**SUPPORTING STATEMENT**

**ENVIRONMENTAL PROTECTION AGENCY**

Phosphoric Acid Manufacturing and Phosphate Fertilizer Production RTR and Standards of Performance for Phosphate Processing

1. **IDENTIFICATION OF THE INFORMATION COLLECTION**

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

Phosphoric Acid Manufacturing (40 CFR part 63, subpart AA) and Phosphate Fertilizer Production (40 CFR part 63, subpart BB) RTR and Standards of Performance for Phosphate Processing (40 CFR part 60, subparts T, U, V, W, and X)

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

This supporting statement addresses information collection activities that will be imposed by amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Phosphoric Acid Manufacturing and Phosphate Fertilizer Production, 40 CFR part 63, subparts AA and BB, referred to as the Phosphoric Acid and Phosphate Fertilizer NESHAP and information collection activities imposed by amendments to the Standards of Performance for the Phosphate Fertilizer Industry, 40 CFR part 60, subparts T, U, V, W, and X, referred to as the Phosphoric Acid Manufacturing and Phosphate Fertilizer NSPS. In 1999, the Environmental Protection Agency (EPA) promulgated national emission standards for hazardous air pollutants for new and existing phosphoric acid manufacturing and phosphate fertilizer production facilities under 40 CFR part 63, subparts AA and BB (64 FR 31358, June 10, 1999). On June 13, 2002 EPA amended subpart AA to revise PM emissions limits for existing phosphate rock calciners, in response to a petition from The Fertilizer Institute. Phosphoric Acid Manufacturing and Phosphate Fertilizer NSPS requirements were promulgated in 1975 for subparts T and U and in 1977 for subparts V, W, and X. As part of the residual risk review for the NESHAP and technology reviews for both the NESHAP and NSPS, EPA issued proposed rules in 2014. This information collection request documents the additional recordkeeping and reporting requirements and burden imposed by the proposed rules.

This ICR includes the burden for activities that will be conducted in the first three years following promulgation of the proposed Phosphoric Acid and Phosphate Fertilizer NESHAP. These activities include reading the rule, performance testing, completing performance evaluations, developing a gypsum dewatering stack and cooling pond management plant, and monitoring, recordkeeping, and reporting requirements.

This ICR does not include burden for the proposed Phosphoric Acid and Phosphate Fertilizer NSPS requirements. These proposed requirements will only apply to new sources, and we are not aware of any planned new sources. Also, we believe that most, if not all, new sources will be exempt from NSPS compliance due to the likelihood of the new source being subject to NESHAP subpart AA or BB.

The use of the term "Designated Administrator" throughout this document refers to the U.S. EPA Administrator or a delegated authority such as a state agency. The term "Administrator" alone refers to the U.S. EPA Administrator.

This ICR presents the burden to respondents and the Designated Administrator (State or Federal Government) that will be imposed by the plans developed to implement the Phosphoric Acid and Phosphate Fertilizer NESHAP. Respondents are owners or operators of existing major source phosphoric acid manufacturing and phosphate fertilizer production facilities.

The requirements described below are the minimum requirements established by the proposed Phosphoric Acid and Phosphate Fertilizer NESHAP. Although the Designated Administrator may choose to impose more stringent requirements, it is assumed for this burden estimate that the implemented plans mirror the Phosphoric Acid and Phosphate Fertilizer NESHAP.

Over the next three years, 13 phosphoric acid manufacturing and phosphate fertilizer production facilities (12 facilities produce phosphoric acid and 11 facilities produce phosphate fertilizer) will be subject to this standard, and the cost of this ICR will be $1,874,000. The burden to the “Affected Public” for each facility may be found in Tables 1 through 4 in Attachment 1. The burden to the “Federal Government” is attributed entirely to work performed by federal employees or government contractors; this burden may be found in Tables 5 through 8 of Attachment 2.

