SUPPORTING STATEMENT

Air Emissions Reporting Requirements (AERR)

EPA ICR # 2170.08 OMB Control No. 2060-0580

PART A

1. IDENTIFICATION OF THE INFORMATION COLLECTION

1(a) Title of the Information Collection

Air Emissions Reporting Requirements

1(b) Short Characterization/Abstract

The Environmental Protection Agency (EPA) promulgated the Revisions to the Air Emissions Reporting Requirements: Revisions to Lead (Pb) Reporting Threshold and Clarifications to Technical Reporting Details on February 19, 2015 (FR Vol 80, No. 33, 8787). The AERR revisions finalized changes to the EPA’s emissions inventory reporting requirements. The AERR has an approved information collection request (ICR) in place (ICR Number 2170.07). This supporting statement provides estimates of the burden of reporting air emissions-related information from state, territorial, and local agencies for inventory years 2021, 2022, and 2023, which are due to be reported on December 31 of the year following each inventory year.

Under the current AERR ICR, 54 state and territorial air quality agencies, including the District of Columbia (DC), and an estimated annual average of 26[[1]](#footnote-2) local air quality agencies, must annually submit emissions data for point sources with the potential to emit specified levels of oxides of nitrogen (NOx), carbon monoxide (CO), sulfur dioxide (SO2), volatile organic compounds (VOC), particulate matter less than or equal to 10 micrometers in diameter (PM10), particulate matter less than or equal to 2.5 micrometers in diameter (PM2.5), and ammonia (NH3). Additionally, these air quality agencies must submit emissions data every third year for point sources emitting 0.5 tons/year or more of lead.

Every 3 years, states[[2]](#footnote-3) are required to submit a point source inventory as well as emissions for stationary nonpoint and some nonroad mobile sources for the same pollutants listed above. These agencies must also submit emissions model input data every 3 years for on-road mobile and non-road mobile equipment, except for California, which must submit emissions for these data categories of the same pollutants listed above. The emissions data submitted for the annual and 3-year cycle (triennial) inventories are used by the EPA’s Office of Air Quality Planning and Standards (OAQPS) to assist in developing ambient air quality emission standards, performing regional and national modeling, providing air quality management support to state agencies and Multi-jurisdictional organizations (MJOs), and preparing national trends assessments and other special analyses and reports. The same reporting mechanisms used for the criteria pollutants listed above are also used for voluntary reporting of hazardous air pollutants (HAPs) and greenhouse gas (GHG) emissions. These data are collected by the air agencies for their own purposes, and the EPA encourages providing such data to the EPA when it is available.

2. NEED FOR AND USE OF THE COLLECTION

2(a) Need/Authority for the Collection

The AERR coordinates the various state emission inventory reporting requirements and streamlines the activities involved in submitting emissions data to the EPA. The AERR enables the EPA to achieve uniformity and completeness in a national inventory to support national, regional, and local air quality planning and attainment. As the EPA works with state and local agencies to address national, regional, and local air quality issues with cost-effective practices, there is a continued need for states to develop consistent inventories and to share their emissions inventory data across the air agencies.

While the Clean Air Act (CAA) does not provide a specific authorization for a national emissions database, the CAA provides the EPA ample legislative authority for acquiring such data. Emissions data are of vital importance to the EPA for fulfilling a host of monitoring, standard-setting, rulemaking, reviewing, and reporting duties. Sections 110 and 301(a) of the CAA provide the primary authority for a national emissions database. Section 110 requires each state to prepare a plan that provides for implementation, maintenance, and enforcement of the primary standard for each pollutant for which air quality criteria have been issued. This plan must include provisions for periodic reports identifying sources and listing amounts of emissions. Section 301(a) authorizes the Administrator to promulgate necessary regulations.

Congressional support for collecting and reporting emissions data is demonstrated in three sections of the CAA. Section 110(a)(2)(F) requires that each state provide for periodic reports on the nature and amounts of emissions of criteria pollutants from stationary sources. Sections 182(a)(3)(A) and 187(a)(5) of the CAA specify periodic inventory requirements for ozone and CO nonattainment areas, respectively. Section 182(a)(3)(A) requires states with ozone nonattainment areas to submit a current inventory of actual emissions of VOC, NOx, and CO every 3 years. Section 187(a)(5) requires a similar inventory of actual CO emissions for CO nonattainment areas. Periodic inventories include emission estimates for all point, nonpoint, onroad mobile, and nonroad mobile sources. Section 172(c)(3) also provides the Administrator with discretionary authority to require other emissions data as deemed necessary for State Implementation Plan (SIP) development in nonattainment areas to meet the national ambient air quality standards (NAAQS).

