INFORMATION COLLECTION REQUEST
SUPPORTING STATEMENT

EPA ICR No. 2411.01:

INFORMATION COLLECTION REQUEST FOR PETROLEUM REFINERY SECTOR NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) RESIDUAL RISK AND TECHNOLOGY REVIEW

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SUPPORTING STATEMENT
INFORMATION COLLECTION REQUEST FOR PETROLEUM REFINERY SECTOR NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) RESIDUAL RISK AND TECHNOLOGY REVIEW

Part A of the Supporting Statement

1. Identification of the Information Collection

(a) Title of the Information Collection

"Information Collection Request for Petroleum Refinery Sector New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Residual Risk and Technology Review." This is a new information collection request (EPA ICR Number 2411.01 and OMB Control Number 2060-NEW).

(b) Short Characterization

This information collection is being conducted by EPA's Office of Air and Radiation (OAR) to assist the EPA Administrator, as required by sections 111(b), 112(d), and 112(f)(6) of the Clean Air Act (CAA), as amended, to reevaluate emission standards for this source category. The information will also be used to develop greenhouse gas regulations for petroleum refinery sources under CAA sections 111(b) and 111(d). The non-confidential information from this information collection request (ICR) would also be made available to the public through the docket for this ICR (Docket ID No. EPA-HQ-OAR-2010-0682).

This is a one-time information collection. EPA is soliciting this information with a survey, under the authority of CAA section 114, from all potentially affected units. The Agency will administer the survey in electronic format. The survey will be sent to all petroleum refineries in the EIA 2009 Refinery Capacity Report. The information collection will contain four components: (i) a questionnaire to be completed by all petroleum refineries; (ii) an emissions inventory to be developed by all petroleum refineries; (iii) distillation feed sampling and analysis to be conducted by all petroleum refineries; and (iv) emissions testing to be completed in accordance with an EPA-approved protocol for 88 petroleum refinery emissions sources at 77 different refineries. Component 1 (the questionnaire) will require the owner/operator of each petroleum refinery to complete a survey about their facility and process information, submit cost data, and provide copies of recent emissions test reports and CEMS/CMS data. Emissions sources to be tested according to Component 4 were selected to

ensure that representative data are collected for emissions sources/pollutants for which EPA has little to no existing information or for which additional information is needed in order to reevaluate emission standards for this source category. The list of the 88 petroleum refinery emissions sources selected for emissions testing is available in Part B of this document.

The Agency estimates the total cost to industry of the electronic information collection (gathering, entering, and performing quality assurance/quality control (QA/QC) checks of data submitted in response to the survey for 152 respondents and emissions testing for 77 respondents) will be 66,000 hours and $29 million, which includes $912 in operation and maintenance (O&M) costs for postage for mailing hard copy test reports and confidential survey responses to EPA. The average burden per respondent is 435 hours and $190,000.

2. Need for and Use of the Collection

(a) Need/Authority for the Collection

Petroleum refineries are facilities engaged in refining and producing products made from crude oil or unfinished petroleum derivatives. This category includes petroleum refinery-specific process units, such as fluid catalytic cracking units and catalytic reforming units, as well as units and processes at petroleum refineries that are also common to many other types of manufacturing facilities, such as storage vessels and wastewater treatment plants. The federal emission standards that are the primary subject of this information collection include:

- -- National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (40 CFR part 63, subpart CC), and
- -- National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units (40 CFR part 63, subpart UUU).
- -- Standards of Performance for Petroleum Refineries (40 CFR part 60, subpart J),
- -- Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007 (40 CFR part 60, subpart Ja),

The NESHAP subpart CC (Refinery MACT 1) regulates hazardous air pollutant (HAP) emissions from miscellaneous process vents, storage vessels, wastewater, equipment leaks, gasoline loading racks, marine tank vessel loading, and heat exchange systems at petroleum refineries. The NESHAP subpart UUU (Refinery MACT 2) regulates HAP from sulfur recovery units and from catalyst regeneration in catalytic cracking units and catalytic reforming units. The NSPS subparts J and Ja regulate criteria pollutant emissions, including particulate matter

(PM), sulfur dioxide (SO_2), nitrogen oxides (NO_X), and carbon monoxide (CO), from fluid catalytic cracking unit catalyst regenerators, fuel gas combustion devices, and sulfur recovery plants. The NSPS subpart Ja also regulates criteria pollutant emissions from fluid coking units and delayed coking units. Standards for greenhouse gases (GHG) will also be developed as part of the NSPS.

