

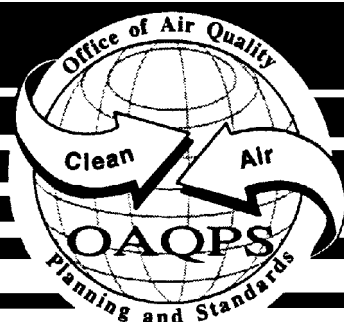
**EPA**

Office of Air and Radiation  
Office of Air Quality Planning and Standards  
Air Quality Policy Division  
New Source Review Group

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June 2010

**INFORMATION COLLECTION  
REQUEST FOR CHANGES TO  
40 CFR PARTS 51 AND 52:  
Prevention of Significant  
Deterioration (PSD) for  
Particulate Matter Less Than 2.5  
Micrometers (PM<sub>2.5</sub>) – Increments,  
Significant Impact Levels (SILs)  
and Significant Monitoring  
Concentration (SMC)**



## Executive Summary

The EPA is revising the regulations governing the Prevention of Significant Deterioration (PSD) program mandated by part C of title I of the Clean Air Act (the Act). The PSD and nonattainment major New Source Review (NA NSR) programs collectively comprise the major NSR program. Specifically, the PSD regulations are being revised to add increments, significant impact levels (SILs), and a significant monitoring concentration (SMC) for particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM<sub>2.5</sub>). This action is being taken as part of our efforts to implement the National Ambient Air Quality Standards (NAAQS) for PM<sub>2.5</sub>.

The PSD program is a preconstruction review and permitting program for new major sources of air pollutants and major modifications at existing major sources, which applies to sources located in areas that meet the NAAQS for one or more regulated NSR pollutants (called “attainment areas”) and in areas where there is insufficient information to determine whether they meet the NAAQS (“unclassifiable areas”). The types of information collection activities associated with the PSD program are those necessary for the preparation and submittal of construction permit applications and the issuance of final permits. The PSD rule changes addressed in this ICR add increments, SILs, and an SMC for PM<sub>2.5</sub>, but do not otherwise change the requirements of the program. For convenience, we refer to this rulemaking as the “PM<sub>2.5</sub> Increments Rule” hereafter.

This purpose of this Information Collection Request (ICR) (OMB Control Number 2060-0609; EPA ICR Number 2276.02) is to show the burden and cost associated with the PM<sub>2.5</sub> Increments Rule. Table E-1 summarizes the overall burden and cost for respondents – sources who must obtain PSD permits and state and local agencies who issue the permits (called “reviewing authorities”).

**TABLE E-1  
BURDEN FOR RESPONDENTS RESULTING FROM PM<sub>2.5</sub> INCREMENTS RULE**

Type of Respondent	Average Annual Burden (Hours)	Average Annual Burden per Respondent (Hours)	Average Annual Cost <sup>c</sup> (\$ 2008)	Average Annual Cost per Respondent
Sources <sup>a</sup>	28,770	105	\$2,808,239	\$10,249
Reviewing Authorities <sup>b</sup>	7,521	67	\$580,797	\$5,186
<b>Total</b>	36,291	N/A	\$3,389,036	N/A

<sup>a</sup> We estimate 274 PSD permits per year.

<sup>b</sup> We assume that there are 112 state and local reviewing authorities.

<sup>c</sup> All costs are labor costs associated with increased burden; there is no increase in capital, start-up, or O&M costs.

The EPA is the only federal entity that will experience burden and cost as a result of the PM<sub>2.5</sub> Increments Rule. We estimate that the average annual burden for EPA will be 461 hours, at a cost of \$19,887 annually.

**CAVEAT:** This analysis overstates the impact of the rulemaking over the 3 years following promulgation because it has been prepared as if the rule revisions would be fully implemented upon the effective date of the rule. In actuality, the full effect of the PSD rule changes for PM<sub>2.5</sub> will lag the promulgation of this rulemaking due to the time needed for reviewing authorities with approved PSD programs to modify their Implementation Plans.



# 1 Identification of the Information Collection

## 1.1 Title

The title of this ICR is “Information Collection Request for Changes to 40 CFR Parts 51 and 52: Prevention of Significant Deterioration (PSD) for Particulate Matter Less Than 2.5 Micrometers (PM<sub>2.5</sub>) – Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC).” This document fulfills the Agency’s requirements under the Paperwork Reduction Act (PRA) with regard to determining the regulatory burden associated with adding increments, SILs, and an SMC for PM<sub>2.5</sub> to the PSD program required under part C of title I of the Act. It has been assigned EPA tracking number 2276.02 and OMB Control Number 2060-0609.

**EPA TRACKING  
NUMBER:  
2276.02**

**OMB CONTROL  
NUMBER:  
2060-0609**

## 1.2 Description

The program called the “PSD program” under authority of part C of Title I of the Act is a preconstruction review and permitting program applicable to new and modified major stationary sources of air pollutants. The PSD program applies in attainment areas (areas meeting the NAAQS) and in areas where there is insufficient information to determine whether they meet the NAAQS (“unclassifiable areas”). The applicability of the PSD program must be determined in advance of construction and is pollutant-specific. When a source triggers PSD, it must install best available control technology (BACT) and conduct modeling, monitoring, and other analyses for the regulated NSR pollutant(s) for which the area is designated as attainment or unclassifiable.

In 1997, EPA promulgated NAAQS for PM<sub>2.5</sub> to address fine particle pollution, while retaining the NAAQS for particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM<sub>10</sub>) to address coarse particle pollution. In 2006, we revised the PM<sub>2.5</sub> and PM<sub>10</sub> NAAQS. After delays associated with litigation over the NAAQS and with building up technical capacity to address PM<sub>2.5</sub>, we are proceeding with implementation of the PM<sub>2.5</sub> program, including implementation of the NSR program for PM<sub>2.5</sub>. In a related rulemaking action we added PM<sub>2.5</sub> and its precursors to both the PSD program and the NA NSR program as regulated NSR pollutants.

