# Supporting Statement for NSPS for Lead Acid Battery Manufacturing (40 CFR part 60, subpart KK)

### 1. Identification of the Information Collection

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

NSPS for Lead Acid Battery Manufacturing (40 CFR part 60, subpart KK)

### 1(b) Short Characterization/Abstract

The New Source Performance Standards (NSPS) for the regulations published at 40 CFR part 60, subpart KK were proposed on January 14, 1980, and promulgated on April 16, 1982. These regulations apply to the following affected facilities in lead-acid battery manufacturing plants with production capacity that is equal to, or exceeds 6.5 tons of lead: grid casting facilities, paste mixing facilities, three-process operation facilities, lead-oxide manufacturing facilities, lead reclamation facilities, and other lead-emitting operations, commencing construction, modification, or reconstruction after the date of proposal. This information is being collected to assure compliance with 40 CFR part 60, subpart KK.

In general, all NSPS standards require initial notifications, performance tests, and periodic reports (e.g., semiannual) if using continuous emissions monitoring systems. Owners, or operators also are 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.

Based on the number of applicable sources in the previous ICR renewal, approximately 52 sources currently are subject to the standard, and it is anticipated that no additional sources will become subject to the standard in the next three years. This estimate is based on recent data available on EPA's Air Facility System (AFS) database, which can be accessed through the Online Tracking Information System (OTIS) database, and consultation with the Battery Council International organization.

The current ICR is based on the most recently approved Information Collection Request (ICR). The cost of this ICR will be \$ 249,933. 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.

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 the Administrator's judgment, lead emissions from lead-acid battery manufacturing plants cause, or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, NSPS standards were promulgated for this source category at 40 CFR part 60, subpart KK.

# 2(b) Practical Utility/Users of the Data

The control of emissions of lead from lead-acid battery manufacturing plants requires not only the installation of properly designed equipment, but also the operation and maintenance of that equipment. Emissions of lead in the production of lead-acid batteries are the result of the operation of grid casting, paste mixing, three-process operation, lead oxide, and lead reclamation facilities, as well as any other lead-emitting operations. These standards rely on the capture of lead emissions by control devices such as scrubbers. The subject standards are achieved by the capture of lead emissions using scrubbing systems and baghouses. 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 records 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. Operating conditions include lead emission concentration in the gas stream, volumetric flow rate of the effluent gas, lead feed rate to the facility, number of emission points, pressure drop across the scrubbing system, and opacity of gases. 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 KK.

### 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 <u>Federal Register</u> on June 21, 2006 (71 FR 35652). No comments were received on the burden published in the <u>Federal Register</u>.

### **3(c)** Consultations

The Agency's industry experts have been consulted, and the Agency's internal data sources and projections of industry growth over the next three years have been considered. The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in the standard, is the AFS (Air Facility System) which is operated and maintained by EPA's Office of Compliance. AFS is EPA=s database for the collection, maintenance, and retrieval of all compliance data. The growth rate for the industry is based on our consultations with the Agency's internal industry experts. Approximately 52 respondents will be subject to the standard over the three year period covered by this ICR.

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 respond after a thorough review of comments received since the last ICR renewal as well as those submitted in response to the First Federal Register Notice.

### 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 <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

None of the reporting or recordkeeping requirements contains sensitive questions.

## 4. The Respondents and the Information Requested

### 4(a) Respondents/SIC Codes

The respondents to the recordkeeping and reporting requirements are lead-acid battery manufacturing plants. The SIC code for the respondents affected by the standards is SIC (United States Standard Industrial Classification) 3691, Storage Batteries, which corresponds to the NAICS (The North American Industry Classification System) code 335911, Storage Battery Manufacturing.

