are $26,775,000.

6(e) Bottom Line Burden Hours Burden Hours and Cost Tables

The bottom line burden hours and cost tables for both the Agency and the respondents are attached below. The annual public reporting and recordkeeping burden for this collection of information is estimated to average 200 hours per response.

6(f) Reasons for Change in Burden

There is a decrease in burden for the Agency from the most recently approved ICR due to a mathematical error.

6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 200 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.

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-OECA-2006-0425. 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, to submit or view public comments, to access the index listing of the contents of the public 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 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 Avenue, N.W., Washington, D.C. 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) 566-1752. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, N.W., Washington, D.C. 20503, Attention: Desk Office for EPA. Please include the EPA

Docket ID Number EPA-HQ-OECA-2006-0425 and OMB Control Number 2060-0072 in any correspondence.

Part B of the Supporting Statement

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

TABLE 1. ANNUAL BURDEN OF RECORDKEEPING AND REPORTING REQUIREMENTS AS A RESULT OF THE STANDARDS FOR INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS/ NSPS SUBPART DB.

	A	B	C	D	E	F
Reporting and recordkeeping requirements	Person hours per occurrence	Annual occurrences per respondent	Annual person hours per respondent (A x B)	Total number of respondents	Total annual person hours (C x D)	Total annual cost (E x $57.12)
1. Applicants	N/A					
2. Survey and Studies	N/A					
3. Reporting Requirements (b)						
A. Read Instructions (c)	1	1	1	45	45	$2,570
B. Required Activities						
Initial Performance Test:						
PM (c)	330	1	330	19	6,270	$358,142
24 hour test for Gas Units (c)	250	1	250	25	6,250	$357,000
Repeat of Performance Test:						
PM (c,d)	330	1	330	9	2,970	$169,646
24 hour tests for Gas Units (c,d)	250	1	250	5	1,250	$71,400
Report of Initial Performance Test: (c)						
SO2	16	1	16	13	208	$11,881
PM	16	1	16	19	304	$17,364
NOx	16	1	16	45	720	$41,126
Notification of CEMS Demonstration (c)						

	A	B	C	D	E	F
Reporting and recordkeeping requirements	Person hours per occurrence	Annual occurrences per respondent	Annual person hours per respondent (A x B)	Total number of respondents	Total annual person hours (C x D)	Total annual cost (E x $57.12)
SO2	2	1	2	13	26	$1,485
PM	2	1	2	19	38	$2,171
NOx	2	1	2	45	90	$5,141
Demonstration of CEMS (c)						
SO2	150	1	150	13	1,950	$111,384
PM	100	1	100	19	1,900	$108,528
NOx	350	1	350	45	15,750	$899,640
Repeat Demonstration of CEMS (c,d)						
SO2	150	1	150	3	450	$25,704
PM	100	1	100	4	400	$22,848
NOx	350	1	350	9	3,150	$179,928
Report of CEMS Demonstration (c)	See 3B					
Reports for SO2 (h)						
Quarterly(j)	16	4	64	130	8,320	$475,238
Semiannual	16	2	32	520	16,640	$950,477
Reports for PM (h,i)						
Quarterly:(j)						
Excess	16	4	64	25	1,600	$91,392

	A	B	C	D	E	F
Reporting and recordkeeping requirements	Person hours per occurrence	Annual occurrences per respondent	Annual person hours per respondent (A x B)	Total number of respondents	Total annual person hours (C x D)	Total annual cost (E x $57.12)
No Excess	8	4	32	102	3,264	$186,440
Semiannual:						
Excess	16	2	32	127	4,064	$232,136
No Excess	8	2	16	368	5,888	$336,323
Reports for NOx						
Quarterly:(j)						
CEMS Compliance	16	4	64	135	832	$47,524
Excess	16	4	64	27	1,728	$98,703
No Excess	8	4	32	108	3,456	$197,407
Semiannual:						
CEMS Compliance	16	2	32	541	17,312	$988,861
Excess	16	2	32	108	3,456	$197,407
No Excess	8	2	16	433	6,928	$395,589
Appendix F Report (h)						
Quarterly:(j)						
SO2	11	4	44	102	4,488	$256,265
NOx	11	4	44	135	5,940	$339,293
Semiannual:						

