**INFORMATION COLLECTION REQUEST**

**SUPPORTING STATEMENT**

**NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS EMISSIONS FOR POLYETHER POLYOLS PRODUCTION (40 CFR part 63 subpart PPP) (PROPOSED RULE)**

**PART A**

**1.0 Identification of the Information Collection**

*(a) Title and Number of the Information Collection.*

This information collection request (ICR) is entitled NESHAP for Polyether Polyols Production (40 CFR part 63, subpart PPP. The EPA tracking number is 1811.08. The Office of Management and Budget (OMB) number is 2060-0415.

*(b) Short Characterization.*

The National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Polyether Polyols Production, (40 CFR part 63 subpart PPP) was proposed on June l, 1999 and published January 30, 2002. These regulations apply to new and existing facilities that engage in the manufacture of polyether polyols (which also include polyether mono-ols) and emit hazardous air pollutants (HAP). Owners or operators of polyether polyols production facilities to which this regulation is applicable must choose one of the compliance options described in the rule or install and monitor a specific control system that reduces HAP emissions to the compliance level. The respondents are also subject to sections of 40 CFR part 63 subpart A.

Compliance is assumed through initial performance testing or design analysis, as appropriate, and ongoing compliance is demonstrated through parametric monitoring. Types of parameters monitored are incinerator temperature, scrubber flow rate, carbon adsorber regeneration frequency as well as others. The appropriate parameter to monitor depends on the type of control device with the owner or operator chooses to comply.

This ICR includes information collection requirements in the proposed rulemaking that amend title 40, chapter I, part 63 of the Code of Federal Regulations (CFR), Subpart PPP, NESHAP for Polyether Polyols Production. The proposed amendments prohibit the discharge to the atmosphere from any pressure relief device (PRD) on any equipment in HAP service within the process units for the Polyether Polyols source category. To ensure compliance with this requirement, facility owners or operators are required to install electronic indicators on each PRD that would be able to identify and record the time and duration of each pressure release and notify operators that a pressure release has occurred. Information related to these new provisions is required to be submitted in the semi-annual reports required by the existing Polyether Polyols NESHAP. The proposed amendments also add provisions for facility owners or operators to use if they wish to assert an affirmative defense to avoid civil penalties for exceedances of the applicable standards that are caused by a malfunction. If these provisions are used, the owner or operator is required to meet certain criteria during the malfunction, notify the Administrator of malfunctions that may cause an exceedance of the emissions standards, and submit a report for the malfunction to the Administrator, to include a root cause analysis of the malfunction, within certain timeframes.

Existing major sources subject to the new requirements specified in the proposed amendments will be required to comply with these requirements within three years of the effective date of the standards. Existing major sources may use the affirmative defense provisions upon the effective date of the standards. All new sources must be in compliance with the requirements of Subpart PPP upon startup or the promulgation date of standards for an affected source, whichever is later.

The polyether polyols universe consists of 23 existing facilities that would be subject to the major source provisions specified under subpart PPP. No new major sources are projected during the 3-year period of this ICR. We anticipate that all of these facilities will conduct all monitoring, inspection, recordkeeping, and reporting (MIRR) requirements. Based on these estimates, the total MIRR cost of the rulemaking for the NESHAP for Subpart PPP is estimated to be $196,822 annually for the next three years. See Section 6 for more details.

The active (previous) ICR had the following Terms of Clearance (TOC):

EPA is reminded that at the time this collection is renewed, the Agency should ensure that its submission properly accounts for the amortization of capital costs beyond the three year period for which this ICR is approved. The Agency should also revise as necessary its estimate of the number of new sources to reflect current information at the time of its renewal submission.

For this ICR update, EPA has addressed each item of concern in the TOC. EPA has calculated new costs and hourly burden based on changes to the Subpart PPP requirements resulting from the proposed amendments. In calculating the updated burden associated with this ICR, EPA used current labor rates and provided a current estimate of the number existing affected sources.

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

1. *Need/Authority for the Collection*.

The Clean Air Act (Act) provides authority to the Agency to establish standards to control air pollution and to ensure compliance with regulations through adequate recordkeeping and reporting by the affected industries (i.e., respondents). The regulations include the New Source Performance Standards (NSPS) under section 111 of the Act, the National Emission Standards for Hazardous Air Pollutants (NESHAP) which includes the original NESHAP standards and the more recent Maximum Achievable Control Technology (MACT) or NESHAP-MACT standards under section 112 of the Act, and emission guidelines for the designated types incinerators under section 129 of the Act.