This ICR addresses rule changes to add increments, SILs, and an SMC for PM<sub>2.5</sub> to the PSD rules. For some sources, this will add to the burden of obtaining a PSD permit because it will add to the number of air quality analyses that must be carried out in the application process. Similarly, state and local reviewing authorities will incur increased burden to review such permit applications and issue the permits. In addition, reviewing

authorities will incur a one-time burden to revise their Implementation Plans to incorporate the PSD rule changes.

## 2 Need For and Use of Collection

### 2.1 Need / Authority for the Collection

Title I of the Act authorizes EPA to collect this information. Through the PSD program it requires owners or operators of emissions units that emit air pollutants to submit an application for a permit to construct, modify, or significantly alter the operations of each source of criteria pollutants.

### 2.2 Practical Utility / Users of the Data

For EPA to carry out its required oversight function of reviewing construction permits and assuring adequate implementation of the program, it must have available to it information on proposed construction and modifications. The burden estimates included in this ICR cover activities to provide PM<sub>2.5</sub> air quality impact projections for the PSD program.

### 2.3 Caveats and Considerations

The information in this ICR is based upon the best data available to the Agency at this time. However, inconsistencies in reviewing authority reporting techniques, incomplete data sets, and sampling limitations necessitated a certain amount of extrapolation and “best-guess” estimations. Consequently, the reader should not consider the conclusions to be an exact representation of the level of burden or cost that *will* occur. Instead, this ICR should be considered a directionally correct assessment of the impact the programmatic changes included in this rulemaking.

In fact, this ICR clearly overstates the impact of the PM<sub>2.5</sub> Increments rulemaking over the 3 years following promulgation because it has been prepared as if the rule revisions would be fully implemented upon the effective date of the rule. In actuality, the full effect of these PSD rule changes for PM<sub>2.5</sub> will lag the promulgation of this rule due to the time needed for state and local agencies with approved PSD programs to modify their Implementation Plans. We believe that this approach provides a more realistic assessment of the long-term impact of the rulemaking.

Throughout this ICR, the reader will observe estimated values that show accuracy to the single hour or dollar. However, reporting values at the single unit level can be misleading. In most situations, the proper way to present estimated data would be to determine an appropriate level of accuracy and truncate values accordingly, usually in terms of thousands or millions of units. For instance, a spreadsheet-generated estimation of \$5,456,295 could be presented in the text as \$5.5 (millions) or \$5,456 (thousands). One problem with such an approach is the loss of data richness when the report contains a mixture of very large and very small numbers, which is the case with this ICR. Consequently, to avoid the loss of information through rounding, this ICR reports all values to the single unit, and we remind the reader that there is no implied precision inherent in this style of reporting.

### **3 Non-Duplication, Consultation, and Other Collection Criteria**

#### **3.1 Non-Duplication**

For approval of a proposed ICR, the Agency must ensure that it has taken every reasonable step to avoid duplication in its paperwork requirements in accordance with 5 CFR 1320.9. Although the reviewing authorities may be required to revise their Implementation Plans, this action imposes no new paperwork requirements.

#### **3.2 Public Notice Requirements**

The proposal notice for this rulemaking was published in the *Federal Register* on September 21, 2007 (72 FR 54112). A 60-day public comment period was provided for this ICR, during which all affected parties were given the opportunity to comment on the burden analysis. No comments on the ICR were received.

#### **3.3 Consultations**

In an earlier proposed rulemaking,<sup>1</sup> we solicited comment on the programmatic aspects of PM<sub>2.5</sub> increments, SILs, and SMCs. We received numerous comments from sources and state and local reviewing authorities on the need for these elements in the PM<sub>2.5</sub> PSD program and the level of effort associated with them. We considered these comments in developing this ICR.

#### **3.4 Less Frequent Collection**

The Act defines the rate of reporting by sources, states, and local entities. Consequently, less frequent collection is not possible.

#### **3.5 General Guidelines**

The OMB's general guidelines for information collections must be adhered to by all federal agencies for approval of any rulemaking's collection methodology. In accordance with the requirements of 5 CFR 1320.5, the Agency believes:

1. The PM<sub>2.5</sub> Increments Rule does not require periodic reporting more frequently than semi-annually.
2. The PM<sub>2.5</sub> Increments Rule does not require respondents to participate in any statistical survey.
3. Written responses to Agency inquiries are not required to be submitted in less than 30 days.
4. Special consideration has been given in the design of the PM<sub>2.5</sub> Increments Rule to ensure that the requirements are, to the greatest extent possible, the same for federal requirements and those reviewing authorities who already have PSD programs in place.
5. Confidential, proprietary, and trade secret information necessary for the completeness of the respondent's permit are protected from disclosure under the requirements of section 114(c) of the Act.

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<sup>1</sup> "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards," 70 FR 65984, November 1, 2005.



6. The PM<sub>2.5</sub> Increments Rule does not require more than one original and two copies of the permit application, update, or revision to be submitted to the Agency.
7. Respondents do not receive remuneration for the preparation of reports required by the Act or 40 CFR part 51 or 52.
8. To the greatest extent possible, the Agency has taken advantage of automated methods of reporting.
9. The Agency believes the impact of the PM<sub>2.5</sub> Increments Rule on small entities to be insignificant and not disproportionate.

The recordkeeping and reporting requirements contained in the PM<sub>2.5</sub> Increments Rule do not exceed any of the Paperwork Reduction Act guidelines contained in 5 CFR 1320.5, except for the guideline which limits retention of records by respondents to 3 years. The Act requires both respondents and state or local agencies to retain records for a period of 5 years. The justification for this exception is found in 28 U.S.C. 2462, which specifies 5 years as the general statute of limitations for federal claims in response to violations by regulated entities. The decision in *U.S. v. Conoco, Inc.*, No. 83-1916-E (W.D. Okla., January 23, 1984) found that the 5-year general statute of limitations applies to the Clean Air Act.