2(b) Practical Utility/Users of the Data

Emissions data and related information on stationary point and nonpoint sources, as well as onroad mobile and nonroad mobile sources, are routinely used by OAQPS and the EPA Regional Offices in carrying out a variety of activities. These activities support regulatory functions as well as functions that are more programmatic in nature, such as trends analyses. Such projects include:

* Basic information to support the boundaries selected for designation of nonattainment areas;
* Evaluation of existing control strategies included in SIPs;
* Evaluation of control strategies for states and larger areas, including applications of regional and national scale models;
* Preparation and publication of national summaries of emissions including trend analyses and international reporting obligations;
* As a database to assist in the identification of important source categories for future regulation;
* Development of national control strategies and preparation of Regulatory Impact Analyses through application of air quality modeling;
* As a key part of air quality modeling platforms, which the EPA uses for research and planning and provides publicly for use for state and MJO air quality modeling efforts;
* As a building block to assist states with compliance with their requirements for preparing SIPs; and
* Preparation of the stationary source portion of a report to Congress on SO2 emissions. This report is required by Section 406 of the CAA and is due on a 5‑year cycle that began on January 1, 1995. The report must contain an inventory of national annual SO2 emissions from industrial sources (as defined in Title IV of the CAA).

In addition to supporting efforts listed above, the data are used to respond to numerous requests for reports on emission sources. Typically, the data are provided freely through EPA’s website. In some cases, specific requests of data not available on EPA’s website are also made by email and rarely, under the Freedom of Information Act. Requests come from the general public, teachers, contractors and consultants involved in special studies; Congress; the press; domestic and international universities; and others involved in research of many types.

3. NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

3(a) Nonduplication

Previous reporting requirements have occasionally forced state agencies into inefficient collecting and reporting activities. The AERR was promulgated specifically to simplify previously existing emission inventory reporting by states to the EPA, offer options for data collection and exchange, and unify reporting dates for various categories of inventories to avoid duplication of effort. For example, under the NOx SIP Call rulemaking, the EPA required states to submit annual inventories for all NOx sources for which states had adopted control measures to meet their NOx budget. In addition, statewide NOx inventories of all controlled and uncontrolled sources were required every 3 years. The Consolidated Emissions Reporting Rule (CERR) also required annual and triennial emission inventory reporting of many of the same data elements. The AERR aligned the reporting dates and combined data from these two previous collection activities to avoid duplication of information collected from sources, minimize the burden on industry, and reduce the effort for state and local government agencies to compile the data. Additionally, both the Ozone SIP Requirements Rule (40 CFR 51, Subpart CC) and the PM SIP Requirements Rule (40 CFR 51, Subpart Z) refer to the AERR for many of the emissions reporting requirements specified in those rules.

3(b) Public Notice Required Prior to ICR Submission to OMB

A notice for comment on the proposed AERR ICR was published in the *Federal Register* on May 7, 2021 (86 FR 24614). One comment was received but was outside the scope of this ICR.

3(c) Consultations

The EPA regularly participates on conference calls chaired by the National Association of Clean Air Agencies (NACAA) and the Association of Air Pollution Control Agencies (AAPCA) to discuss issues raised by state agencies related to emission inventories. The EPA developed and operates a web-accessible database known as the Emission Inventory System (EIS) that serves as the repository for the state agency data submitted to the EPA under the AERR requirements. The EIS includes a Support Request feature and a quality assurance test environment for state and local agencies. In addition, the EPA provides training via webinars, conferences, and EPA’s website for the state, local, and tribal agencies to learn about using the EIS and the development of inventories for reporting to EPA.

3(d) Effects of Less Frequent Collection

The submittal dates required for reporting emissions data to the EPA have been established to minimize the burden on state agencies, but also to ensure that state agencies are collecting timely and sufficient emission inventory data to support air pollution management efforts. A statewide inventory compiled at least every 3 years for all point, nonpoint, onroad mobile and nonroad mobile sources is considered important to assist states in meeting various CAA requirements.

If the information collection were not carried out every 3 years for all sources and annually for larger point sources, the EPA would not be able to maintain a central, national repository of emissions data from which to extract updated information needed to fulfill EPA mandates. In fact, the public continues to expect annual data updates for as many sources as possible.

3(e) General Guidelines

This ICR does not violate any of OMB's guidelines for information collections.

3(f) Confidentiality

Any data that are submitted to the EPA under this final rule will be considered in the public domain and cannot be treated as confidential.

3(g) Sensitive Questions

This information collection does not ask any questions concerning sexual behavior or attitudes, religious beliefs, or other matters usually considered private.

4. THE RESPONDENTS AND THE INFORMATION REQUESTED

4(a) Respondents/North American Industry Classification System (NAICS) Codes

The emissions data required by the AERR are submitted by state, territorial, and local air pollution control agencies. Under the AERR, there are 54 state and territorial air pollution control agencies and between 23 and 31 local and tribal air agencies that are subject to the national reporting requirements and are required to compile and report emissions information for large stationary point sources on an annual basis, and for smaller point sources, stationary nonpoint and onroad and nonroad mobile sources on a 3-year basis. The affected NAICS code is *924110 – Administration of Air and Water Resources and Solid Waste Management Programs*, which includes governmental environmental protection and control agencies, and pollution control agencies.