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

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

The EPA is charged under CAA Section 112, as amended, to establish standards of performance for each category or subcategory of major sources and area sources of hazardous air pollutants (HAP). These standards are applicable to new or existing sources of HAP and require the maximum degree of emission reduction. In addition, CAA section 114(a) states that the Administrator may require any owner/operator subject to any requirement of this Act to:

(A) Establish and maintain such records; (B) make such reports; (C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods; (D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Administrator shall prescribe); (E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (F) submit compliance certifications in accordance with Section 114(a)(3); and (G) provide such other information as the Administrator may reasonably require.

In the Administrator's judgment, HAP emissions from phosphoric acid manufacturing and phosphate fertilizer production facilities cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, the NESHAP were promulgated for major sources in this source category at 40 CFR part 63,subparts AA and BB.

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

The information will be used by Designated Administrators' enforcement personnel to ensure that the requirements are being implemented and are complied with on a continuous basis. Specifically, the information will be used by the Designated Administrator to: (1) identify sources subject to the standards; (2) ensure that the Phosphoric Acid and Phosphate Fertilizer NESHAP being properly applied; (3) ensure that the Phosphoric Acid and Phosphate Fertilizer NESHAP being complied with; and (4) ensure, on a continuous basis, that the operating parameters established during performance tests are not exceeded.

In addition, records and reports are necessary to enable the Designated Administrator to identify phosphoric acid manufacturing and phosphate fertilizer production facilities that may not be in compliance with the standards. Based on reported information, the Designated Administrator can decide which facilities should be inspected and what records or processes should be inspected. The records that facilities maintain would indicate to the Designated Administrator whether the personnel are operating and maintaining control equipment properly and whether they have met the qualification requirements.

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

The requested recordkeeping and reporting will be required under 40 CFR part 63, subparts AA and BB.

**3(a) Nonduplication**

If the subject standards have not been delegated, the information is sent directly to the appropriate EPA regional office. Otherwise, the information is sent directly to the delegated state or local agency. If a state or local agency has adopted its own similar standards to implement the Federal standards, a copy of the report submitted to the state or local agency can be sent to the Administrator in lieu of the report required by the Federal standards. Therefore, no duplication exists.

**3(b) Public notice prior to ICR submission to OMB**

A public notice of this collection is provided in the Federal Register notice of proposed rulemaking published for the Phosphoric Acid Manufacturing and Phosphate Fertilizer Production RTR and Standards of Performance for Phosphate Processing.

**3(c) Consultations**

The public will be provided the opportunity to review and comment on the burden estimated in this Information Collection Request during the comment period for the proposed rulemaking. In addition, industry representatives including The Fertilizer Institute, and all member companies, provided information concerning the Phosphoric Acid and Phosphate Fertilizer NESHAP at meetings with the EPA prior to rule proposal.

**3(d) Effects of Less Frequent Data Collection**

The Phosphoric Acid and Phosphate Fertilizer NESHAP requires initial and periodic testing, continuous operating parameter monitoring, performance evaluations, a notification of compliance status, and summary reports. The frequency of these activities was chosen by EPA as the period that will provide an adequate margin of assurance that affected facilities will not operate for extended periods in violation of the standards.

Although continuous monitoring of operating parameters cannot provide a direct measurement of emissions, it is less expensive than continuous emissions monitoring systems (CEMS), and the information provided can be used to ensure that the air pollution control devices are operating properly. This information assures EPA and the public that the reductions envisioned by the regulations are being achieved. Less frequent monitoring would not ensure continuous compliance.

Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards was collected less frequently, the proper operation and maintenance of control equipment and the possibility of detecting violations would be less likely.

**3(e) General Guidelines**

These reporting or recordkeeping requirements do not violate any of the regulations promulgated by OMB under 5 CFR part 1320, section 1320.5.