### **3.6 Confidentiality**

Confidentiality is not an issue for this rulemaking. To the extent that the information required in a PSD permit under the PM<sub>2.5</sub> Increments Rule is proprietary, confidential, or of a nature that could impair the ability of the source to maintain its market position, that information is collected and handled subject to the requirements of section 114(c) of the Act. Information received and identified by owners or operators as confidential business information (CBI) and approved as CBI by EPA, in accordance with Title 40, Chapter 1, Part 2, Subpart B, shall be maintained appropriately (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 39999, September 8, 1978; 43 FR 42251, September 28, 1978; 44 FR 17674, March 23, 1979).

### **3.7 Sensitive Questions**

The consideration of sensitive questions, (i.e., sexual, religious, personal, or other private matters), is not applicable to this rulemaking. The information gathered to establish a PSD permit does not include personal data on any owner or operator.

### **3.8 Environmental Justice Considerations**

The President's priorities in promoting environmental justice (EJ) are contained in Executive Order 12898. Because the PSD program operates nationwide and across all industry classifications, the Agency does not believe there is a disproportionate EJ effect in the PSD program.

## 4 The Respondents and the Information Requested

### 4.1 Respondents/SIC and NAICS Codes

Table 4-1 lists the industrial groups that we expect will contain the majority of the industrial respondents affected by the NSR program. These categories were chosen because of their historic relative incidence in seeking NSR permits as established in prior ICRs and confirmed by a nationwide air pollutant emission inventory developed by the EPA in 1986-87. These industries have been used as the basis for impact analysis since that inventory.

**Table 4-1. Most Numerous Industrial Respondents by Industrial Group**

Industry Group	SIC	NAICS
Electric Services	491	221111, 221112, 221113, 221119, 221121, 221122
Petroleum Refining	291	32411
Industrial Inorganic Chemicals	281	325181, 32512, 325131, 325182, 211112, 325998, 331311, 325188
Industrial Organic Chemicals	286	32511, 325132, 325192, 325188, 325193, 32512, 325199
Miscellaneous Chemical Products	289	32552, 32592, 32591, 325182, 32551
Natural Gas Liquids	132	211112
Natural Gas Transport	492	48621, 22121
Pulp Mills	261	32211, 322121, 322122, 32213
Paper Mills	262	322121, 322122
Automobile Manufacturing	371	336111, 336112, 336712, 336211, 336992, 336322, 336312, 33633, 33634, 33635, 336399, 336212, 336213
Pharmaceuticals	283	325411, 325412, 325413, 325414

The respondents also include state and local air regulatory agencies. Because of the national scope of the PSD program, these governmental respondents are in all 50 states.

### 4.2 Information Requested

This section discusses the data items that must be collected and reported and the activities that respondents must carry out under the PM<sub>2.5</sub> Increments Rule.

#### 4.2.1 Data items, including recordkeeping requirements

The data required from sources for a complete PSD permit application can be found in parts 51 and 52 of title 40 of the Code of Federal Regulations (40 CFR). Section 51.166 specifies the minimum requirements that a PSD permit program under title I, part C of the Act must contain to warrant approval as a revision to an Implementation Plan. Section 52.21 delineates the federal PSD permit program which applies to all federally controlled areas, such as tribal lands, outer continental shelf sources, and states that

have not submitted a PSD program meeting the requirements of 40 CFR 51.166.<sup>2</sup>

Respondent data and information requirements for PSD permits can be found in the Supporting Statement for the 2008 ICR renewal for the entire major NSR program (ICR No. 1230.23, OMB Control Number 2060-0003), including appropriate references in 40 CFR part 51 for the data and information requirements that govern the way states implement NSR programs.<sup>3</sup>

The data requirements associated with the PM<sub>2.5</sub> Increments Rule are a small subset of the total data required for PSD permits. Specifically, this rule enables the air quality impact analyses that already must be carried out for other significant pollutants to be implemented for PM<sub>2.5</sub>. Thus, when the rule is implemented, the modeling analyses required by 40 CFR 51.166(k) and (l) or 52.21(k) and (l), whichever is applicable, will have to be conducted by sources for PM<sub>2.5</sub> and submitted for review by reviewing authorities.

#### 4.2.2 Respondent activities

The Supporting Statement for the 2008 ICR renewal for the entire major NSR program (ICR No. 1230.23) identifies the activities for PSD permitting for source and reviewing authority respondents.<sup>4</sup> For source respondents, the activities are divided into three broad categories: (1) preparation and planning, (2) data collection and analysis, and (3) permit application. The PM<sub>2.5</sub> Increments Rule will add new burden for the data collection and analysis category as sources will have to conduct these activities for PM<sub>2.5</sub>.

Reviewing authority respondents' activities involve interacting with the source during its preparation of an application, reviewing the application and making a determination, implementing the public notice and comment process, issuing the permit, and transmitting information to EPA. The PM<sub>2.5</sub> Increments Rule will add new burden for attending pre-application meetings, answering sources' questions, and logging in and reviewing data

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<sup>2</sup> These citations can be accessed from the electronic Code of Federal Regulations (eCFR) website at: [http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?sid=15afb009d0485fc06fb4f566f3bfc3b&c=ecfr&tpl=/ecfrbrowse/Title40/40tab\\_02.tpl](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?sid=15afb009d0485fc06fb4f566f3bfc3b&c=ecfr&tpl=/ecfrbrowse/Title40/40tab_02.tpl)

<sup>3</sup> United States Environmental Protection Agency. *Information Collection Request for Prevention of Significant Deterioration and Nonattainment New Source Review (40 CFR Part 51 And 52)*. ICR No. 1230.23. 2008. Appendix A.

<sup>4</sup> United States Environmental Protection Agency. *Information Collection Request for Prevention of Significant Deterioration and Nonattainment New Source Review (40 CFR Part 51 And 52)*. ICR No. 1230.23. 2008. Pages 17 and 18.

submissions, as reviewing authorities will have to conduct these activities for PM<sub>2.5</sub>.