4(b) Information Requested

The AERR consolidated emission inventory data that was previously being collected by states and reported to the EPA under several different provisions of the CAA, include annual point source inventories and more extensive periodic or 3-year cycle inventories. Annually, state agencies are required to submit emissions data for large stationary point sources emitting one or more of the following pollutants above a specified level: NOx, CO, SO2, VOC, PM10, PM2.5, and NH3. The AERR also requires states to report point and nonpoint emissions data for all criteria pollutants and their precursors every 3 years on a statewide basis. There are no annual reporting requirements for sources of lead; however, lead emissions must be included in the 3-year cycle inventories. For onroad mobile and nonroad mobile sources, the AERR requires reporting of model inputs for all states but California, for which emissions values are required. Data elements that must be reported by state agencies for point, nonpoint, and onroad and nonroad mobile sources are listed in Appendix A to Subpart A of 40 CFR part 51. The AERR also encourages voluntary reporting of HAPs and activity data for wildfire and prescribed burning events.

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

5(a) Agency Activities

The EPA activities associated with the AERR include:

* Maintaining a database of emissions factors for use by states and the point sources regulated by states;
* Developing guidance and training materials for states for each emissions inventory reporting cycle and maintaining communication through EPA’s website and other methods, including providing in-person, webinar-based, and self-guided online training;
* Evaluating the adequacy of existing emissions estimation methods and models, developing method and model revisions, and publishing updated methods and models as appropriate;
* Preparing nonpoint emissions data for review and possible use by states;
* Preparing onroad and nonroad mobile model inputs for review and possible use by states;
* Preparing data for voluntary review of participating agencies, including landing and takeoff data at airports and fire activity data and emissions;
* Receiving, reviewing, and storing emission inventory data submitted by each state;
* Processing and updating data submitted by states, including performing quality assurance of data, and coordinating efforts to resolve errors and anomalies;
* Fulfilling technical assistance and information requests;
* Developing technical documentation of the resulting emissions inventories created from compiling the collected data;
* Maintaining the EIS and associated electronic reporting approaches; and
* Maintaining reporting codes to use in emissions inventory databases to identify various aspects of emissions inventories such as emissions unit types, release point types, source category classifications, and geopolitical entities.

5(b) Collection Methodology and Management

The EPA has established a central repository of emissions inventory data for all states called the EIS. Emissions inventory data reported electronically are stored in the EIS, and the database is used by the EPA and by states for obtaining emissions data reports and input files for air quality modeling.

The EPA maintains the EIS as a central repository of inventory data for all states, but much of the data must be supplied by the state and local agencies in electronic form. The EPA requires that submitting agencies use a defined eXtensible Markup Language (XML) schema for electronic data reporting using the EPA’s Central Data Exchange (CDX).

EPA promotes burden reduction of the mandatory reporting requirements for states in several ways. The EPA has developed the Combined Air Emissions Reporting System (CAERS) for use by states to collect point source emissions and report them to the EPA rather than develop and maintain their own emissions reporting data system. For nonpoint sources, the EPA loads nonpoint emissions data for consideration for review and acceptance by the states. States can meet their reporting obligations by (a) reviewing and provide comments on EPA’s estimates for EPA to incorporate, (b) revise the estimates by reporting emissions, or (c) accept the estimates after review. For onroad mobile sources and nonroad equipment, the EPA runs the latest mobile source emissions model using state-supplied model inputs and provides the resulting emissions for onroad and nonroad vehicles for review and comment by the states. For aircraft emissions, the EPA compiles landing and takeoff data, provides to states for review and comment, and then computes emissions using the latest Federal Aviation Administration emissions model. For commercial marine vessels, the EPA compiles activity data using the Automatic Identification System (AIS) database and computes emissions for review and comment by states. Finally, for locomotive emissions, the EPA works with industry representatives to compile activity data and draft emissions for review and comment by states.

For the voluntary reporting of wildfire and prescribed burning events, the EPA compiles available satellite and ground-based fire observation data from numerous sources around the country, and provides those data for voluntary state review, edit, and comment. The EPA also estimates the wildfire and prescribed burning emissions based on these revised data for inclusion in the NEI. In addition to the data mentioned above, the EPA loads into EIS for use in the NEI several national datasets, including Toxics Release Inventory, the Greenhouse Gas Reporting Program data, and data on emissions from drilling wells from the Bureau of Ocean Energy Management.

5(c) Small Entity Flexibility

State and local agencies are not considered to be small entities. According to the EPA's ICR Handbook, OMB's definition for a small entity includes small governmental jurisdictions with populations of less than 50,000. According to 2010 population data from the U.S. Census Bureau, no state or territory has a population below this threshold. In addition, none of the local air agencies that report under the AERR for their jurisdictions represent an area with population of less than 50,000.

5(d) Collection Schedule

States must annually report all required emissions data for Type A point sources of NOx, CO, SO2, VOC, PM10, PM2.5, and NH3. All other data as described in Section 4 are collected on a 3-year schedule.

The AERR also contains a provision that allows states the option of estimating one-third of their 3-year cycle inventories, including Type B sources, in any given year. This enables states to spread out the effort required to prepare a complete 3-year cycle inventory over 3 years. Some conditions apply if a state chooses this reporting option (e.g., emission estimates for each year that comprise a complete 3-year cycle inventory must be compiled identically).

For all the above reporting activities, the EPA requires that states submit the appropriate emissions data within 12 months of the end of the inventory year (e.g., a statewide pollutant emissions inventory for the year 2021 is required by December 31 of 2022).