### 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 KK.

A source must make the following reports:

Reports for 40 CFR part 60, subpart KK				
Notification of construction/reconstruction	60.7(a)(1)			
Notification of initial startup	60.7(a)(3)			
Notification of initial performance test	60.8(d)			
Physical or operational change	60.7(a)(4)			

Reports for 40 CFR part 60, subpart KK				
Report opacity results (reported with the initial performance test results) and at other times opacity observations are required	60.11(e)			
Report of performance test results	60.8(a)			
Periodic reports if using continuous emissions monitoring systems (e.g., semiannual)	60.7(c) 60.7(e)			

A source must maintain the following records:

Recordkeeping for 40 CFR part 60, subpart KK					
Startups, shutdowns, malfunctions, periods where the continuous monitoring system is inoperative	60.7(b)				
Performance test records	60.7(d)				
Pressure drop monitoring records for sources using a scrubber system	60.7(e), 60.373				
Maintain a file of all measurements, maintenance, reports, and records, for at least two years	60.7(f)				

# (ii) Respondent Activities

### **Respondent Activities**

#### Read instructions.

Install, calibrate, maintain, and operate a monitoring device that measures pressure drop across the scrubbing system every 15 minutes.

Perform initial performance test using Reference Method 12 to determine lead concentration and volumetric flow rate, and Reference Method 9 for opacity readings, and repeat performance tests if necessary.

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.

### **Respondent Activities**

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.

Presently sources are using monitoring equipment that provides parameter data in an automated way (e.g., pressure drop indicators); however, personnel at the facility still need to evaluate the data. However, this type of monitoring equipment has significantly reduced the burden associated with monitoring and recordkeeping. In addition, some regulatory agencies are setting up electronic reporting systems to allow sources to report electronically, or by means of a disk, which is reducing the reporting burden. However, electronic reporting systems still are not widely used by the regulatory agencies.

# 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**

Observe initial performance tests and repeat performance tests if necessary.

Review notifications and reports, including performance test results, required to be submitted by industry.

Audit facility records.

Input, analyze, and maintain data in the AFS database, which can be accessed through the OTIS.

### 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, and note the operating conditions under which compliance was achieved. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs.

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 and annual emission inventory data for more than 100,000 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 or operator for at least two years.

### **5(c) Small Entity Flexibility**

The recordkeeping and reporting requirements were selected within the context of a small collection of process equipment and reflect the burden on small businesses. To the extent that larger businesses can use economies of scale to reduce their burden, the overall burden will be reduced. Although the recordkeeping and reporting requirements are the same for small and larger businesses, the Agency considers these requirements the minimum needed to ensure compliance and, therefore, cannot reduce them further for small businesses.

The information available on the Lead Acid Battery Manufacturing sector indicates that small operations are being bought by larger facilities. It was assumed for this ICR that none of the existing sources is a small entity.

### 5(d) Collection Schedule

The specific frequency for each information collection activity within this request is shown in Table 1: Annual Respondent Burden and Cost - NSPS for Lead Acid Battery Manufacturing (40 CFR part 60, subpart KK).

### 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 in Table 1. 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 \$ 249,933 (rounded) (See Total Labor 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 most recently approved ICR, consultation with industry, and any comments received.

# **6(b)** Estimating Respondent Costs

### (i) Estimating Labor Costs

This ICR uses a Technical Labor Rate of \$ 61.66 per hour. This rate is from the United States Department of Labor, Bureau of Labor Statistics, September 2002, "Table 10. Private industry, by occupational and industry group." The rates are from column 1, "Total compensation." The rate has been increased by 110% 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 are both labor costs, which are addressed elsewhere in this ICR, and the costs associated with continuous parameter (i.e., pressure drop) monitoring when a scrubbing system is used as the control device. 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 monitors 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) Capital/ Startup Cost for One Respondent	(C) Number of New Respondents	(D) Total Capital/Startu p Costs, (B X C)	(E) Annual O&M Costs for One Respondent	(F) Number of Respondents with O&M	(G) Total O&M Costs, (E X F)			
Pressure Drop Monitors <sup>1</sup>	\$ 0	0	0	\$ 900	13	\$ 12,000 (rounded)			

There are no capital/startup costs for this regulation since there are no new sources anticipated over the three-year period of this ICR. This is the total of column D in the above table. The total operation and maintenance (O&M) costs for this ICR are \$ 12,000 (rounded). This is the total of column G.

The total respondent costs 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 three-year period of this ICR are estimated to be \$ 12,000.