In addition to the activities associated with reviewing and issuing major NSR permits under the revised regulations, reviewing authority respondents may have to revise their Implementation Plans to add increments, SILs, and an SMC for PM<sub>2.5</sub> to their PSD programs.

## 5 The Information Collected - Agency Activities, Collection Methodologies, and Information Management

### 5.1 Agency Activities

The Supporting Statement for the 2008 ICR renewal for the entire major NSR program (ICR No. 1230.23) identifies EPA's activities associated with PSD permitting.<sup>5</sup> These activities generally involve oversight review of PSD permitting actions to verify that the requirements of the Act and the implementing part 51 and 52 regulations are being met. The PM<sub>2.5</sub> Increments Rule will add new burden for oversight review of air quality analyses. In addition, EPA will have to review the Implementation Plan revisions submitted by the reviewing authorities.

### 5.2 Collection Methodology and Management

The owner or operator of a new or modified major stationary source affected by the PM<sub>2.5</sub> Increments Rule must conduct PM<sub>2.5</sub> air quality analyses and submit the data and conclusions in a construction permit application to the reviewing authority, who logs in the permit application, stores the application in a central filing location, notifies the Federal Land Manager (FLM) of the permit, and provides a copy of the application (if applicable) to the FLM and transmits a copy of each application to EPA.

The reviewing authority reviews the PM<sub>2.5</sub> air quality analyses and checks the quality of data submitted by the applicant on a case-by-case basis. The applicant will be required to submit information on how the data were obtained and how the calculations and modeling were performed. The reviewing authority personnel will check data quality by reviewing the modeling documentation and checking engineering calculations. Confidential information submitted by the applicant (if any) will be handled by the reviewing authority's confidential information handling procedures. The public will be provided the opportunity to review a permit application and other materials relevant to the reviewing authority's decision on issuing the permit, including FLM findings, by obtaining a copy from the permit reviewing authority or by attending the public hearing. The PM<sub>2.5</sub> Increments Rule will not require information through any type of survey.

### 5.3 Small Entity Flexibility

The Regulatory Flexibility Act (RFA) requires regulatory agencies, upon regulatory action, to assess that action's potential impact on small entities (businesses, governments, and small non-governmental organizations) and report the results of the assessments in (1) an Initial Regulatory Flexibility Analysis (IRFA), (2) a Final Regulatory Flexibility Analysis (FRFA), and (3) a Certification. For ICR approval, the Agency must demonstrate that it "has taken all practicable steps to develop separate and simplified requirements for small businesses and other small entities" (5 CFR

<sup>5</sup> United States Environmental Protection Agency. *Information Collection Request for Prevention of Significant Deterioration and Nonattainment New Source Review (40 CFR Part 51 And 52)*. ICR No. 1230.23. 2008. Page 19.

1320.6(h)). In addition, the agencies must assure through various mechanisms that small entities are given an opportunity to participate in the rulemaking process.

A Regulatory Flexibility Act Screening Analysis (RFASA) developed as part of a 1994 draft Regulatory Impact Analysis (RIA) and incorporated into the September 1995 ICR renewal analysis reported an initial regulatory flexibility screening analysis showed that the changes to the NSR program due to the 1990 Clean Air Act amendments would not have an adverse impact on small entities.<sup>6</sup> This analysis encompassed the entire universe of applicable major sources that were likely to also be small businesses. The Agency estimates there are approximately 50 “small business” major sources.<sup>7</sup> Because the administrative burden of the NSR program is the primary source of the NSR program’s regulatory costs, the analysis estimated a negligible “cost to sales” (regulatory cost divided by the business category mean revenue) ratio for this source group. The new burden resulting from the PM<sub>2.5</sub> Increments Rule is small compared to the overall burden of the PSD program. Thus, there is no economic basis for a different conclusion regarding the PM<sub>2.5</sub> Increments Rule.

### **5.3.1 Measures to avert impacts on small entities**

The Agency may not, under any circumstances, exempt a major source of air pollution from the requirements of PSD. Since the impacts of PSD regulations which may impact small entities occur predominantly at major sources, little room exists for regulatory flexibility to avert the impact of the proposed rulemaking on small entities through exemption.

### **5.3.2 Measures to mitigate impacts on small entities**

Even though the PSD program does not have an adverse impact on a significant number of small businesses, EPA takes measures to assist sources in affected small entities through the implementation of small business stationary source technical and environmental compliance assistance programs, as called for in section 507 of the Act. These programs reduce the reporting burden of small entities that are subject to PSD and may significantly alleviate the economic burden on small sources by (1) establishing programs to assist small businesses with determining what Act requirements apply to their sources and when they apply, and (2) providing guidance on alternative control technology and pollution prevention for small businesses.

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<sup>6</sup> “Economic Assessment of the Impacts of Part C and D Regulatory Changes,” June 2, 1994.

<sup>7</sup> The definition for “small business” employed for all SIC categories in this analysis was any business employing fewer than 500 employees.

#### **5.4 Collection Schedule**

Respondents are not subjected to a collection schedule *per se* under the PSD regulations. In general, each major stationary source is required to submit an application as a prerequisite to receiving a construction permit. Preparation of a major source construction permit application is a one-time-only activity for each project involving construction of a new major stationary source or major modification of an existing major stationary source. The applicable Implementation Plan typically states the time period that is necessary to process a permit application and issue a permit. Consequently, a prospective source would be obliged to work backward from the desired commencement date for construction to determine the optimum submittal date for the application.

## 6 Estimating the Burden and Cost of the Collection

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; and transmit or otherwise disclose the information. In addition to the labor hours expended by the respondents, the burden estimate should include: (1) total capital and start-up costs annualized over the useful life of the purchased equipment, and (2) total costs for operation, maintenance, and purchases of services. Each component should be divided into burden borne directly by the respondent and any services that are contracted out.