6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION

6(a) Estimating Respondent Burden

The respondent burden for complying with the reporting requirements of this AERR ICR is estimated based on the burden associated with meeting both the annual and the 3-year cycle reporting requirements. The state agencies reporting to the EPA under the AERR maintain their own air quality management systems, including permitting programs and annual emissions fee programs for their point sources. The efforts they expend to collect and manage emissions inventory data for these purposes, which are irrespective of the AERR, are not included as part of the burden estimates for reporting the data to the EPA under the AERR.

The efforts expended to support their permitting and emissions fee statement programs and other state uses, which are *excluded from* this AERR burden estimate include:

* Maintaining the state’s data system to collect data from facilities;
* Collecting emissions data and other associated information;
* Training staff in coding and submissions techniques;
* Quality-assuring and quality-controlling emissions data and resolving errors and anomalies prior to submitting to the EIS electronic quality-assurance; and
* Maintaining records associated with data submitted by sources.

For the point source inventory reporting requirements of the AERR, respondent activities generally involve copying emissions and related parameters from an existing state electronic file, resolving any errors or anomalies identified through edits or other qualitative reviews, and providing it to the EPA electronically using XML format. Thus, the activities for generating criteria pollutant point source inventories are primarily data processing and typically do not involve the development of new data that does not already exist in the state’s files. However, compiling a triennial statewide nonpoint, onroad mobile, and nonroad mobile source inventory is expected to involve additional effort by a state. The specific respondent activities associated with the AERR are outlined below and are grouped into annual and triennial activities.

Annual state activities include submitting emissions data for Type A point sources with potential to emit 2,500 tons per year (tpy) of NOx, CO, or SO2; or 250 tpy of VOC, PM10, PM2.5 or NH3. The key steps to perform this work are:

* Updating state data systems to comply with electronic reporting requirement format changes;
* Extracting the necessary data from the state electronic data system;
* Converting any facility inventory data (i.e., attributes of the facility including details about its units, processes, release points and controls) for new facilities into the XML submittal format;
* Converting the point emissions data into the XML submittal format;
* Running the automated quality-assurance checks provided in the EPA data system and resolving any critical errors;
* Submitting the final file to the EPA; and
* Responding to any follow-up inquiries from the EPA.

For triennial reporting, state activities include:

* Submitting emissions data for Type B point sources with the potential to emit 100 tpy of NOx, SO2, VOC, PM10, PM2.5, or NH3; or 1,000 tpy of CO; or with actual emissions of at least 0.5 tons of lead, which includes data for Type A sources (the same steps as listed above for Type A sources apply);
* For states with nonattainment areas, submitting emissions data for Type B sources with lower emissions thresholds for sources within the nonattainment areas, in accordance with Table 1 of Appendix A to Subpart A of 40 CFR Part 51;
* Developing and reporting statewide emission inventory estimates for stationary nonpoint sources, commercial marine vessels, aircraft, and locomotives, which involves at the option of the state either reviewing EPA-provided data (described above) or collecting activity data, estimating emissions, formatting data into XML format, running quality assurance checks, and submitting the final data through CDX;
* For all states except California, developing model inputs for onroad mobile and nonroad mobile sources, which involves reviewing and revising draft data from the EPA and/or collecting such data from other sources, reviewing and editing that data, formatting data into required XML format, running quality assurance checks, and submitting the final data to the EPA through CDX;
* For California, developing and reporting statewide inventory emission estimates for onroad and nonroad mobile sources for all criteria pollutants, which involves developing model inputs for California’s mobile source model, running the California mobile source model, and the same steps as listed for stationary nonpoint emissions; and
* Voluntary review and use of fire activity and emissions data.

For states with nonattainment areas, the burden imposed by the AERR is lower for the nonattainment areas than for other areas of the state, because states must already prepare nonattainment area inventories for stationary nonpoint and mobile sources. The incremental burden is to prepare data (emissions and model inputs) for the attainment counties if that is not already needed for a state implementation plan[[3]](#footnote-4) and submit these to EPA. For ozone nonattainment areas, states are required to provide emissions on a triennial basis for nonattainment counties, and so this incremental burden will vary by state depending on the total number of counties as well as the number of nonattainment versus attainment counties within each state. Further, the additional burden on states depends on the extent of their use of data compiled by EPA to assist states with meeting these requirements.

The following sections discuss the assumptions used to develop burden hour estimates for annual and triennial activities. Table 6-1 lists the burden items included under these categories, and presents their associated burden hours for 1 year. In general, managerial time was estimated to be about 10 percent of technical staff time for point sources and 5 percent of staff time for other sources. Burden hours and associated costs were estimated for the 3-year period that the affected states would have to report emissions data to the EPA. In this case, that period corresponds to the years 2022, 2023, and 2024 (since states will begin collecting data for the emissions year 2021 during 2022, and would report the data within 12 months of the end of 2021; i.e., December 31, 2022). Table 6-2 presents the state and local respondent annual burden hours and costs by activity.