<sup>1</sup> It is estimated that 25 percent of the 52 existing sources (i.e., 13 sources) have scrubber systems and are, therefore, required to install and maintain a monitor to measure and record pressure drop across the scrubbing system.

### 6(c) Estimating Agency Burden and Cost

The only costs to the Agency are those costs associated with analysis of the reported information (i.e., notifications, performance test results and periodic reports). Publication and distribution of the information are part of the compliance and enforcement 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 associated with 40 CFR part 60, subpart KK, is \$ 4,107 over the three-year period of this ICR. The cost to the Agency 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 \$ 39.49. This rate is from the Office of Personnel Management (OPM) "2003 General Schedule" which excludes locality rates of pay. Details upon which this estimate is based appear in Table 2: Annual Federal Government Burden and Cost - NSPS for Lead Acid Battery Manufacturing (40 CFR part 60, subpart KK), attached.

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

Approximately 52 sources are currently subject to the regulation, and it is estimated that no new sources per year will become subject to the regulation in the three-year period of this ICR.

	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	(F) Number of Respondents that keep records but do not submit reports	(E) Total Annual Responses = (AxB)+(CxD) +F		
NSPS, subpart KK	0 1	4	13	2	39	65		

The number of total respondents is 52. This number is the sum of column C and column F of the Respondent Universe and Number of Responses Per Year table. This represents the number of existing sources plus the number of new sources averaged over the three-year period (i.e., the total of the number of new respondents over the three-year period divided by three years).

The number of Total Annual Responses is 65. This is the number in column E of the Respondent Universe and Number of Responses Per Year table above.

The total annual labor costs are \$ 249,933 (rounded). Details upon which this estimate is based appear in Table 1: Annual Respondent Burden and Cost - NSPS for Lead Acid Battery

<sup>1</sup> The information available on the sector indicates that facilities are closing operations or are that small operations are being bought by larger facilities. We have assumed that there will be no significant process changes triggering NSPS, subpart KK, applicability.

Manufacturing (40 CFR part 60, subpart KK).

Note that the total annual capital and O&M costs to the regulated entity are \$ 11,700. These costs are detailed in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance (O&M) Costs.

### 6(e) Bottom Line 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 62 (rounded) hours per response.

## **6(f)** Reasons for Change in Burden

There is no change in burden from the most recently approved ICR. This ICR renewal was approved under the "renew without change" option and reflects no increase in the number of new or modified sources.

### 6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 62 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 currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 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-OECA-2006-0415. 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 also are 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 Enforcement and Compliance Docket and Information Center Docket is (202)

566-1514. 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-OECA-2006-0415 and OMB Control Number 2060-0081 in any correspondence.

# **Part B of the Supporting Statement**

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

	(A)	(B)	(C=AxB)	(D)	(E=CxD)	<b>(F)</b>
Burden Type	Hours/ occurrence	Occurrence/ respondent/ year	Hours/ respondent/ year	Respondents/ year <sup>a</sup>	Hours/ year	Cost/ year <sup>b</sup>
1. APPLICATIONS	Not applicable					
2. SURVEYS AND STUDIES	Not applicable					
3. REPORTING REQUIREMENTS						
A. Read Instructions	Included in 3B					
B. Required Activities						
New Sources						
Initial performance test	24	1	24	0	0	0.00
Reference Method 9 °						
Reference Method 12 d						
Other method approved by						
Administrator <sup>e</sup>						
Repeat of performance test <sup>f</sup>	24	1	24	0	0	0.00
New and Existing sources						
Monitoring of emissions	Included in 4E					
and operations <sup>g</sup>	Included in 4E					
C. <u>Create Information</u>	Included in 3B					
D. Gather Existing Information	Included in 3E					
E. Write Report						
New Sources						
Notification of construction/	2	1	2	0	0	0.00
reconstruction/modification						
Notification of initial startup	2	1	2	0	0	0.00
Notification of CMS demonstration	2	1	2	0	0	0.00
Notification of initial	2	1	2	0	0	0.00
performance test						
Report of performance test results	Included in 3B					
New and Existing sources						
Semi-annual Reports <sup>h</sup>	16	2	32	13	416	\$25,650.56
Process Change	2	1	2	0	0	\$0.00