This section discusses the development of burden estimates and their conversion into costs, which are separated into burden costs and capital and operating and maintenance (O&M) costs. According to the latest guidance for ICRs (EPA 2005), capital and O&M costs display the cost of any new capital equipment the source or reviewing authority may have to purchase solely for information collection, assimilation, and storage purposes. For example, if a source had to purchase a new computer to store and manipulate data, that computer would be a cost of administration subject to reporting in the ICR. In addition, the latest guidance instructs the Agency to differentiate the burden associated with a source's labor and that which it hires through outside contractors. To the extent a source contracts out for administrative purposes (e.g., employing consultants to perform modeling functions), the burden associated with those contracted tasks are not a burden to the source - but they still remain a cost. The reader should read this section with the following considerations in mind:

- The Agency believes the time necessary to perform a task is independent of the origins of its labor. In other words, if a source would employ 20 hours of burden to fully perform a function, then a contractor hired by the source would also take 20 hours to perform that same task. Furthermore, the Agency assumes no economies or diseconomies of scale. The linear combination of any amount of contractor and source effort will also sum to 20. Therefore, the burden estimates in this ICR act as an assessment of the total burden to affected sources and reviewing authorities, given the affected entity does not employ contracted labor.



- For some burden categories, the Agency believes the hours assigned to them will be divided between the source and outside contractors. For these categories, the Agency established a composite cost per hour by developing a weighted average of the source and contractor wages, with the weight defined by the percentage of total effort each burden source applied. Consequently, the cost developed in this ICR should be interpreted as an upper bound on the actual cost of administration by the source or reviewing authority. The methodology for determining cost per hour can be found in greater detail in section 6.2, below.

## 6.1 Estimating Respondent Burden

The requirements of the PSD program apply to new or modified sources on a pollutant-by-pollutant basis (for those pollutants for which the area is designated as attainment or unclassifiable). That is, a source must meet the requirements of the program for each pollutant that it will emit in amounts greater than the applicable threshold, and must address each such pollutant in its permit application. Thus, PSD permitting actions very often involve more than one pollutant.

The PM<sub>2.5</sub> Increments Rule adds increments, SILs, and an SMC for PM<sub>2.5</sub> to the PSD program. When the rule is implemented, sources will be required to conduct the air quality impact analyses for PM<sub>2.5</sub> that they are already required to conduct for other pollutants. Thus, the rule will add new burden as sources and reviewing authorities carry out the activities associated with such analyses for PM<sub>2.5</sub>.<sup>8</sup>

Under PSD, sources are generally required to conduct dispersion modeling to determine the air quality impacts of the criteria pollutants that they emit in significant quantities.<sup>9</sup> Up until now, the lack of PM<sub>2.5</sub> increments, SILs,

<sup>8</sup> The PM<sub>2.5</sub> SILs and SMC are actually de minimis levels that can reduce the number and/or complexity of the air quality analyses for PM<sub>2.5</sub> that must be carried out through modeling and monitoring, respectively. Thus, they work to lessen the burden and cost that result from the addition of PM<sub>2.5</sub> to the PSD program. The PSD program currently uses SILs and SMCs for other regulated pollutants, as well, and the approved ICR for the major NSR program incorporates their impact on the average burden and cost of PSD permits without addressing them directly. Because in this ICR we derive the burden and cost of adding PM<sub>2.5</sub> increments, SILs, and the SMC to the PSD program relative to the approved ICR, we also do not address the impact of the PM<sub>2.5</sub> SILs and SMC directly.

<sup>9</sup> “Criteria pollutants” are those for which NAAQS have been established, i.e., ozone, nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), lead, PM<sub>10</sub>, and PM<sub>2.5</sub>. Ozone is not emitted directly, but is formed in the atmosphere by complex photochemical reactions involving volatile organic compounds (VOCs) and oxides of nitrogen (NO<sub>x</sub>). Impact modeling is not required for ozone under PSD because existing models are not capable of

and SMCs have prevented sources from carrying out the full range of air quality impact analyses that would otherwise have been required for significant sources of PM<sub>2.5</sub>. Instead, in accordance with our stated policy, sources and reviewing authorities have used PM<sub>10</sub> analyses as a surrogate for PM<sub>2.5</sub>. As a result of the PM<sub>2.5</sub> Increments Rule, we expect most PM<sub>2.5</sub> sources to be required to carry out modeling analyses for both PM<sub>2.5</sub> and PM<sub>10</sub> (as well as any other criteria pollutants that they emit), resulting in a new burden to obtain a PSD permit. In addition, a corresponding new burden will result for reviewing authority respondents to review permit applications and issue permits.

To estimate the magnitude of the permitting burden that will result from the PM<sub>2.5</sub> Increments Rule, we considered two factors: (1) which permitting activities are likely to be affected by an increase in the number of air quality impact modeling analyses, and (2) the new burden for carrying out the affected activities for PM<sub>2.5</sub>. These factors are discussed further below.

Since the 2008 ICR renewal for the overall NSR program (EPA ICR No. 1230.23), the ICR was revised to account for the Flexible Air Permitting rule (EPA ICR No. 1230.26). Based on this approved ICR, the average burden to a source to obtain a PSD permit is 879 hours. Of these, 350 hours are associated with data collection and analysis activities, which we believe are the activities that will be most affected by an increase in the number air quality modeling analyses. Also based on the approved ICR, the average burden to a reviewing authority for issuing a PSD permit is 313 hours, of which 75 hours are associated with attending pre-application meetings, answering sources' questions, and logging in and reviewing data submissions (the activities most related to air quality modeling analyses).

To determine the new burden per PSD permit for carrying out the affected activities for PM<sub>2.5</sub>, we assumed that PSD permit applicants who would be subject to the requirements for PM<sub>2.5</sub> currently conduct an average of four modeling impact analyses.<sup>10</sup> After implementation of the PM<sub>2.5</sub> Increments

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accurately predicting the impacts of a single source.