1. **Annual activities**

For 2 of the 3 years in each triennial cycle, the agencies submit only point source data for Type A sources, as described in Section 4(c). To help estimate the time needed to report emissions for Type A sources, we estimate the number of such sources by considering the emissions reporting thresholds. The Type A reporting thresholds are potential-to-emit thresholds; however, the EPA does not collect potential-to-emit data. The EPA only collects actual emissions, and actual emissions are lower than potential-to-emit values. Since EPA does not collect data on potential-to-emit, it is difficult to know with certainty the number of Type A sources. Furthermore, many states voluntarily submit many more facilities than those required. For these reasons, we must estimate the number of Type A sources.

Based on an analysis of the 2014 NEI, 1,255 sources (i.e., facilities) had *actual* emissions greater than the Type A potential-to-emit thresholds of 2,500 tpy of NOx, CO, or SO2, or 250 tpy of VOC, PM10, PM2.5, or NH3. Using 2014 NEI is conservative because the number of these large sources has further decreased since 2014. To adjust for the undercounting due to actual emissions, we assume that there are double the number Type A sources than have actual emissions that exceed the Type A thresholds. As a result, we assume 2,510 Type A sources are reported for the purposes of this analysis across 54 state/territorial and 23 local and tribal air agencies. This equates to an average of 33 Type A sources to be reported on average per agency for 2 of the 3 years. The number of Type A sources can be much larger for heavily industrialized states and smaller (all the way down to zero Type A sources) for some smaller states and local agencies.

Table 6-1 summarizes the hours per state respondent for the annual reporting years, and we have estimated these hours based on the average number of sources per respondent. This ICR uses the same approach as was developed for the prior ICR, which had been improved from prior cycles.

Use of these averages should provide an overly conservative (larger) estimate of total burden hours because the burden values for the smaller agencies are being overestimated since they will have fewer sources than average, and the average burden values do not include the economies of scale experienced by the larger agencies. The idea of economies of scale is further supported by the actual number of facilities reported in these years. States report about 28,000 facilities in the annual reporting years, which is about ten times more than the estimated 2,510 facilities required to be reported.

1. **Triennial activities**

For the triennial inventory submission, the state agencies submit the more numerous Type B sources as described in Section 4(c). Like Type A sources, the Type B reporting thresholds are based on potential-to-emit values, but the EPA does not collect potential-to-emit data. Fortunately, the Type B threshold definition is nearly the same as the Major source definition for Title V facilities, and a list of such sources is available from the EPA Enforcement and Compliance History Online (ECHO) web application. ECHO is fed by reporting of compliance data from the state agencies. These data are sent from states to the EPA many times per year, which helps ensure that we are using updated information.

For the previous version of this ICR using the ECHO database, the EPA determined that there are 13,408 Major Title V facilities nationwide. To adjust this facility-count for the Type B definition, we also needed to consider the Type B threshold for lead, which is 0.5 tons of actual emissions per year (and more stringent than the Major Title V definition). Since the lead threshold is based on actual emissions, we used the 2014 NEI to determine that just 12 additional facilities have 0.5 tons of lead emissions or more and are not otherwise identified as Major Title V sources. The resulting Type B source facility total used for this work is 13,420. Because the number of Title V facilities as decreased since the previous ICR, these numbers provide a conservative estimate of the number of facilities.

Since there are 85 reporting agencies in triennial years, we estimate an average of 158 facilities to be reported per agency for the triennial inventories. The number of sources can be much larger for the large, heavily industrialized states, and smaller for some states and local agencies. Because much of the effort needed to report the point source emissions data from the state and local data systems to the EPA involves automated data manipulations, there are economies of scale for the states with many sources. The idea of economies of scale is further supported by the actual number of facilities reported. States report about 60 thousand facilities in the triennial reporting years, which is far greater than the 13,420 facilities that we estimate are required.

Table 6-1 summarizes the average hour burden estimates for this triennial point source reporting. It is conservatively estimated that the additional hours needed for tasks 4 and 6, resolving critical QA errors and responding to EPA follow-up questions, will increase by a factor of 5 compared to the annual Type A reporting. This factor is derived by dividing the average Type B facility count per agency (158) by the average Type A facility count per agency (33). The tasks of (a) converting the Facility Inventory and (b) converting the point emissions data into the XML format are conservatively estimated to require just twice the effort needed for the annual Type A sources, because the task is largely the same regardless of the number of sources. The tasks of (a) extracting data from a state data system and (b) submitting a final file to the EPA are estimated to require the same amount of effort as for a Type A annual reporting year.

In addition to the Type B point source reporting, a burden is expected for states to develop the statewide stationary nonpoint emissions, onroad and nonroad source emissions (California), and onroad and nonroad model inputs every 3 years. The burden for a state agency to develop and report statewide inventories was estimated to be 1,740 hours for the primary staff person and 87 managerial hours every third year in the previous ICR (number 2170.07). Since there is no change in the AERR since that ICR was done, there is no change in the state agency hours estimates for this ICR. The EPA’s efforts to reduce burden (described above) have become more extensive since the last ICR was published, which makes these hours estimates even more conservative.

