EPA

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

August 2007

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_{2.5}) – 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_{2.5}). This action is being taken as part of our efforts to implement the National Ambient Air Quality Standards (NAAQS) for PM_{2.5}.

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_{2.5} and its precursors, but do not otherwise change the requirements of the program. For convenience, we refer to this rulemaking as the "PM_{2.5} Increments Rule" hereafter.

This purpose of this Information Collection Request (ICR) (OMB Control Number 2060-NEW; EPA ICR Number 2276.01) is to show the burden and cost associated with the PSD rule changes for PM_{2.5}. 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 $PM_{2.5}$ INCREMENTS RULE

| Type of Respondent | Average Annual Burden (Hours) | Average Annual Burden per Respondent (Hours) | Average Annual Cost ^c (\$ 2004) | Average Annual Cost per Respondent (\$ 2004) |
|--|----------------------------------|--|--|--|
| Sources ^a Reviewing Authorities ^b | 14,045 4,143 | 53 37 | \$919,948 \$180,359 | \$3,472 \$1,610 |
| Total | 18,188 | N/A | \$1,100,307 | N/A |

^a We estimate 265 PSD permits per year.

^b We assume that there are 112 State and local reviewing authorities.

c 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 $PM_{2.5}$ Increments Rule. We estimate that the average annual burden for EPA will be 452 hours, at a cost of \$16,355 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_{2.5} will lag the promulgation of this rulemaking due to the time needed for reviewing authorities with approved PSD programs to modify their Implementation Plans.

DRAFT 8/1/07

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_{2.5}) – 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_{2.5} to the PSD program required under part

EPA TRACKING NUMBER: 2276.01

OMB CONTROL NUMBER: 2060-NEW

C of title I of the Act. It has been assigned EPA tracking number 2276.01 and OMB Control Number 2060-NEW.

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 $PM_{2.5}$ 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_{10}) to address coarse particle pollution. In 2006, we revised the $PM_{2.5}$ and PM_{10} NAAQS. After delays associated with litigation over the NAAQS and with building up technical capacity to address $PM_{2.5}$, we are proceeding with implementation of the $PM_{2.5}$ program, including implementation of the NSR program for $PM_{2.5}$. In a related rulemaking action we are adding $PM_{2.5}$ 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_{2.5} 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.¹ In addition, reviewing authorities will incur a one-time burden to revise their Implementation Plans to incorporate the PSD rule changes.

The term "reviewing authority" is synonymous with the term "permitting authority" used in previous permit-related analyses. The reader should consider these terms interchangeable for comparison purposes.

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 $PM_{2.5}$ 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_{2.5} 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_{2.5} 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

A 60-day public comment period will be provided after proposal of the $PM_{2.5}$ Increments Rule, during which all affected parties will be given the opportunity to comment on the proposed rule and the associated burden estimate. All comments will be considered, and some may be reflected in the development of the final regulatory language.

3.3 Consultations

In an earlier proposed rulemaking,² we solicited comment on the programmatic aspects of PM_{2.5} 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_{2.5} 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 $PM_{2.5}$ Increments Rule does not require periodic reporting more frequently than semi-annually.
- 2. The PM_{2.5} 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_{2.5} 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.

² "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards," 70 FR 65984, November 1, 2005.

- 6. The PM_{2.5} Increments Rule does not require more that 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 parts 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_{2.5} Increments Rule on small entities to be insignificant and not disproportionate.

The recordkeeping and reporting requirements contained in the PM_{2.5} 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_{2.5} 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 $PM_{2.5}$ 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. These citations can be found on the EPA website at:

http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm

Respondent data and information requirements for PSD permits can be found in the Supporting Statement for the 2005 ICR renewal for the entire major NSR program (ICR #1230.17), including appropriate references in 40 CFR part 51 for the data and information requirements that govern the way States implement NSR programs.³

The data requirements associated with the $PM_{2.5}$ 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 $PM_{2.5}$. 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 $PM_{2.5}$ and submitted for review by reviewing authorities.

4.2.2 Respondent activities

The Supporting Statement for the 2005 ICR renewal for the entire major NSR program (ICR #1230.17) identifies the activities for PSD permitting for source and reviewing authority respondents.⁴ 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_{2.5} Increments Rule will add new burden for the data collection and analysis category as sources will have to conduct these activities for PM_{2.5}.

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 $PM_{2.5}$ Increments Rule will add new burden for attending pre-application meetings, answering sources' questions, and logging in and reviewing data submissions, as reviewing authorities will have to conduct these activities for $PM_{2.5}$.

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_{2.5} to their PSD programs.