1. *Use/Users of the Data.*

The recordkeeping and reporting requirements in the standard(s) are used by regulatory agencies, the public and the regulated community for a variety of reasons including the determination of the respondent’s compliance status, analytical studies to demonstrate compliance trends, and evaluations regarding the efficacy of the regulations.

The required recordkeeping and reporting are also used to: 1) certify compliance with the regulations; 2) determine the respondent’s compliance with the designated emission limitation(s);

3) notify regulatory agencies when a standard is violated; 4) evaluate continuous compliance through the use of emission or operational parameter monitors; and 5) ensure that plant personnel are following the required procedures and are periodically trained, as indicated. The information collection specified in this ICR will also be used by the delegated authority to determine if a source meets the criteria for affirmative defense. If a source meets the affirmative defense criteria, they may be excused from civil penalties for exceedances of an emission limit.

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

1. *Nonduplication.*

The standards do not require the duplication in the collection and reporting of information. If the subject standards have not been delegated, the information is sent directly to the appropriate Environmental Protection Agency (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.

1. *Public Notice Required Prior to ICR Submission to OMB.*

Public notice of and the opportunity to comment on the ICR will be included in the preamble to the proposed rule.

1. *Consultations.*

Upon review of the standard, information available and the data, the Agency has determined the recordkeeping and reporting requirements in the “Active” ICR is fully supported and necessary to fulfill the requirements of the Clean Air Act (CAA). It has been determined that no further consultations with industry are necessary to calculate the burden associated with the amendments to the Polyether Polyols Production NESHAP.

1. *Effects of Less Frequent Collection.*

The effect of less frequent collection would be a decrease in the margin of assurance that facilities are achieving the emission reductions mandated by the CAA through the promulgation of the applicable regulations. In addition, the likelihood of detecting the poor operation and maintenance of control equipment decreases and the detection of noncompliance becomes problematic.

1. *General Guidelines.*

Neither the reporting nor recordkeeping requirements violate the regulations established by Office of Management and Budget (OMB) at 5 CFR part 1320, section 1320.5. However, most NESHAP standards and a few NSPS standards require records to be kept more than three years. In general, these standards require the respondents to maintain all records, including reports and notifications, for five years. The five-year record retention requirement is consistent with the permit program at 40 CFR part 70, and the five-year statute of limitations on which the permit program is based.

The retention of records for five years allows EPA to establish the compliance history of the respondent for purposes of determining the appropriate level of enforcement action. Historically, EPA notes that the most flagrant violations have extended beyond a five-year period. If records are retained for less than five years, EPA would be deterred from pursuing the most flagrant violations due to the destruction of records documenting noncompliance.

1. *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 Title 40, Chapter 1, Part 2, Subpart B--Confidentiality of Business Information (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 39999, September 28, 1978; 43 FR 42251, September 28, 1978; 44 FR 17674, March 23, 1979).

*(g) Sensitive Questions.*

This section is not applicable because this ICR does not involve matters of a sensitive nature.

**4. The Respondents and the Information Requested**

1. *Respondents/NAICS Codes.*

Potential respondents under Subpart PPP are owners or operators of any existing or new Polyether Polyols manufacturing facility that is a major source of HAP emissions, including any facilities who may wish to make use of the new affirmative defense provisions to avoid civil penalties resulting from the exceedance of an emission limit. The source category and affected sources regulated by the Polyether Polyols NESHAP are classified under the North American Industrial Classification System (NAICS) code 325199, for Basic Organic Chemical Manufacturing.

The Polyether Polyols source category is estimated to consist of 23 existing facilities nationwide, all of which are major sources and would be subject to the major source provisions specified under the Polyether Polyols NESHAP. This estimate is based on emissions data reported by facilities in the 2005 National Emissions Inventory (NEI), as well as a review of current Title V permits. All 23 existing facilities could make use of the new affirmative defense provisions added to the rule. No new major sources are projected during the 3-year period of this ICR.