F. <u>Subtotal</u>					416	\$25,650.56
4. RECORDKEEPING REQUIREMENTS						
A. Read Instructions	Included in 3A					
B. <u>Plan Activities</u>	Included in 4E					
C. <u>Implement Activities</u>	Included in 4E					
D. <u>Develop Record System</u>	Not applicable					
E. <u>Time to Enter Information</u>						
Records of monitoring of emissions						
and operations <sup>g</sup>	0.75	365	273.8	13	3,559.40	\$219,472.60
Records of startups, shutdowns,						
malfunctions, etc.	1.5	1	1.5	52	78	\$4,809.48
F. <u>Train Personnel</u>	Not applicable					
G. <u>Audits</u>	Not applicable					
H. <u>Subtotal</u>					3,637.40	\$224,282.08
TOTAL ANNUAL BURDEN (Rounded)					4,053	\$249,933

#### **ASSUMPTIONS**

- a We have assumed that there are approximately 52 sources currently subject to NSPS, subpart KK. We have assumed that there will be no new sources over the period of this ICR. Therefore, the average number of respondents per year is estimated to be 52.
- b We have assumed a Technical Labor Rate of \$61.66 per hour which is based on the United States Department of Labor, Bureau of Labor Statistics, September 2002, "Table 10. Private industry, by occupational and industry group." The rate is from column 1, "Total compensation." The rate has been increased by 110% to account for the benefit packages available to those employed by private industry.
- c All sources are required to use Method 9 for opacity observations, except for lead oxide manufacturing facilities.
- d All respondents would have to perform Method 12 to calculate the lead concentration and the volumetric flow rate of the effluent gases. It requires at least three runs of 60 minutes and 0.85 dscm.
- f We have assumed that 20 percent of initial performance tests must be repeated due to failure.
- g Monitoring of emissions and operations requirements includes pressure drop measurements across the scrubbing system at least every 15 minutes, if applicable. We have assumed that 25 percent of the sources (i.e., 13 sources) have scrubbing systems.
- h Semi-annual reports are required by this rule for those sources that have to install continuous monitoring systems (e.g., pressure drop monitors across the scrubbing systems).

TABLE 2. Annual Agency Burden and Cost- NSPS for Lead-Acid Battery Manufacturing (40 CFR part 60, subpart KK) (Renewal)								
N SP S for Leag-Actionattery Manuacturing (40 CFK part 60, Suppart KK) (Renewal)								
	(A)	(B)	(C=AxB)	(D)	(E=CxD)	(F) <sup>a</sup> Cost/		
	EPA hrs/	Occurr ences/	EPA hrs/	Plants/	EPA			
B ur den Type	Occurrence	plant/yr	plant/yr	y ear	hrs	Year \$		
New Sources b								
Notification of construction/								
Reconstruction/modification	2	1	2	0	0			
Notification of initial startup	1	1	1	0	0			
Notification of CMS demonstration	1	1	1	0	0			
Notification of initial	0.5	1.2	0.6	0	0			
Performance Test								
Initial Performan ce Test	24	1	24	0	0			
Repeat of Performance Test <sup>c</sup>	24	0.2	4.8	0	0			
Review Performance Test results <sup>c</sup>	8	1.2	9.6	0	0			
New and Existing Sources								
Review of Semi-annual Reports <sup>d</sup>	4	2	8	13	104	\$4,106.96		
TOTAL ANNUAL LABOR HOURS (Rounded)					104	\$4,107		
TRA VEL EXPENSES: \$0.00/y ear								
TOTAL ANNUAL COST= \$4,107/year								
A SSUMPTIONS:								
a This cost is based on the average hourly labor								
for a total of \$39.49. These rates are from the Offic		547						
b. We have assumed that there will be nonew so					ve no burden asso	ciated with		
initial notifications and travel expenses to attend				60, subpart KK.				
c. We have as sumed that 20 percent of initial perf								
d. We have as sumed that 25 percent of the 52 exi					quired to install an	d maintain a		
monitor to measure and record pressure drop acr	oss the scrubbing	system, and subm	it semi-annual repo	orts				