A. Rios and J. Santiago. *Information Collection Request for 40 CFR Part 51 and 52 Prevention of Significant Deterioration and Nonattainment New Source Review*. U.S. Environmental Protection Agency, Research Triangle Park, NC. October 2004. Appendix A.

⁴ A. Rios and J. Santiago. *Information Collection Request for 40 CFR Part 51 and 52 Prevention of Significant Deterioration and Nonattainment New Source Review.* U.S. Environmental Protection Agency, Research Triangle Park, NC. October 2004. Pages 17 and 18.

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

5.1 Agency Activities

The Supporting Statement for the 2005 ICR renewal for the entire major NSR program (ICR #1230.17) identifies EPA's activities associated with PSD permitting. 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 $PM_{2.5}$ 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 $PM_{2.5}$ Increments Rule must conduct $PM_{2.5}$ 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 $PM_{2.5}$ 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 $PM_{2.5}$ 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

A. Rios and J. Santiago. *Information Collection Request for 40 CFR Part 51 and 52 Prevention of Significant Deterioration and Nonattainment New Source Review.* U.S. Environmental Protection Agency, Research Triangle Park, NC. October 2004. Page 19.

INFORMATION COLLECTION REQUEST FOR CHANGES TO 40 CFR PART 51 AND 52: Prevention of Significant Deterioration (PSD) for Particulate Matter Less Than 2.5 Micrometers (PM $_{2.5}$) – Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC)

requirements for small businesses and other small entities" (5 CFR 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. 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. Because the administrative burden of the NSR program are 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_{2.5} 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_{2.5} Increments Rule.

5.3.1 Measures to avert impacts on small entities

5.3.2 Measures to mitigate 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.

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.

[&]quot;Economic Assessment of the Impacts of Part C and D Regulatory Changes," June 2, 1994.

The definition for "small business" employed for all SIC categories in this analysis was any business employing fewer than 500 employees.

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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 mini-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_{2.5} Increments Rule adds increments, SILs, and an SMC for PM_{2.5} to the PSD program. When the rule is implemented, sources will be required to conduct the air quality impact analyses for PM_{2.5} 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_{2.5}.

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. Up until now, the lack of $PM_{2.5}$ increments, SILs, 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 $PM_{2.5}$. Instead, in accordance with our stated policy, sources and reviewing authorities have used PM_{10} analyses as a surrogate for $PM_{2.5}$. As a result of the $PM_{2.5}$ Increments Rule, we expect most $PM_{2.5}$ sources to be required to carry out modeling analyses for both $PM_{2.5}$ and PM_{10} (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

[&]quot;Criteria pollutants" are those for which NAAQS have been established, i.e., ozone, nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO), lead, PM₁₀, and PM_{2.5}. Ozone is not emitted directly, but is formed in the atmosphere by complex photochemical reactions involving volatile organic compounds (VOCs) and oxides of nitrogen (NOx). Impact modeling is not required for ozone under PSD because existing models are not capable of accurately predicting the impacts of a single source.

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 $PM_{2.5}$ 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 $PM_{2.5}$. These factors are discussed further below.

As noted previously, there is currently an approved ICR for the overall NSR program (2005 ICR renewal; ICR #1230.17), which includes the PSD program. This approved ICR indicates that the average burden to a source to obtain a PSD permit is 839 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. The approved ICR also indicates that the average burden to a reviewing authority for issuing a PSD permit is 272 hours, of which 72 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_{2.5}, we assumed that PSD permit applicants who would be subject to the requirements for PM_{2.5} currently conduct an average of four modeling impact analyses.⁹ After implementation of the PM_{2.5} Increments Rule, we believe that this number will increase by one (i.e., by 25 percent) to an average of five such analyses.¹⁰ Thus, for sources subject to PSD

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 $PM_{2.5}$ currently must conduct modeling analyses for PM_{10} for two averaging periods – annual and 24-hour. Some such sources also are subject to PSD for SO_2 and/or SO_2 nust conduct analyses for three averaging periods (annual, 24-hour, and 3-hour), while SO_2 nust conduct an analysis for the annual averaging period. To account for overlapping SO_2 and SO_3 nust conduct an average of two additional modeling analyses, for a total of four (prior to the SO_3 Increments Rule).

Under the $PM_{2.5}$ Increments Rule, sources subject to PSD for $PM_{2.5}$ will be required to conduct $PM_{2.5}$ modeling analyses for two averaging periods – annual and 24-hour. Because most such sources also will be subject to PSD for PM_{10} , they will be required to conduct one PM_{10} modeling analysis for the 24-hour averaging period (there is no longer an annual NAAQS for PM_{10} and the annual increment for PM_{10} is eliminated by the $PM_{2.5}$ Increments Rule). The rule will not affect the average of two analyses that we assume for SO_7/NOx . Thus,

permitting for $PM_{2.5}$, the new, additional burden associated with the affected activities will be 25 percent of the currently approved burden. We assumed the same percent increase for reviewing authorities where PSD permits must address $PM_{2.5}$.