1. *Information Requested.*

*(i) Data Items*

A source must make the following reports:

|  |  |
| --- | --- |
| Reports for National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols Production | |
| Physical or operational change | 63.1420(g)(4), 63.1439(e)(7)(iii), & 63.1430(i) |
| Periodic reports | 63.1439(e)(4) |
| PRD requirements in periodic reports | 63.1439(e)(9) |
| Reports and notifications of malfunctions that result in an exceedance of the standard for the purpose of affirmative defense | 63.1420(i)(2) |

A source must maintain the following records:

|  |  |
| --- | --- |
| Recordkeeping for 40 CFR, Part 63.1439, Subpart PPP | |
| All reports from Table above |  |
| Record of applicability | 63.10(b)(3) & 63.1420(b)(1)(i) |
| Records for sources with continuous monitoring systems | 63.1430(c), (d), (e), & (f) |
| Records are required to be retained for 5 years | 63.1439(a) |

Electronic Reporting

At the present, many respondents to CAA standards use monitoring equipment that automatically records parameter data. Although personnel at the affected facility must evaluate the data, this internal automation has significantly reduced the burden associated with monitoring and recordkeeping at the plant site.

Also regulatory agencies, in cooperation with the respondents, continue to create reporting systems to transmit data electronically. However, electronic reporting systems are still not widely used. At this time, it is estimated that approximately 20 percent of the respondents use electronic reporting.

*(ii) Respondent Activities.*

|  |
| --- |
| Respondent Activities |
| Read instructions |
| Install, calibrate, maintain, and operate continuous parametric monitoring system (CPMS) for the appropriate control device. |
| Perform initial performance test and repeat performance tests if necessary. |
| Write the notifications and reports listed in Table 1 |
| Enter information required to be recorded in Table 1. |
| Submit the required reports developing, acquiring, installing, and utilizing technology and systems for the purpose of collecting, validating, and verifying information. |
| Develop, acquire, install, and utilize technology and systems for the purpose of processing and maintaining information. |
| Develop, acquire, install, and utilize technology and systems for the purpose of disclosing and providing information. |
| Adjust the existing ways to comply with any previously applicable instructions and requirements. |
| Train personnel to be able to respond to a collection of information. |
| Transmit, or otherwise disclose the information. |

At the present, many respondents to CAA standards use monitoring equipment that automatically records parameter data. Although personnel at the affected facility must evaluate the data, this internal automation has significantly reduced the burden associated with monitoring and recordkeeping at the plant site.

*(iii) Summary of Proposed Amendments.*

The proposed amendments to the Polyether Polyols NESHAP require that facilities report any pressure device releases with the next periodic report required by the existing Polyether Polyols NESHAP. Facility owners or operators are required to install electronic indicators on each PRD to identify and record the time and duration of each pressure release. For affirmative defense, the primary data item required is a written report which proves that all the criteria for asserting an affirmative defense have been met. The report also must include a root cause analysis of the malfunction and must be submitted within 45 days of the initial occurrence of the emissions exceedance. The owner or operator must notify the administrator within 2 days of the initial occurrence of the malfunction if it wishes to avail itself of an affirmative defense.

EPA is including in Table 3 (attached) an estimate of the burden associated with performing an affirmative defense. EPA is providing this as an illustrative example of the potential additional administrative burden a source may incur to assert in an Affirmative Defense in response to an action to enforce the standards set forth in the applicable subpart.

This illustrative estimate is not considered a duplicate estimate of cost under the General Duty to Minimize Emissions clause under 63.6(e)(1)(i), which states: “At all times, the owner and operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determining whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.”

To provide the public with an estimate of the relative magnitude of the burden associated with an assertion of the affirmative defense position adopted by a source, EPA provides an administrative adjustment to this ICR that estimates the costs of the notification, recordkeeping and reporting requirements associated with the assertion of the affirmative defense. EPA’s estimate for the required notification, reports and records, including the root cause analysis, associated with a single incident totals approximately $2,188 and is based on the time and effort required of a source to review relevant data, interview plant employees, and document the events surrounding a malfunction that has caused an exceedance of an emission limit. The estimate also includes time to produce and retain the records and reports for submission to EPA. EPA provides this illustrative estimate of this burden because these costs are only incurred if there has been a violation and a source chooses to take advantage of the affirmative defense.

Of the number of excess emission events reported by source operators, only a small number would be expected to result from a malfunction, and only a subset of excess emissions caused by malfunctions would result in the source choosing to assert the affirmative defense. Thus we believe the number of instances in which source operators might be expected to avail themselves of the affirmative defense will be extremely small. For this reason, we estimate no more than 2 or 3 such occurrences for all sources within a given category over the 3-year period covered by this ICR. For the purpose of this estimate, we are adding two (2) instances of affirmative defense. We expect to gather information on such events in the future and will revise this estimate as better information becomes available.