	A	B	C	D	E	F
Reporting and recordkeeping requirements	Person hours per occurrence	Annual occurrences per respondent	Annual person hours per respondent (A x B)	Total number of respondents	Total annual person hours (C x D)	Total annual cost (E x $57.12)
SO2	11	2	22	406	8,932	$510,196
NOx	11	2	22	541	11,902	$679,842
Annual Compliance Tests for NOx (h)	250	1	250	239	59,750	$3,412,920
Appendix F Annual Accuracy Test: (e,h)						
SO2	36	1	36	676	24,336	$1,390,072
NOx	36	1	36	508	18,288	$1,044,611
Appendix F Audits (e,f,h)						
Quarterly						
SO2 - In Situ	125	4	500	34	17,000	$850,000
SO2 - Extractive	36	4	144	101	14,544	$727,200
Semiannual						
SO2 - In Situ	125	2	250	135	33,750	$1,687,500
SO2 - Extractive	36	2	72	406	29,234	$1,461,700
Quarterly						
NOx - In Situ	125	4	500	25	12,500	$625,000
NOx - Extractive	36	4	144	74	10,656	$532,800
Semiannual						

	A	B	C	D	E	F
Reporting and recordkeeping requirements	Person hours per occurrence	Annual occurrences per respondent	Annual person hours per respondent (A x B)	Total number of respondents	Total annual person hours (C x D)	Total annual cost (E x $57.12)
NOx - In Situ	125	2	250	99	24,750	$1,237,500
NOx - Extractive	36	2	72	295	21,240	$1,062,000
C. Create Information (c)	Included in 3B					
D. Gather Existing Information	Included in 3B					
E. Write Report						
Notify of Construction/Reconstruction (c)	2	1	2	45	90	$5,141
Notify of Anticipated Startup (c)	2	1	2	45	90	$5,141
Notify of Actual Startup (c)	2	1	2	45	90	$5,141
Monitoring Plan (c)	4	1	4	22	88	$5,027
Notification of Initial Performance Test (c)						
SO2	2	1	2	13	26	$1,485
PM	2	1	2	19	38	$2,171
NOx	2	1	2	45	90	$5,141
4. RECORDKEEPING REQUIREMENTS (g)						
Read Instructions	See 3A					
Plan Activities	N/A					

	A	B	C	D	E	F
Reporting and recordkeeping requirements	Person hours per occurrence	Annual occurrences per respondent	Annual person hours per respondent (A x B)	Total number of respondents	Total annual person hours (C x D)	Total annual cost (E x $57.12)
Implement Activities	N/A					
Develop Record System	N/A					
Time to Enter Information						
Records of Startup, Shutdown, Malfunction	1.5	52	78	1,143	89,154	$5,092,476
Records of All Measurements	1.5	52	78	1,143	89,154	$5,092,476
TOTAL ANNUAL BURDEN					**591,389**	**$32,609,435**

Footnotes:

a) Assume an hourly wage of $57.12. This amount was multiplied by the hours per year in column E.
b) EPA estimates that there will be 25 new gas-fired steam generating units per year (which require NOx controls), 13 new coal-fired generating units per year (which require SO2, NOx, and PM controls), and 6 new biomass/wood (which require NOx and PM controls).
c) One-time only costs associated with the anticipated 45 new sources per year over the next three years.
d) Assume 20 percent of initial performance tests and CEMS demonstrations are repeated due to failures.
e) Appendix F costs are based on contractor costs of $50.00 per hour.
f) Assume that 25 percent of units have in situ CEMS and 75 percent have extractive CEMS.
g) Respondents per year amounts (column D) in the RECORDKEEPING REQUIREMENTS section are based on the average number of plants in existence over the next three years.
h) The number of controls for SO2, PM and NOx for existing sources is based on the number of existing sources from the last ICR and the ratios established by computer modeling in the first ICR issued after subpart Db was revised. The average number of new sources for each control (X*3/2) for SO2, Pm and NOx have been added to the number of existing sources to obtain the figures for “Total number of respondents.”
i) Assume the 20 percent of units are found to be in excess of emission standard, 80 percent are found to be in no excess.
j) Assume that 20 percent of respondents will choose to report quarterly.