However, not all sources that must obtain a PSD permit will be subject to PSD for $PM_{2.5}$. To estimate the percentage of permits that will have to address $PM_{2.5}$, we consulted the RBLC to determine what percentage has historically been subject to major NSR for particulate matter. We found that over the last 10 years, 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 $PM_{2.5}$ and those that do not). This weighted average is 15 percent (0.60 x 0.25 = 0.15). 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 $PM_{2.5}$ 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 53 hours per PSD permit. Based on the current approved total burden for a PSD permit (839 hours), this represents an increase of about 6 percent. For reviewing authorities, we estimate an average burden of 10 hours per permit, or about 4 percent of the current approved total burden of 272 hours.

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

| Type of Respondent | Activities Affected | Approved Burden Absent PM _{2.5} Increments Rule (hours) | Additional Burden Resulting from PM _{2.5} Increments Rule (hours) |
|-----------------------|---|--|--|
| Sources | Data collection and analysis | 350 | 53 |
| Reviewing authorities | Attending pre-application meetings Answering sources' questions Logging in and reviewing data submissions Total | 36 20 <u>16</u> 72 | 5 3 <u>2</u> 10 |

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In addition to issuing permits, the reviewing authorities must ensure that their PSD programs meet the requirements that EPA specifies for such

the average total number of modeling analyses under the $PM_{2.5}$ Increments Rule will be five.

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.

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programs pursuant to part C. The PM_{2.5} 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
- 6.2.1 Estimating

labor costs

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

In order to allow a direct cost comparison with the existing approved ICR for the major NSR program (i.e., the 2005 renewal, ICR #1230.17), we use the same cost factors in this ICR. These cost factors are laid out below.

As in the 2005 ICR renewal for the major NSR program, the hourly labor rate for source respondents used for this analysis is \$65.50 per hour (in 2004 dollars). This labor rate was calculated by taking 70 percent of the 2004 in-house labor rate, which was derived using fully loaded but weighted technical, clerical, and managerial staff wages, and adding the resulting labor rate to 30% of the 2004 fully loaded weighted consultant rate for technical, clerical, and managerial staff.

Similarly, the labor rate used in this analysis for reviewing authority respondents is \$43.53 per hour. This rate was derived for the 2005 ICR renewal by inserting 2004 Federal government pay schedule wage rates for clerical, technical, and managerial staff into the weighting system developed in the 1997 renewal ICR and described in the November 2002 ICR update.12

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

INFORMATION COLLECTION REQUEST FOR CHANGES TO 40 CFR PART 51 AND 52: Prevention of Significant Deterioration (PSD) for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}) – Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC)

¹² U.S., Environmental Protection Agency, Office of Air Quality Planning and Standards, Draft Information Collection Request For Changes To The 40 CFR Part 51 And 52 Prevention Of Significant Deterioration And New Source Review Applicability Requirements For Modifications To Existing Sources, November 2002, p. 29.

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_{2.5} Increments Rule will not cause any new capital costs to be incurred by any respondents.

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 $PM_{2.5}$ 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. In the currently approved ICR for the overall NSR program (2005 ICR renewal; ICR #1230.17), the average EPA burden per PSD is 14 hours. Under the PM_{2.5} Increments Rule we expect an additional burden of 1 hour per permit associated with our review of additional PM_{2.5} 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 15 percent. The additional 1 hour of EPA burden will amounts to about 7 percent of the currently approved EPA burden for PSD permits.

To facilitate cost comparisons between this ICR update and the 2005 ICR renewal, we have used the Federal labor rate from the 2005 ICR of \$36.21 per hour.¹³ The rate reflects the assumption, made in the July 10, 1997

A. Rios and J. Santiago. *Information Collection Request for 40 CFR Part 51 and 52 Prevention of Significant Deterioration and Nonattainment New Source Review.* U.S. Environmental Protection Agency, Research Triangle Park, NC. October 2004. Page 13.

INFORMATION COLLECTION REQUEST FOR CHANGES TO 40 CFR PART 51 AND 52: Prevention of Significant Deterioration (PSD) for Particulate Matter Less Than 2.5 Micrometers (PM $_{2.5}$) – Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC)

renewal ICR and the February 2001 renewal ICR, that the staff reviewing permits are classified as Grade 11 Step 3. The corresponding salary is loaded with benefits at the rate of 60%.