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

1. *Agency Activities.*

EPA conducts one or more of the activities provided in Table 2 in connection with the acquisition, analysis, storage, and distribution of the required information. These tables are introduced in Section 6(c) of this ICR.

1. *Collection Methodology and Management*.

The required data and reports can be evaluated thru an on-site by conducting a partial compliance evaluation, full compliance evaluation or inspection, or thru an off-site review of compliance monitoring records and reports. Evaluation reports and inspection results are maintained by the Agency or delegated authority.

The results of these evaluations are entered into the Air Facility Subsystem (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 delegated authorities can retrieve and analyze the data.

1. *Small Entity Flexibility.*

The Small Business Administration defines a small entity as one that meets the Small Business Administration size standards for small businesses found at 13 CFR 121.201 (less than 1000 employees for NAICS 325199). We estimate that none of the facilities affected by the new requirements are small entities. Accordingly, the rule does not impose significant economic impact on a substantial number of small businesses, and small business considerations do not apply.

1. *Collection Schedule*.

The specific frequency for each information collection activity within this request is shown in Table 1 (attached) for the Polyether Polyols source category.

**6. Estimating the Burden and Cost of the Collection**

Table 1 documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry. 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, except for responses related to the assertion of an affirmative defense.

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.

1. *Estimating Respondent Burden.*

The respondent burden is shown in Table 1. The labor hours in Table 1 are based on

Agency studies and background documents from the development of the regulation, Agency knowledge and experience with the standard, the previously approved ICR, and any comments received. No burden estimates are provided for new sources because no new facilities are expected to become affected sources during the 3­year period of this ICR.

1. Estimating Respondent Costs.

The estimates of total technical-hours per year per source and the number of activities per respondent per year for the new PRD requirements are listed in Table 1 and are based upon experience with similar information collection requirements in the Polyvinyl Chloride and Copolymers Production NESHAP (Subpart HHHHHHH).

EPA’s estimate for an affirmative defense and root cause analysis is based on the time and effort required of a source to review relevant data, interview plant employees, and reconstruct the events prior to a malfunction in order to determine primary and contributing causes. The level of effort also includes time to produce and retain the report in document form so that the source will have it available should EPA or state enforcement agencies ever request to review it. The estimates of total technical-hours per year per source for asserting an affirmative defense are listed in Table 1 and are based upon experience with similar information collection requirements in the Sewage Sludge Incineration Units NESHAP (Subpart MMMM).

(i) *Estimating Labor Costs*.

The ICR uses the following labor rates:

Technical $51.62 ($24.58 + 110%)

Managerial $104.92 ($49.96 + 110%)

Clerical $41.66 ($19.84 + 110%)

Labor rates and associated costs are based on data from the United States Department of Labor, Bureau of Labor Statistics (BLS) from July 2010. Wages for technical labor are from the category "chemical plant and system operators"; wages for management labor are from the category "general and operations managers”; and wages for clerical labor are from the category “secretaries and administrative assistants”. These rates represent salaries plus fringe benefits. The wages provided above were increased by a rate of 110 percent to account for overhead.

*(ii) Estimating Capital and Operations and Maintenance (O&M) Costs*.

The previous (active) ICR includes an estimate of the initial capital cost of process vent monitoring equipment, which is amortized over 5 years. In this information collection, it is assumed that these costs have been paid off, and facilities are no longer making payments for process vent monitoring equipment.

As part of the proposed amendments to the Polyether Polyols NESHAP, facility owners or operators are required to install electronic indicators on each PRD to identify and record the time and duration of each pressure release. The cost of each monitoring system is expected to be $188,913, and the total cost for these capital expenditures for all facilities in the Polyether Polyols source category is estimated to be $4,344,999. The annual operation and maintenance costs are the ongoing costs to maintain the monitor. These costs are considered negligible and are therefore zero.

*(iii) Annualizing Capital Costs*.

Annualized costs are calculated by multiplying the capital recovery factor by the capital cost. The capital recovery factor is 0.1424 based on an interest rate of 7 percent and an assumed equipment life of 10 years. The total annualized capital cost is $618,631.

1. Estimating Agency Burden and Cost.

The only costs to the Agency are those associated with analysis of the reported information. EPA's overall compliance and enforcement program includes activities such as the examination of records maintained by the respondents and the publication and distribution of collected information. The average annual Agency cost during the three years of the ICR is shown in Table 2, attached.