<sup>10</sup> Full modeling analyses must be conducted for each criteria pollutant emitted by the source for which PSD increments (i.e., maximum allowable increases above baseline ambient concentrations) have been established. These analyses must be carried out for each averaging period that has been established for the pollutants. Sources subject to PSD for PM<sub>2.5</sub> currently must conduct modeling analyses for PM<sub>10</sub> (as a surrogate for PM<sub>2.5</sub>) for two averaging periods – annual and 24-hour. Some such sources also are subject to PSD for SO<sub>2</sub> and/or NO<sub>x</sub>. Sources subject for SO<sub>2</sub> must conduct analyses for three averaging periods (annual, 24-hour, and 3-hour), while NO<sub>x</sub> sources only need to conduct an analysis for the annual averaging period. To account for overlapping SO<sub>2</sub> and NO<sub>x</sub> applicability, we believe it is a reasonable assumption that PM<sub>2.5</sub> sources

Rule, we believe that this number will increase by two (i.e., by 50 percent) to an average of six such analyses.<sup>11</sup> Thus, for sources subject to PSD permitting for PM<sub>2.5</sub>, the new, additional burden associated with the affected activities will be 50 percent of the currently approved burden. We assumed the same percent increase for reviewing authorities where PSD permits must address PM<sub>2.5</sub>.

However, not all sources that must obtain a PSD permit will be subject to PSD for PM<sub>2.5</sub>. To estimate the percentage of permits that will have to address PM<sub>2.5</sub>, we consulted the RBLC to determine what percentage has historically been subject to major NSR for particulate matter.<sup>12</sup> We found that over a 10-year period, approximately 60 percent of facilities that obtained control technology determinations obtained a determination for particulate matter. We used this percentage as a weighting factor to determine the weighted average increase in burden for the affected activities across all PSD permits (i.e., those that address PM<sub>2.5</sub> and those that do not). This weighted average is 30 percent (0.60 x 0.50 = 0.30). We applied this weighted average burden increase to the affected PSD activities for both source respondents and reviewing authority respondents to determine the average new burden per PSD permit associated with the PM<sub>2.5</sub> Increments Rule.

Table 6-1 shows the average new burden per PSD permit for source and reviewing authority respondents. As the table shows, we estimate an average burden for sources of 105 hours per PSD permit. Based on the current approved total burden for a PSD permit (879 hours), this represents an increase of about 12 percent. For reviewing authorities, we estimate an average burden of 22 hours per permit, or about 7 percent of the current approved total burden of 313 hours.

**Table 6-1. Burden for Source and Reviewing Authority Respondents, Hours per PSD Permit**

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must conduct an average total of four modeling analyses (prior to the PM<sub>2.5</sub> Increments Rule) – two for PM<sub>10</sub> and an average of two for SO<sub>2</sub> and/or NO<sub>x</sub>.

<sup>11</sup> Under the PM<sub>2.5</sub> Increments Rule, sources subject to PSD for PM<sub>2.5</sub> will be required to conduct PM<sub>2.5</sub> modeling analyses for two averaging periods – annual and 24-hour. Because most such sources also will be subject to PSD for PM<sub>10</sub>, they will also be required to conduct two PM<sub>10</sub> modeling analyses, also for annual and 24-hour averaging periods. The rule will not affect the average of two analyses that we assume for SO<sub>2</sub>/NO<sub>x</sub>. Thus, the average total number of modeling analyses under the PM<sub>2.5</sub> Increments Rule will be six.

<sup>12</sup> The Reasonably Available Control Technology (RACT), Best Available Control Technology (BACT), Lowest Achievable Emission Rate (LAER) Clearinghouse, or RBLC, is a database of RACT/BACT/LAER determinations made in site-specific permitting analyses. It is generated and updated using information provided by state and local permitting agencies.

Type of Respondent	Activities Affected	Approved Burden Absent PM <sub>2.5</sub> Increments Rule (hours)	Additional Burden Resulting from PM <sub>2.5</sub> Increments Rule (hours)
Sources	Data collection and analysis	350	105
Reviewing authorities	Attending pre-application meetings	38	11
	Answering sources' questions	21	6
	Logging in and reviewing data submissions	16	5
	<b>Total</b>	<b>75</b>	<b>22</b>

In addition to issuing permits, the reviewing authorities must ensure that their PSD programs meet the requirements that EPA specifies for such programs pursuant to part C. The PM<sub>2.5</sub> Increments Rule revises these requirements. Therefore, each reviewing authority must submit changes to its existing Implementation Plan program or demonstrate that its existing program is no less stringent than EPA's new requirements. Because the changes needed for updating Implementation Plans are small and the requirements for Implementation Plan development differ from state to state, the EPA assumed it would take no more than 40 hours for each reviewing authority to fully incorporate this rulemaking into its plan. This assumption includes legislative review, public comment, and all legal and legislative processes necessary for all of the above components. This is a one-time burden that will occur during the 3-year period covered by this ICR.

## 6.2 Estimating Respondent Costs

In order to allow a direct cost comparison with the existing approved ICR for the major NSR program (i.e., EPA ICR No. 1230.26), we use the same cost factors in this ICR. These cost factors are laid out below.

### 6.2.1 Estimating labor costs

As in the currently approved ICR for the major NSR program, the hourly labor rate for source respondents used for this analysis is \$97.61 per hour.

Similarly, the labor rate used in this analysis for reviewing authority respondents is \$77.22 per hour.

### 6.2.2 Estimating capital/start-up and O&M costs, including purchase of services

Capital/start-up and O&M costs are non-labor related costs. One-time capital/start-up costs are incurred with the purchase of durable goods needed to provide information. According to the Paperwork Reduction Act, capital/start-up cost should include among other items, preparations for collecting information such as purchasing computers and software, monitoring, sampling, drilling, and testing equipment.

Even if an applicant is a brand new company and the prospective source is a "greenfield" source (the EPA estimates less than 1 percent of source respondents fit that description) most, and perhaps all, of the equipment needed to prepare permit applications (for example, the computers and basic software) will be part of the source's business operation inventory. Furthermore, the models for performing ambient air impact analyses are

available in electronic form from several different EPA web sites for just the Internet access charges, which are typically absorbed in routine business overhead expenses. Thus, the PM<sub>2.5</sub> Increments Rule will not cause any new capital costs to be incurred by any respondents.