This rule requires all records to be maintained at the source for a period of five years. In 40 CFR part 63, subpart A, "General Provisions for National Emission Standards for Hazardous Air Pollutants for Source Categories," owners or operators of facilities are required to keep and maintain records for a period of five years. The title V permit programs also require records to be retained for five years. These records must be kept on file for use, if needed, by the regulating authority to ensure that the plant personnel are operating and maintaining control equipment properly.

**3(f) Confidentiality**

All information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in 40 CFR 2, subpart B -- Confidentiality of Business Information (see 40 CFR 2; 41 FR 36902, September 1, 1976, amended by 43 FR 39999, September 28, 1978; 43 FR 42251, September 28, 1978; 44 FR 17674, March 23, 1979).

**3(g) Sensitive Questions**

The reporting or recordkeeping requirements in the standard do not include sensitive questions.

**4. THE RESPONDENTS AND THE INFORMATION REQUESTED**

**4(a) Respondents/NAICS Codes**

The respondents to the recordkeeping and reporting requirements are owners or operators of new or existing major source phosphoric acid manufacturing and phosphate fertilizer production facilities. This includes, but is not limited to, North American Industry Classification System (NAICS) Codes 325312 and 325314.

**4(b) Information Requested**

**(i) Data Items**

Tables 1 through 4 of Attachment 1 present a summary of the recordkeeping and reporting requirements of this regulation.

**(ii) Respondent Activities**

The respondent activities required by the standards are provided under the first column of Tables 1 through 4 of Attachment 1, introduced in section 6(a). All burden items are included in these tables.

**(iii) Summary of Requirements**

The information collection activities in this ICR include the following: reading the rule, performance tests, operating parameter monitoring, preparation of a monitoring plan with performance evaluations, preparation of a gypsum dewatering stack and cooling pond management plan, periodic reports, and the maintenance of records. The activities in this ICR and the associated burden estimate are only for rule requirements which were previously not included in the 2002 NESHAP.

Facilities must develop a monitoring plan to describe their methods of conforming to the operating parameter requirements. This includes discussion of CPMS and CEMS requirements, if applicable. The monitoring plan also includes procedures for performance evaluations which must be performed annually, at a minimum.

Phosphoric acid facilities must prepare a gypsum dewatering stack and cooling pond management plan which provides additional details on their active gypsum dewatering stacks and ponds. As part of this plan, phosphoric acid facilities must provide documentation which shows at least one of the fugitive emission control measures is already in place or will be implemented for their existing gypsum dewatering stacks or cooling ponds.

Phosphoric acid manufacturing and phosphate fertilizer production facilities must comply with hydrogen fluoride (HF) emission limits using Method 320. The current NESHAP required performance tests for total fluorides (TF) using Method 13A or 13B. The proposed Phosphoric Acid and Phosphate Fertilizer NESHAP translated those TF limits into HF limits and revised the test method, which has a higher cost per test.

Performance testing is now required for additional emission sources and pollutants. The regulation requires an initial performance test for mercury (Hg) at phosphate rock calciners and for HF at defluorination units, oxidation reactors, and clarifiers. During the initial performance test the owner or operator must establish limits for each operating parameter. Thereafter, the owner or operator must continuously monitor the operating parameters and perform annual testing.

Owners or operators of phosphoric acid manufacturing and phosphate fertilizer production facilities are required to keep records of certain parameters and information for a period of five years. These records include the performance test and operating parameter values consistent with the monitoring plan and performance evaluation data.

All reports are to be submitted to the Designated Administrator. The information will be used to determine that all sources subject to the Phosphoric Acid and Phosphate Fertilizer NESHAP are achieving the requirements.

**5. THE INFORMATION COLLECTED -- AGENCY ACTIVITIES, COLLECTION, METHODOLOGY, AND INFORMATION MANAGEMENT**

**5(a) Agency Activities**

A list of Agency activities is provided in section 6(c) and in Tables 5 through 8 of Attachment 2.