Section 112(f)(2) of the CAA directs EPA to conduct risk assessments on each source category subject to maximum achievable control technology (MACT) standards within 8 years of promulgation of the MACT standard and determine if additional standards are needed to reduce residual risks. Section 112(d)(6) of the CAA requires EPA to review and revise the MACT standards, as necessary, taking into account developments in practices, processes, and control technologies, every 8 years. Refinery MACT 1 was promulgated in 1995 and is due for review under CAA sections 112(f)(2) and 112(d)(6). Likewise, Refinery MACT 2 was promulgated in 2002 and is also due for review. Section 111(b)(1)(B) of the CAA mandates that EPA review and, if appropriate, revise existing NSPS every 8 years. The NSPS for petroleum refineries (40 CFR part 60, subpart J) were promulgated in 1974, amended in 1976, and reviewed in 2008; as part of the 2008 review, EPA promulgated amendments to the existing standards of performance and developed separate standards of performance for new process units (40 CFR part 60, subpart Ja). However, the Agency received and granted a number of petitions for reconsideration related to those standards. In addition, the Agency entered into a settlement agreement with the States of New York, California, Connecticut, Delaware, Maine, New Hampshire, New Mexico, Oregon, Rhode Island, Vermont, and Washington, the Commonwealth of Massachusetts, the District of Columbia, and the City of New York (collectively "State Petitioners") and the Natural Resources Defense Council (NRDC), Sierra Club, and Environmental Integrity Project (EIP) (collectively "Environmental Petitioners"). As part of that settlement, the Agency agreed to propose standards for GHG under CAA sections 111(b) and 111(d) by December 10, 2011, and finalize those standards (after consideration of public comments on the proposed standards) by November 10, 2012.

The data used as the basis for the originally promulgated Refinery MACT 1 are over 15 years old, and the data used as the basis for the originally promulgated Refinery MACT 2 are over 10 years old. In addition, while efforts were made during the recent NSPS review process to update the NSPS data set developed in 1978, some data for some types of processes and

technologies remains unavailable. The Agency is aware that significant changes have been made in the intervening years in the number of affected facilities, in industry ownership practices, and in emissions collection and control configurations. The Agency has not previously collected data for the purposes of developing regulations for GHG. In light of the statutory requirements for reviewing and developing emission standards under CAA sections 111(b), 111(d), 112(f)(2), and 112(d)(6), EPA has concluded that obtaining updated information will be crucial to informing its decisions on the NSPS review and the NESHAP risk and technology review (RTR) for petroleum refineries.

The Agency has already begun assembling data for a preliminary residual risk assessment for the petroleum refinery NESHAP. A data set derived from the EPA's 2005 National Scale Air Toxics Assessment (NATA) National Emissions Inventory (NEI) and supplemented with data supplied by about 20 individual refineries were used for a previous residual risk assessment for Refinery MACT 1. However, there remain a number of petroleum refineries for which substantial updates of emissions release points and emissions estimates are important in order for EPA to accurately consider residual risk for the petroleum refinery NESHAP. In addition, there are some petroleum refineries for which no Refinery MACT 1 and/or Refinery MACT 2 data are currently available in the NEI.

Preliminary risk analysis results for the petroleum refinery sector (based on the 2005 NATA NEI data sets) indicate that some refineries are projected to present risk above the thresholds for further consideration under the residual risk process. However, inconsistency in reporting methodologies makes it difficult to draw proper conclusions when different emissions estimates and performance levels are identified. Additional refinery-specific information would allow EPA to better characterize emissions sources, to refine the risk analysis, and to address any residual risk to ensure the public is protected with an ample margin of safety. An update of the 2005 NATA NEI data sets and more specific information needed for rulemaking regulatory analyses would be derived from the ICR. Information collected directly from petroleum refineries will have the greatest practical utility for purposes of performing the NSPS review and RTR, as information from the affected industry will contain the most up-to-date, accurate, and reliable equipment and operational data for each refinery. The Agency is also providing a protocol document to provide guidance to the industry when estimating emissions that are not directly monitored. This will ensure that the data collected are consistent and will allow direct

comparisons and minimize uncertainty caused by different estimation techniques. The ICR will request that new information be supplied for a 2010 base year, and therefore, will not suffer from the considerable "lag time" that can be associated with different inventory and permit review cycles (*e.g.*, where the currently available inventory does not yet reflect recent changes in control devices).[1]