In the 2008 ICR renewal for the entire major NSR program (EPA ICR No. 1230.23), EPA estimated that 34 PSD permit applicants are required to conduct preconstruction ambient monitoring each year at an average cost of approximately \$335,000, and this estimate was unchanged in the current approved ICR for the program (EPA ICR No. 1230.26). This cost is considered a start-up, direct cost associated with preparing a permit application (not a fixed capital cost) because we believe that most sources contract out this activity, which is generally a one-time exercise. Based on this assumption, the cost of capital equipment for preconstruction monitoring is negligible. Because the effect of adding PM<sub>2.5</sub> to the major NSR program on the start-up cost associated with preconstruction monitoring was previously accounted for in the ICR for the 2008 PM<sub>2.5</sub> NSR Implementation Rule (EPA ICR No. 1230.21), we do not believe that the PM<sub>2.5</sub> Increments Rule will have any effect on this cost.

Since the purchase of capital equipment is believed to be an insignificant factor in permit application preparation, we assume that the O&M and services for same are negligible. Further, once a permit is issued, there is no O&M cost associated with it. It remains unaltered unless the source or the reviewing authority discovers specific reasons to reexamine it and change any conditions or specifications. If purely administrative, the changes are handled exclusively by the reviewing authority. If changes have the potential for environmental consequences, the action may be significant enough to be counted as a separate and new application, to which a new burden and cost may be ascribed.

### **6.2.3 Annualized capital costs**

Typically, annualized capital cost would be derived from a discounted net present value of the stream of costs that would occur over the life of the permit, or the ICR, whichever is shorter. However as discussed above, there are no capital costs in the case of the PM<sub>2.5</sub> Increments Rule. Therefore, the annualized capital costs for this ICR to industry respondents are zero.

### **6.3 Estimating Agency Burden and Cost**

Staff in EPA's Regional Offices typically review PSD permits. Based on the currently approved ICR for the overall NSR program (ICR No. 1230.26), the average EPA burden per PSD permit is 15 hours. Under the PM<sub>2.5</sub> Increments Rule we expect an additional burden of 1 hour per permit associated with our review of additional PM<sub>2.5</sub> air quality modeling analyses. This new burden was derived as discussed above in section 6.1 for the source and reviewing authority burden increases. That is, for those

activities that will be affected by the number of modeling analyses conducted for a PSD permit, the weighted average burden per permit will increase by 30 percent. The additional 1 hour of EPA burden will amount to about 7 percent of the currently approved EPA burden for PSD permits.

To facilitate cost comparisons between this ICR revision and the currently approved ICR for the NSR program (EPA ICR No. 1230.26), we have used the same federal labor rate, \$43.17 per hour.

In addition, there will be Agency burden to review the revised Implementation Plans submitted by the reviewing authorities to verify that the revisions fully meet the requirements of the PSD program, as changed by the PM<sub>2.5</sub> Increments Rule. Due to the nature of the Implementation Plan revisions needed, the Agency expects that each Implementation Plan revision will require about 5 hours of review. We expect this one-time burden to occur during the period covered by this ICR.

#### **6.4 Estimating the Respondent Universe and Total Burden and Cost**

For the purpose of estimating the total burden in this ICR, the respondent universe is defined by the annual number of permit applications prepared by sources and the number of reviewing authorities that must process such permit applications. It also includes the number of reviewing authorities that will have to revise their Implementation Plans.

##### **6.4.1 Estimating the number of respondents**

As discussed above in section 6.1, the PM<sub>2.5</sub> Increments Rule will result in additional burden per PSD permit. However, we do not believe that the number of permits will be affected because the rule does not affect PSD applicability. For this reason, this analysis uses the number of PSD permits (274 per year) that results from implementation of the Flexible Air Permitting rule, as set out in EPA ICR No. 1230.26. For purposes of this ICR, we carried out the analysis as if the PM<sub>2.5</sub> Increments Rule would be fully implemented immediately upon promulgation. That is, we have allowed for no lag time for reviewing authorities to submit Implementation Plan revisions and for EPA to review and approve the revisions. This approach results in a “worst-case” analysis for the 3-year period covered by this ICR, but more accurately reflects the long-term impacts of the rule.

For the number of respondent reviewing authorities associated with major NSR permitting and Implementation Plan revisions, we used the 112 reviewing authority count used by other permitting ICRs. Again, we carried out this “worst-case” analysis as if all reviewing authorities would begin issuing PSD permits for PM<sub>2.5</sub> immediately, with no lag time for Implementation Plan revisions. We also included the reviewing authorities’ burden for revising the Implementation Plans in this ICR.

**6.4.2 Estimating total respondent burden and cost**

Based on the estimates presented above for the new burden for PSD permits, the labor rates for source and reviewing authority respondents, and the number of respondents, we have estimated the total burden and costs that will result from the PM<sub>2.5</sub> Increments Rule. Table 6-2 presents the totals for source respondents for each year of the 3 years covered by this ICR. Table 6-3 shows the average annual totals for reviewing authority respondents.

**Table 6-2. Annual Burden and Costs for Source Respondents**

Activity	Number of Permits per Year	Burden per Permit (Hours)	Annual Burden (Hours)	Labor Rate	Annual Cost
PSD Permitting	274	105	28,770	\$97.61/hr	\$2,808,239

**Table 6-3. Annual Burden and Costs for Reviewing Authority Respondents**

<b>Major NSR Permitting</b>					
Activity	Number of Permits per Year	Burden per Permit (Hours)	Annual Burden (Hours)	Labor Rate	Annual Cost
PSD Permitting	274	22	6,028	\$77.22/hr	\$465,482
<b>Implementation Plan Revisions</b>					
Activity	Number of Plan Revisions per Year <sup>a</sup>	Burden per Revision (Hours)	Average Annual Burden <sup>b</sup> (Hours)	Labor Rate	Average Annual Cost <sup>c</sup>
Revision of Implementation Plan	37.33	40	1,493	\$77.22/hr	\$115,315
<b>Reviewing Authority Totals</b>					
<b>TOTAL</b>			<b>7,521</b>		<b>\$580,797</b>

<sup>a</sup> Each of the 112 reviewing authorities may submit one Implementation Plan revision to conform their PSD programs to the revised rules over the 3-year period covered by this ICR. Thus, the average annual number of such revisions is 112 / 3 = 37.33 per year.