For local agencies responsible for developing and reporting nonpoint and mobile source model inputs for each county within their jurisdiction, the triennial burden is estimated to be one-half of that estimated for a state agency (i.e., ½ of 1,740 = 870 technical hours plus 44 managerial hours). Additional hours were also estimated for all local agencies (i.e., 31 agencies) to coordinate and provide some de minimis emissions inventory data or supporting information to their corresponding state agency. The time estimated for each local agency to perform these activities every 3 years was estimated to be 80 technical hours and 4 managerial hours. Since there is no change in the AERR since that ICR was done, there is no change in the local agency hours estimates for this ICR.

6(b) Estimating Respondent Costs

Table 6-2 presents state and local respondent annualized hours and costs for each information collection activity. To estimate annualized hours and costs for triennial activities, we divide the burden estimate by three to estimate the annualized burden spread over a 3-year period. For the annual Type A point source reporting activities, annualized hours are the same as shown in Table 6-1. However, in the case of the additional hours needed in each triennial reporting year to report the larger number of point sources, the number of *incremental* hours above the Type A source effort is divided by three to estimate the annualized burden.

**(i) Estimating Labor Costs**

For this ICR, the labor rate used for technical staff at state, territorial, and local agencies is $46.58 per hour, and the labor rate for managerial employees at these agencies is $77.76 per hour. These labor rates are found in data shown on the U.S. Department of Labor, Bureau of Labor Statistics Web site at https://www.bls.gov/oes/current/naics4\_999200.htm#11-0000 (“National Industry-Specific Occupational Employment and Wage Estimates, May2020”). The technical rate represents the mean hourly wage for Environmental Engineers for *NAICS 999200 - State Government*. The managerial rate represents the mean hourly wage for Computer and Information Systems Managers in the same NAICS. An overhead rate of 100 percent was applied to both the technical and managerial mean hourly wage rates to derive the bottom-line rates of $93.16 and $155.52 used in the calculations and shown in Table 6-2.

**(ii) Estimating Capital and Operations and Maintenance Costs**

The methodology for estimating capital and operations and maintenance costs presented below is based on the method used in the ICR for the previous AERR annual inventory (EPA ICR #2170.07, OMB #2060-0580). Assumptions regarding the number workstations are unchanged, but the number of respondents has changed based on the most recent triennial AERR submissions.

The number of respondents is 85, which reflects the number of agencies (state, territorial and local) that report data directly to the EPA. The number of workstations assumed for each respondent reflects the number of workstations that would be dedicated to reporting under the previous ICR. It was assumed that each agency would require 5 workstations to comply with the reporting provisions of the AERR (1 for point sources, 1 for nonpoint sources, 1 for onroad mobile, 1 for nonroad mobile, and 1 for managerial/coordination activities).

The cost for replacing a workstation including new basic software and peripherals, when replacement becomes necessary, is assumed to be approximately $1,500 per agency. For this ICR, it is assumed that 20 percent of the workstations will be replaced each year. Thus, the costs of replacement per agency would be:

5 workstations/agency x 20% replacement/year × $1,500/workstation = $1,500/agency/year

Cost of workstation replacement for all agencies equals: $1,500/replacement costs/year × 85 agencies/year = $127,500/year

Maintenance costs are attributed to the normal maintenance of the workstations used to submit the required annual and triennial reports to the EPA. This includes annual software costs, service costs, and warranty costs. It is assumed that the total cost of ownership over 5 years is four times the original purchase price, or $6,000. Thus, the annual maintenance costs are $6,000 minus the $1,500 capital cost divided by 5, or $4,500/5, which is $900/year per workstation. We conservatively assume that one-third of the workstation annual maintenance cost can be attributed to the AERR. The resulting estimated costs associated with AERR are estimated to be approximately $300 per workstation per year, which is $1,500 per agency per year. Total maintenance costs for the respondents are estimated to be:

$1,500/agency/year x 85 agencies = $127,500/year.

These costs are accounted for in Table 6-2 in the row capturing burden for the submittal of Type B point source data by states. This is done for simplicity purposes in entering that information in the table once for annual capital costs and once for annual operation and maintenance costs.

6(c) Estimating Agency Burden and Cost

The EPA’s costs that relate to this collection can be grouped into 7 areas:

1. Maintaining a database of emissions factors for use by states and the point sources regulated by states
2. Emission Inventory System (EIS) annual operation and maintenance costs;
3. Preparing and providing guidance, plans, and training to states;
4. Revising emissions estimation methods and models to reflect the best available science, including mobile model updates related solely to support of AERR implementation;
5. Preparing draft nonpoint emissions and mobile-source model inputs;
6. Review, documentation, and publication of data; and
7. Information requests.

As of fiscal year 2021, the annual operation and maintenance costs for EPA’s efforts to maintain emissions factors in support of the NEI program is 2 FTE positions. No data system costs for the emissions factor program are included in this ICR.

As of fiscal year 2021, the EIS annual operation and maintenance costs are estimated to be: 2.7 FTE positions, $300,000 in Working Capital Funds and $625,000 for an information technology contractor.

The labor costs of preparing and providing guidance, plans and training to states is 1 FTE annually.

The labor costs of reviewing and revising emissions estimation methods and models to reflect the best available science for nonpoint emissions methods is 2 FTE annually.