**5(b) Collection Methodology and Management**

Data obtained during periodic visits by EPA personnel, from records maintained by the respondents, and from information provided in reports will be tabulated and published for internal EPA use in compliance and enforcement programs. The Phosphoric Acid and Phosphate Fertilizer NESHAP allows records to be retained in hardcopy or electronic format to allow flexibility and minimize burden.

Information contained in the reports is entered into the Air Facility System (AFS) which is operated and maintained by EPA's Office of Compliance. AFS is EPA’s database for the collection, maintenance, and retrieval of compliance data for approximately 125,000 industrial and government-owned facilities. EPA uses the AFS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. EPA and its delegated Authorities can edit, store, retrieve and analyze the data.

The records required by this regulation must be retained by the owner/operator for five years.

**5(c) Small Entity Flexibility**

There are no small entities (i.e., small businesses) affected by this regulation.

The Phosphoric Acid and Phosphate Fertilizer NESHAP does not contain any provisions reserved exclusively for the benefit of small entities; however, there are provisions that reduce the impact on all regulated entities, which would include any small entities. This includes requiring operating parameter monitoring instead of CEMS.

**5(d) Collection Schedule**

In the first three years following promulgation of the Phosphoric Acid and Phosphate Fertilizer NESHAP owners or operators would read the rule and are required to submit an initial notification. We also anticipate the one-time and annual activities, including performance tests (Hg and HF), development of a monitoring plan with performance evaluations, development of a gypsum dewatering stack and cooling pond management plan, and the notification of compliance status (including performance tests results and operating parameter values) will occur for facilities within the first three years. Facilities are not subject to HF limits until one year after the rule is finalized, therefore, the incremental HF testing costs are only included in years 2 and 3. Facilities are not subject to Hg limits until three years after the rule is finalized, therefore, the additional Hg testing costs are only included in year 3.

**6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION**

Tables 1 through 4 of Attachment 1 document the computation of individual burdens and non-labor costs for the recordkeeping and reporting requirements applicable to the industry for each year for the subpart included in this ICR. The individual burdens are expressed under standardized headings believed to be consistent with the concept of burden under the Paperwork Reduction Act. Where appropriate, specific tasks and major assumptions have been identified. Responses to this information collection are mandatory. Tables 5 through 8 of Attachment 2 present a summary of the agency burden.

The agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number.

**6(a) Estimating Respondent Burden**

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated to be 640 hours. The average annual recordkeeping hours are 40 and the reporting requirement hours are 600, both of which are shown in Tables 1 through 4 of Attachment 1.

**6(b) Estimating Respondent Costs**

The information collection activities for sources subject to these requirements are presented in Tables 1 through 4 of Attachment 1. The total cost for each respondent activity includes labor costs, capital/startup costs, and operating and maintenance (O&M) costs.

**(i) Estimating Labor Costs**

This ICR uses the following labor rates:

Managerial $148.72 ($70.82 + 110%)

Technical $84.04 ($40.02 + 110%)

Clerical $30.24 ($14.40 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, May 2013, “National Industry-Specific Occupational Employment and Wage Estimates, NAICS 325300.” The rates are from column 8, mean hourly wage. The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

**(ii) Estimating Capital/Start-up and Operation and Maintenance Costs**

There are no capital costs associated with the proposed Phosphoric Acid and Phosphate Fertilizer NESHAP and start-up costs only include reading the rule; these are one time costs when a facility becomes subject to the regulation. The annual operation and maintenance costs are the ongoing costs to maintain the monitors and complete performance evaluations, conduct performance testing, and other costs such as photocopying and postage.

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

Below are the estimated capital and startup costs and O&M costs for the affected units for the first three years after promulgation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Capital/Startup vs. Operation and Maintenance (O&M) Costs** | | | | |
| (A)  Unit Type | (B)  Number of Respondents (facilities) | (C)  Total Capital/Startup Costs | (D)  Total Annual Capital/Startup and O&M Costs | (E)  Average Annual Capital/Startup and O&M Costs |
| Phosphoric Acid and Phosphate Fertilizer Production Facilities | 13 | $43,500 | $1,716,000 | $572,000 |

The total capital/startup costs for this ICR are $43,500; column C.