TABLE 2. ANNUAL EPA RESOURCE REQUIREMENT FOR INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS/ NSPS SUBPART Db

	(A)	(B)	(C)	(D)	(E)	(F)
Activity	EPA hours per occurrence	Occurrences per plant per year	EPA hours per plant per year (A x B)	Plants per year	EPA hours per year (C x D)	Total annual cost (E x $38.30)
Report Review For Construction, Anticipated Startup, Actual Startup (f)	116	1	116	45	5,220	$199,926
Review Notification of Initial Test:						
SO2 (g)	70	1	70	13	910	$34,853
PM (g)	72	1	72	19	1,368	$52,394
NOx (g)	104	1	104	45	4,680	$179,244
Review Initial Test Results:						
SO2 (g)	280	1	280	13	3,640	$139,412
PM (g)	288	1	288	19	5,472	$209,578
NOx (g)	416	1	416	45	18,720	$716,976
Review Notification of CMS Demonstration:						
SO2 (g)	56	1	56	13	728	$27,882
PM (g)	82	1	82	19	1,558	$59,671
NOx (g)	42	1	42	45	1,890	$72,387
Review CMS Performance Demonstration:						
SO2 (g)	448	1	448	13	5,824	$223,059

	(A)	(B)	(C)	(D)	(E)	(F)
Activity	EPA hours per occurrence	Occurrences per plant per year	EPA hours per plant per year (A x B)	Plants per year	EPA hours per year (C x D)	Total annual cost (E x $38.30)
PM (g)	656	1	656	19	12,464	$477,371
NOx (g)	336	1	336	45	15,120	$579,096
Review Monitoring Plan	108	1	108	373	40,280	$1,542,712
Review NOx Compliance Reports (i)						
Quarterly	42	4	168	89	14,952	$572,662
Semiannual	42	2	84	355	29,820	$1,142,106
Review SO2 Compliance Reports (i)						
Quarterly	70	4	280	130	36,400	$1,394,120
Semiannual	70	2	140	520		
Review Excess Emissions Reports:						
SO2: (i)						
Quarterly	130	4	520	159	82,680	$3,166,644
Semiannual	130	2	260	637	165,620	$6,343,246
NOx: (i)						
Quarterly	92	4	368	89	32,752	$1,254,402
Semiannual	92	2	184	355	65,320	$2,501,756

	(A)	(B)	(C)	(D)	(E)	(F)
Activity	EPA hours per occurrence	Occurrences per plant per year	EPA hours per plant per year (A x B)	Plants per year	EPA hours per year (C x D)	Total annual cost (E x $38.30)
Review Appendix F QA Data Assessment Reports:						
SO2 (i)	42	1	42	524	22,008	$842,906
NOx (i)	56	1	56	444	24,864	$952,291
SUBTOTAL					592,290	$22,684,707
Travel Expenses (c)						$7,125
TOTAL ANNUAL COST						$23,691,832

Footnotes:

a) A x B = C

b) C x D = E

c) Burden cost is calculated at a rate of $38.30 ($23.94 x 1.6 to account for government benefits and overhead expenses).

d) All new plants subject to the standard must conduct initial performance tests as required by sections 60.42b, 60.43b, 60.44b.

e) Assume 20 percent of initial performance tests must be repeated due to failure.

f) All new plants subject to the standard must provide reports of these events as required by section 60.7.

g) EPA estimates that there will be 25 new gas-fired steam generating units per year (which require NOx controls), 13 new coal-fired generating units per year (which require SO2, NOx, and PM controls), and 6 new biomass/wood (which require NOx and PM controls).

h) Owners of plants rated at 250 MMBTU/hr and utilizing an annual capacity factor who seek to predict and monitor NOx emission rates submit this plan. It is estimated that 84 percent of NOx producing facilities meet this criteria (84 percent of the 444 sources with NOx controls over the next three years).

I) Semiannual reports are required of most facilities subject to the regulation. Assume approximately 20 percent of plants report electronically. The number of plants per year in these catagories were established during promulgation of the regulation and adjusted accordingly for this update.

j) Travel expenses (1 person x 15/plants/yr x 3 days/plant x $75 per diem) + ($250 round trip/plant x 15 plants/yr)