The labor costs of preparing draft nonpoint emissions and mobile-source model inputs include the costs associated with developing updated emissions methods, overseeing contractor resources, quality assuring contractor results, developing documentation, and distributing data and draft documentation to states. The costs of reviewing data submitted by states include costs relating to data review, coordination of efforts to resolve any errors or anomalies, and updating of the data after the quality assurance and reconciliation assurance efforts have been completed. The costs associated with technical documentation include: compiling summaries of emissions, reviewing methods documents and notes, word processing, and 508 compliance steps. For these activities, the EPA requires approximately 1 FTE for point sources, 1.3 FTE for mobile sources, and 3 FTE for nonpoint sources to prepare draft data and review data submitted by states. In addition, the OAQPS requires 1 FTE for information requests. The EPA also incurs a $800,000 annual cost to have environmental engineering contractors assist with developing emissions methods, building data tools, and keeping input data current.

In addition to the primary roles within OAQPS, the EPA Regional Offices annually use about 1 FTE in total across the 10 Regions to coordinate state efforts in making their submissions, quality reviews, and outreach and communication on behalf of the data collection program.

Thus, the total number of EPA FTEs is 15 (2.7 for the EIS and 12.3 for outreach, data methods, handling, and publication). Since most of the FTEs for this estimate work in Research Triangle Park, North Carolina, we used the pay rates from the General Services Administration (GSA) with locality adjustment for the Raleigh-Durham-Chapel Hill area. We conservatively estimated that the average EPA worker for these purposes is a GS-13, step 7 with a salary rate of $117,500 per year. The rate includes possible increases above the fiscal year 2021 rate of $114,902. In addition, a 26 percent increase in this amount was included to adjust for benefits paid by the government. The resulting annual FTE cost assumed is rounded to the nearest thousand dollars to $148,000. Thus, the total resulting EPA annual impact for 15 FTE is 31,200 hours and $2,220,000.

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

The number of respondents is estimated to be 54 states/territories (including DC), and average annual 26 local and tribal agencies, resulting in 80 total respondents. As detailed in Table 6-2, the total annual hourly burden for all state, territorial and local respondents is estimated to be 49,502 hours per year, and the total annual cost is estimated to be $5,038,367.

6(e) Bottom Line Burden Hours and Cost Tables

**Total Estimated Respondent Burden and Cost Summary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Burden Element/Cost** | **Respondents** | **EPA** | **Total** |
| Number of Respondents | 80 |  | 85 |
| Total Hours Per year | 49,502 | 31,200 | 80,702 |
|  |  |  |  |
| Annual Capital Cost | $127,500 | $300,000 | $427,500 |
| Annual O&M Cost | $127,500 | $1,125,000 | $1,252,500 |
| Total Annual Capital and O&M Costs | $255,000 | $1,425,000 | $1,680,000 |
|  |  |  |  |
| Labor Cost Per Year | $4,783,367 | $2,220,000 | $7,003,367 |
| Total Cost Per Year | $5,038,367 | $3,645,000 | $8,683,367 |

6(f) Reasons for Change in Burden

The net change in the estimated reporting burden as compared with the existing approved ICR for the AERR (EPA ICR #2170.07) is shown in the table below. These changes show an average annual increase in the number of responses from 75 to 80 and an associated hour increase of about 2,254 and cost increase of about $524,977 including the changes in labor rates noted next. This increase does not reflect a change in burden for each respondent, but rather reflects the latest counts of local agencies that report their emissions. The previous ICR assumed 20 local agencies would report on average, but the highest number of local agencies reporting in the last three reporting years has been 31 agencies with a weighted average of 26 for a triennial period. The total number of state and territorial agencies reporting is 54, bringing the total revised number of annual average respondents to 80.

Additionally, increased labor rates are included in this ICR as compared with the existing approved ICR. Labor rates have been updated to the 2020 labor rates from U.S. Department of Labor, Bureau of Labor Statistics for managers and technical staff.

EPA costs included in this ICR reflect an update to the number of staff working to support the NEI program. We have revisited the number of EPA FTE involved in data collection for the NEI to include training, support, and the emissions factor program. This has resulting in an increased number of EPA FTE from 10 to 15, which contributes to a $740,000 increase in the cost.

**Burden Change**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Currently Approved ICR | Change | Total Requested |
| Annual Responses | 75 | +10 | 85 |
| Annual Respondent Hour Burden | 47,248 | +2,254 | 49,502 |
| Annual Respondent Cost Burden | $4,513,390 | $524,977 | $5,038,367 |
| Annual EPA Cost Burden | $1,480,000 | $740,000 | $2,220,000 |

6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 619 hours per response, $1,500 in capital costs, and $1,500 in operation and maintenance costs.  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, the EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2004-0489, which is available for online viewing at [*www.regulations.gov*](http://www.regulations.gov), or in-person viewing at the Air and Radiation Docket and Information Center in the EPA Docket Center (EPA/DC), WJC West Building, 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-HQ-OAR-2004-0489 and OMB Control Number 2060-0580 in any correspondence.