The total annualized capital/startup and O&M costs for this ICR are $1,716,000, or an average of $572,000 per year; column E. These are recordkeeping costs.

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

The only costs to the agency are those costs associated with analysis of the reported information. The EPA's overall compliance and enforcement program includes activities such as the examination of records maintained by the respondents, periodic inspection of sources of emissions, and the publication and distribution of collected information.

The average annual agency cost during the three years of the ICR is estimated to be $17,000.

This cost is based on the average hourly labor rates as follows:

Managerial $62.27 (GS-13, Step 5, $38.92+ 60%)

Technical $46.21 (GS-12, Step 1, $28.88+ 60%)

Clerical $25.01 (GS-6, Step 3, $15.63 + 60%)

These rates are from the Office of Personnel Management (OPM), 2013 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for overhead and fringe benefit costs. Details on the line item estimates used to calculate these burdens are presented in Tables 5 through 8 of Attachment 2.

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

The total number of respondents is also referred to as the respondent universe. Based on research, 13 existing facilities will be subject to the standard. No new respondents will become subject. Industry burden is calculated based on the number of facilities in each subcategory and the anticipated controls and monitoring that each unit will most likely utilize to comply with the proposed emissions guidelines.

|  |  |  |  |
| --- | --- | --- | --- |
| **Total Annual Responses** | | | |
| (A)  Unit Type | (B)  Number of Respondents (facilities) | (C)  Total Number Responses for 3-year Period | (D)  Average Annual Number of Responses |
| Phosphoric Acid and Phosphate Fertilizer Production Facilities | 13 | 57 | 19 |

The number of average annual responses is 19.

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

**(i) The Respondent Tally**

The total annual labor hours are 1,930. Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 34 hours per response. The total annual labor costs are $159,000 or $53,000 per year. Details regarding these estimates may be found in Tables 1 through 4 of Attachment 1.

The total annual capital/startup and O&M costs to the regulated entity are $572,000. The cost calculations are detailed in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance Costs.

**(ii) The Designated Administrator Tally**

The average annual burden over the first three years for the Designated Administrator would be 326 hours at a cost of $17,000 per year. The Designated Administrator burden hours and costs are presented in Tables 5 through 8 of Attachment 2.

**6(f) Reasons for change in burden**

There is no change in the labor hours or cost in this ICR as it is for the proposed Phosphoric Acid and Phosphate Fertilizer NESHAP and is considered new burden.

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to be 34 hours per response. Burden means 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 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, the EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2012-0522. An electronic version of the public docket is available at http://www.regulations.gov/ which may be used to obtain a copy of the draft collection of information, submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the public docket that are available electronically. When in the system, select “search,” then key in the docket ID number identified in this document. The documents are also available for public viewing at the Enforcement and Compliance Docket and Information Center in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the docket center is (202) 566-1927. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OAR-2002‑0037 in any correspondence.

**PART B OF THE SUPPORTING STATEMENT**

This section is not applicable because statistical methods are not used in data collection associated with this regulation.

**ATTACHMENT 1**

**TABLES 1, 2, 3, and 4**

Tables 1 - 3: Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Phosphoric Acid and Phosphate Fertilizer NESHAP – Years 1-3

Table 4: Summary of Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Phosphoric Acid and Phosphate Fertilizer NESHAP

**ATTACHMENT 2**

**TABLES 5, 6, 7, and 8**

Tables 5 - 7: Annual Designated Administrator Burden and Cost of Recordkeeping and Reporting Requirements for the Phosphoric Acid and Phosphate Fertilizer NESHAP - Year 1-3

Table 8: Summary of Annual Designated Administrator Burden and Cost of Recordkeeping and Reporting Requirements for the Phosphoric Acid and Phosphate Fertilizer NESHAP