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_{2.5} 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 $PM_{2.5}$ Increments Rule will result in addition 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 same number of PSD permits (265 per year) used in the 2005 ICR renewal (ICR #1230.17). For purposes of this ICR, we carried out the analysis as if the $PM_{2.5}$ 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_{2.5} 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 $PM_{2.5}$ 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 (\$ 2004) |
|----------------|----------------------------------|---------------------------------|-----------------------------|------------|--------------------------|
| PSD Permitting | 265 | 53 | 14,045 | \$65.50/hr | \$919,948 |

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

| Activity | Number of Permits per Year | Burden per Permit (Hours) | Annual Burden (Hours) | Labor Rate | Annual Cost (\$ 2004) |
|---------------------------------|-----------------------------------|-----------------------------------|---|------------|--|
| PSD Permitting | 265 | 10 | 2,650 | \$43.53/hr | \$115,354 |
| Implementation Plan Re | Number of Plan Revisions per Year | Burden per Revision (Hours) | Average Annual Burden ^b (Hours) | Labor Rate | Average Annual Cost ^o (\$ 2004) |
| Revision of Implementation Plan | 37.33 | 40 | 1,493 | \$43.53/hr | \$65,005 |
| Reviewing Authority Tot | als | | | | |
| | | | | 1 | 1 |

^a 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.

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 $PM_{2.5}$ Increments Rule. All of the Federal burden and costs are incurred by EPA. Table 6-4 presents the estimated burden and costs.

^b 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.

 $^{^{\}circ}$ Total 3-year cost is 4,480 hours x \$43.53 = \$195,014. Average annual cost is \$195,014 / 3 = \$65,005.

Table 6-4. Federal Annual Burden and Costs

| Major NSR Permitting | | | | | |
|--------------------------------|--|---|---|------------|-------------------------------------|
| Activity | Number of Permits per Year | Additional Burden per Permit (Hours) | Additional Annual Burden (Hours) | Labor Rate | Annual Cost (\$ 2004) |
| PSD Permitting | 265 | 1 | 265 | \$36.21/hr | \$9,596 |
| Implementation Plan Re | Number of Plans to Review per Year ^a | Burden per Plan Review (Hours) | Average Annual Burden ^b (Hours) | Labor Rate | Average Annual Cost (\$ 2004) |
| Review of Implementation Plans | 37.33 | 5 | 187 | \$36.21/hr | \$6,759 |
| Federal Totals | | | | | |
| TOTAL | | | 452 | | \$16,35 |

^a 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.

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 $PM_{2.5}$ 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 $PM_{2.5}$ 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 | 265 | 14,045 | \$919,948 | \$ 0 | \$919,948 |
| Reviewing Authorities ^a | 302.33 | 4,143 | 180,359 | 0 | 180,359 |
| TOTAL | 567.33 | 18,188 | \$1,100,307 | \$ 0 | \$1,100,307 |

^a During the 3-year period of this ICR, the 112 reviewing authorities will review 265 PSD permits each year and submit an average of 37.33 Implementation Plan revisions per year (112 / 3 = 37.33), for a total of 302.33 responses per year.

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

| | | Total | Total | Total | Total |
|----------------------|-----------|--------------|-------------|---------------|-------------|
| | | Incremental | Incremental | Incremental | Incremental |
| | Number of | Burden | Labor Costs | Capital Costs | Costs |
| Type of Entity | Entities | (Hours/Year) | (\$/Year) | (\$/Year) | (\$/Year) |
| Federal Agency (EPA) | 1 | 452 | \$16,355 | \$0 | \$16,355 |

^b 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.

^b Total 3-year cost is 560 hours x \$36.21 = \$20,278. Average annual cost is \$20,278 / 3 = \$6,759.

6.6 Reasons for Change in Burden

As discussed in the previous sections, the $PM_{2.5}$ 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 $PM_{2.5}$ to protect the public health and welfare. This new rule adds increments, SILs, and an SMC for $PM_{2.5}$ 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 $PM_{2.5}$ 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 $PM_{2.5}$ Increments Rule will result in a total annual burden on 265 source respondents of about 14,000 hours and \$920,000 per year (see Tables 6-2 and 6-5), for an average burden of about 19 hours and \$1,200 per source. For the 112 reviewing authority respondents, we estimate that the total annual burden will be about 4,100 hours and \$180,000 (see Tables 6-3 and 6-5), for an average burden of about 37 hours and \$1,600 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, 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. 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-HO-OAR-2007-0628 and OMB Control Number 2060-NEW in any correspondence.