**Table 6-1. State Respondent Burden Hours by Activity**

|  |  |  |  |
| --- | --- | --- | --- |
| **Information Collection Activity** | **Hours Per Respondent** | | |
| **Managerial Hours** | **Technical Hours** | **Total** |
| **Annual** | | | |
| 1. Extract data from the state data system |  | 4 | 4 |
| 2. Convert data into the XML format – Facility info |  | 8 | 8 |
| 3. Convert data into the XML format – Emissions info |  | 4 | 4 |
| 4. Run quality-assurance checks and resolve critical errors | 2 | 24 | 26 |
| 5. Submit final file to the EPA via CDX |  | 2 | 2 |
| 6. Respond to follow-up inquiries from the EPA | 2 | 4 | 6 |
| **Subtotal for Annual Point Source Reporting – Type A sources** | 4 | 46 | 50 |
| **Triennial** | | | |
| 1. Extract data from the state data system |  | 4 | 4 |
| 2. Convert data into the XML format – Facility info |  | 16 | 16 |
| 3. Convert data into the XML format – Emissions info |  | 8 | 8 |
| 4. Run quality-assurance checks and resolve critical errors | 10 | 120 | 130 |
| 5. Submit final file to the EPA via CDX |  | 2 | 2 |
| 6. Respond to follow-up inquiries from the EPA | 10 | 20 | 30 |
| **Subtotal for Triennial Point Source Reporting – all point sources** | 20 | 170 | 190 |
| **Subtotal for Triennial Point Source Reporting – increment in addition to annual reporting** | 16 | 124 | 140 |
| 7. For state agencies, develop and report statewide inventory data for stationary nonpoint, nonroad mobile, and onroad mobile sources for all pollutants | 87 | 1,740 | 1,827 |
| 8. For local agencies, develop and report county-level inventory data for stationary nonpoint, nonroad mobile, and onroad mobile sources for all pollutants | 44 | 870 | 914 |
| 9. For local agencies, coordinate with state agencies to complete stationary nonpoint, nonroad mobile, and onroad mobile sources for all pollutants | 4 | 80 | 84 |
|  | | | |

**Table 6-3. Annual State Respondent B** 17

**Table 6-2. Annualized Respondent Burden and Cost by Activity**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Information Collection Activity** | Hours and Costs Per Respondent | | | | | | Total Hours and Costs | | |
| Manager  Hrs/yr @  $155.52/Hr | Tech. Hrs/yr @  $93.16/Hr | Respondent  Hours/Year | Labor  Cost/Year | Capital Cost1 | O & M  Cost1 | Number of  Respondents | Total  Hours/Year2 | Total Labor  Cost/Year3 |
| ***Annual*** | | | | | | | | | |
| Submit Type A point sources | 4.00 | 46.00 | 50.00 | $4,907.44 |  |  | 80 | 4,000 | $392,595 |
| ***Triennial (triennial hours from Table 6-1 divided by 3 to annualize)*** | | | | | | | | | |
| Submit Type B point sources (increment above Type A) | 5.33 | 41.33 | 46.67 | $4,679.22 |  |  | 85 | 3,967 | $397,734 |
| For state agencies, develop and report statewide inventory for stationary nonpoint, onroad mobile, and nonroad mobile sources | 29.00 | 580.00 | 609.00 | $58,542.9 |  |  | 54 | 32,886 | $3,161,316 |
| For local agencies, develop and report county-level inventories for stationary nonpoint, onroad mobile, and nonroad mobile sources | 14.67 | 290.00 | 304.67 | $29,297.90 |  |  | 26 | 7,921 | $761,745 |
| For local agencies, coordinate with state agencies to complete stationary nonpoint, onroad mobile, and nonroad mobile sources | 1.33 | 26.67 | 28.00 | $2,691.42 |  |  | 26 | 728 | $69,977 |
| **Labor Subtotal** |  |  |  |  |  |  |  |  | $4,783,367 |
| **Capital and O&M Subtotal** |  |  |  |  | $1,500 | $1,500 | 85 |  | $255,000 |
| **Total** | **54.33** | **984** | **1038.34** | **$100,119** | **$1,500** | **$1,500** |  | **49,502** | **$5,038,367** |
| 1 Capital costs and O&M are calculated using the full number of 85 respondents because equipment is needed for every year irrespective of reporting.  2 Hours per year are rounded to the nearest hour.  3 Costs per year are rounded to the nearest dollar. | | | | | | | | | |
|  | | | | | | | | | |

|  |
| --- |
|  |
|  |

O&M 240,000

1. 31 local and tribal agencies reported in 2017 and 23 in 2018. 26 is a weighted average with triennial years assuming 31 and interim years assume 23 (i.e., [31 + 23 + 23]/3 rounds up to 26) [↑](#footnote-ref-2)
2. Except where noted, future reference to “state(s)” in this supporting statement includes 50 states, 3 territories, 31 local agencies, and the District of Columbia (DC). [↑](#footnote-ref-3)
3. States with Marginal or greater ozone nonattainment areas or PM2.5 nonattainment areas are required to prepare a modeled attainment demonstration that could include emissions for the same inventory year as the triennial NEI. If so, such modeling effort would usually need emissions for the entire state. [↑](#footnote-ref-4)