<sup>b</sup> Each reviewing authority will revise its Implementation Plan once for a 3-year total burden of 4,480 hours. Average annual burden is 4,480 / 3 = 1,493 hours.

<sup>c</sup> Total 3-year cost is 4,480 hours x \$77.22 = \$345,946. Average annual cost is \$345,946 / 3 = \$115,315.

**6.4.3 Estimating total federal burden and cost**

Based on the estimates presented above for the federal burden hours for each activity, the federal labor rate, and the number of permits and Implementation Plan revisions, we have estimated the total average annual federal burden and costs that will result from the PM<sub>2.5</sub> Increments Rule. All of the federal burden and costs are incurred by EPA. Table 6-4 presents the estimated burden and costs.

**Table 6-4. Federal Annual Burden and Costs**

<b>Major NSR Permitting</b>					
Activity	Number of Permits per Year	Additional Burden per Permit (Hours)	Additional Annual Burden (Hours)	Labor Rate	Annual Cost
PSD Permitting	274	1	274	\$43.17/hr	\$11,829
<b>Implementation Plan Review</b>					
Activity	Number of Plans to Review per Year <sup>a</sup>	Burden per Plan Review (Hours)	Average Annual Burden <sup>b</sup> (Hours)	Labor Rate	Average Annual Cost <sup>c</sup>
Review of Implementation Plans	37.33	5	187	\$43.17/hr	\$8,058
<b>Federal Totals</b>					
<b>TOTAL</b>			<b>461</b>		<b>\$19,887</b>

<sup>a</sup> The EPA will review one Implementation Plan revision submitted by each of the 112 reviewing authorities over the 3-year period covered by this ICR. Thus, the average annual number of Implementation Plan reviews is 112 / 3 = 37.33 per year.

<sup>b</sup> The EPA will review a total of 112 Implementation Plan revisions for a 3-year total burden of 560 hours. Average annual burden is 560 / 3 = 187 hours.

<sup>c</sup> Total 3-year cost is 560 hours x \$43.17 = \$24,175. Average annual cost is \$24,175 / 3 = \$8,058.

**6.5 Bottom Line Burden and Cost**

Table 6-5 displays the annual burden and costs for source and reviewing authority respondents that we estimate will result from the PM<sub>2.5</sub> Increments Rule, as well as the total across all respondents. Table 6-6 shows the annual burden and costs for the EPA that we estimate will result from the PM<sub>2.5</sub> Increments Rule.

**Table 6-5. Total Estimated Annual Respondent Burden and Costs**

Type of Respondent	Number of Responses	Total Burden (Hours/Year)	Total Labor Costs (\$/Year)	Total Capital Costs (\$/Year)	Total Costs (\$/Year)
Sources	274	28,770	\$2,808,239	\$0	\$2,808,239
Reviewing Authorities <sup>a</sup>	311.33	7,521	\$580,797	\$0	\$580,797
<b>TOTAL</b>	<b>585.33</b>	<b>36,291</b>	<b>\$3,389,036</b>	<b>\$0</b>	<b>\$3,389,036</b>

<sup>a</sup> During the 3-year period of this ICR, the 112 reviewing authorities will review 274 PSD permits each year and submit an average of 37.33 Implementation Plan revisions per year (112 / 3 = 37.33), for a total of 311.33 responses per year.

**Table 6-6. Total Estimated Annual Federal Burden and Costs**

Type of Entity	Number of Entities	Total Incremental Burden (Hours/Year)	Total Incremental Labor Costs (\$/Year)	Total Incremental Capital Costs (\$/Year)	Total Incremental Costs (\$/Year)
Federal Agency (EPA)	1	461	\$19,887	\$0	\$19,887

**6.6 Reasons for Change in Burden**

As discussed in the previous sections, the PM<sub>2.5</sub> Increments Rule will result in new burden associated with obtaining and issuing PSD permits. This change in the PSD regulations is necessary under the Clean Air Act because EPA has, in other rulemakings, promulgated NAAQS for PM<sub>2.5</sub> to



protect the public health and welfare. This new rule adds increments, SILs, and an SMC for PM<sub>2.5</sub> to the PSD program, but it does not otherwise change the requirements of the program. We expect the rule to add to the burden associated with applying for and issuing those PSD permits that will now involve PM<sub>2.5</sub> air quality modeling analyses in addition to analyses for other pollutants, but we do not expect any change in the number of PSD permits that must be issued (i.e., no change in the number of source respondents). In addition, reviewing authorities may incur a one-time burden to revise their Implementation Plans to incorporate the PSD rule changes. The magnitude of the new burden is presented above in Tables 6-5 and 6-6.

## 6.7 Burden Statement

We estimate that the PM<sub>2.5</sub> Increments Rule will result in a total annual burden on 274 source respondents of about 29,000 hours and \$2,800,000 per year (see Tables 6-2 and 6-5), for an average burden of about 105 hours and \$10,000 per source. For the 112 reviewing authority respondents, we estimate that the total annual burden will be about 7,500 hours and \$580,000 (see Tables 6-3 and 6-5), for an average burden of about 67 hours and \$5,200 per reviewing authority.

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-OAR-2007-0628, which is available for online viewing at [www.regulations.gov](http://www.regulations.gov), or in-person viewing at the Air and Radiation Docket and Information Center in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Avenue, NW, 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 Air Docket is (202) 566-1742. An electronic version of the public docket is available at [www.regulations.gov](http://www.regulations.gov). This site can be used to submit or view public comments, 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 identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OAR-2007-0628 and OMB Control Number 2060-NEW in any correspondence.