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

Technical $55.45 (GS-12, Step 1, $34.66 x 1.6)

Managerial $74.73 (GS-13, Step 5, $46.70 x 1.6)

Clerical $30.01 (GS-6, Step 3, $18.76 x 1.6)

Agency labor rates are from the Office of Personnel Management (OPM) 2011 General Schedule Salary Table 2011-GS, which excludes locality rates of pay. Labor rates are inflated 20% to reflect average locality pay increase from base rates.

1. Estimating the Respondent Universe and Total Burden and Costs.

Respondents include owners or operators of all 23 existing facilities regulated by the Polyether Polyols NESHAP, including any of the 23 facilities who may wish to make use of the new affirmative defense provisions in the amendments to the rule

While all 23 of the existing facilities could make use of the new affirmative defense provisions added to the rule, EPA estimates only two total instances of the use of these provisions over the three year ICR period. Consequently, the average annual number of affirmative defense responses during the 3-year period of this ICR is 2.

The number of total annual responses is determined from the number of reports required to be submitted by the respondents. This is calculated in Table 1 as 48.7 responses. The total annual burden hours requested is 3,701. The total annual labor cost is calculated in Table 1 as $196,822. EPA’s estimate for the total burden and cost for a single incident of an affirmative defense is shown in Table 3 as $2,188.

1. Bottom Line Burden Hours and Cost Tables.

The detailed bottom line burden hours and cost calculations for the respondents and the Agency are shown in Tables 1 and 2, respectively.

*(i) Respondent tally.*

The bottom line respondent burden hours and costs, presented in Table 1, are calculated by adding person-hours per year down each column for technical, managerial, and clerical staff, and by adding down the cost column. The annual burden for the recordkeeping and reporting requirements for the 23 existing facilities subject to the Polyether Polyols NESHAP is 3,701 person-hours, with an annual labor cost of $196,822.

*(ii) The Agency tally.*

The average annual Agency burden hours and cost over next three years is shown in Table 2.

*(iii) Variations in the annual bottom line.*

This section does not apply since no significant variation is anticipated.

1. Reasons for Change in Burden.

The decrease in burden from the most recently approved ICR is due to adjustment in both the types of information which must be collected and the number of sources submitting the required information. Specifically, burden items related to start-up, shutdown, and malfunction reports are eliminated under the proposed amendments. The previous (active) ICR calculated burden based on 81 existing facilities and 1 new facility, whereas this ICR calculates burden based on 23 existing facilities. Based on a review of the 2005 NEI, as well as a review of current Title V permits, many of the original facilities in the previous (active) ICR are no longer operational or no longer produce polyether polyols, and therefore they are no longer subject to the Polyether Polyols NESHAP.

EPA provides an adjustment to this ICR that estimates the costs of the notification, recordkeeping and reporting requirements associated with the assertion of the affirmative defense. EPA’s estimate for the required notification, reports and records, including the root cause analysis, associated with a single incident totals approximately $2,188 and is based on the time and effort required of a source to review relevant data, interview plant employees, and document the events surrounding a malfunction that has caused an exceedance of an emission limit. The estimate also includes time to produce and retain the records and reports for submission to EPA. For the purpose of estimating the annual burden, EPA is attributing a total of 2 instances of affirmative defense over a three year period across all sources in the category. EPA is using this frequency of 2 events in three years because, of the number of excess emission events reported by source operators, only a small number would be expected to result from a malfunction, and only a subset of excess emissions caused by malfunctions would result in the source choosing to assert the affirmative defense. Thus, we believe the number of instances in which source operators might be expected to avail themselves of the affirmative defense will be extremely small.

1. Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 76 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA’s regulations in 40 CFR part 63 are listed in 40 CFR part 9.

To comment on the Agency’s need for this information the accuracy of the provided burden estimates, and any suggestions for minimizing respondent burden, including through the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID No. EPA-HQ-OAR-2011-0435, which is available for online viewing at <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 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 Air Docket is (202) 566-1742. An electronic version of the public docket is available at <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 one of the Docket ID Numbers 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, DC 20503, Attention Desk Officer for EPA. Please include the relevant Docket ID Number (EPA-HQ-OAR-2011-0435) and OMB Control Number (2060-0405) in any correspondence.

**PART B**

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