(b) Use/Users of the Data

As mentioned previously, the data used for the originally promulgated NSPS and NESHAP are outdated and do not reflect the significant changes in emissions collection and control configurations that have occurred since promulgation of the standards. The MACT standards contain a number of compliance alternatives that allow for a variety of control devices and process changes to be used to meet the emission standards. At present, EPA does not have a full database reflecting the post-MACT configurations of petroleum refinery emission units and air pollution control systems and techniques. It is essential for EPA to have updated information to use in the regulatory analyses required under CAA sections 112(d) and 112(f)(2). In addition, this updated information will be used to complete the final steps in the NSPS review required under CAA section 111(b) and to develop GHG standards under CAA sections 111(b) and 111(d). By conducting all of the CAA-required reviews (*i.e.*, conducting the subpart CC and subpart UUU RTR reviews and completing the subpart J NSPS review) at the same time as the development of standards for GHG, EPA can make use of a single collection of information to consider control strategies that are the most effective for HAP, which are regulated under section 112, criteria air pollutants (such as PM, SO_2, and NO_X), which are regulated under section 111, and GHG. The data would also allow EPA to evaluate compliance options for startup and shutdown periods and to consider ways to consolidate monitoring, reporting, and recordkeeping requirements among the different rules under review.

The data collected will be used to update and augment facility and emissions source information already available to the Agency, develop new estimates of the population of affected units, and identify the control measures and alternative emission limits being used for compliance with the existing rules that are under review. This information, along with existing

[1] There is a "lag time" associated with compiling large State or national emission inventories. For example, an updated version of the NEI database is compiled every three years, but the information contained in the NEI may be based on prior years if states do not submit current data. There can also be a "lag time" associated with posting of recent permits to State websites (particularly if permits are only posted every 5 years as they are reviewed).

emission limits, will be used to establish the baseline emissions and control levels for purposes of the regulatory reviews. The emissions test data (test reports, continuous emissions monitoring systems (CEMS) data, and continuous monitoring systems (CMS) data) collected will be used to assess the effectiveness of existing control measures, examine variability in emissions, evaluate the stringency of existing emission limits, identify the most effective control measures considered for purposes of reducing residual risk, and provide a basis for estimating nationwide emissions from emissions sources for which EPA has little information. Emissions data will also be used, along with process and emission unit details, to consider options for best demonstrated technology (BDT) under the NSPS review, to consider subcategories for further regulation, and to estimate the environmental and cost impacts associated with any regulatory options considered.

In addition to informing the CAA-required NSPS and RTR regulatory analyses for the petroleum refinery sector, it is EPA's intent to include the information supplied through this information collection in future versions of the NEI and its successor, the Emissions Inventory System (EIS). Including this information in the NEI is one method of making the data available to the States and the public. More information about the NEI can be found at http://www.epa.gov/air/data/neidb.html.

The non-confidential information collected through this ICR would also be available to the public through the docket for this ICR (Docket ID No. EPA-HQ-OAR-2010-0682), including petroleum refinery industry trade groups that may find the information useful for their ongoing data gathering, analyses, and publications. In addition, such trade groups may wish to use the data collected to review and verify EPA's regulatory conclusions.

3. Non-duplication, Consultations, and Other Collection Criteria

(a) Non-duplication

Currently, information necessary to identify petroleum refineries is available from the Department of Energy's (DOE) Energy Information Administration's (EIA) Refinery Capacity Report, the Oil and Gas Journal, and EPA's National Emissions Inventory. However, EPA needs additional data on unit-specific operating capacity, emission source design, emissions collection and control systems, regulatory alternatives used, and emissions test data that are not provided by these data sources to characterize petroleum refinery affected sources for purposes of NSPS and NESHAP regulatory analyses. Although some of the needed information may be included in

title V or State air emissions permits, many permits do not contain all of the detail needed and are not readily available from any single source. Furthermore, there are no readily available sources for previously conducted emissions test results (since the mid-1990s) that will provide data for emissions of the variety of pollutants under consideration.

As noted, the Agency recognizes that some of the information requested in the information collection effort may already be included in the submittals made by individual companies, pursuant to State and national emissions inventories, operating permits applications, initial notification forms, and compliance reports. However, the complete extent of the data fields requested under this survey is not available in any consistent or usable format. Additionally, these sources do not provide detailed emissions test data. As mentioned previously, there is a lag time associated with State and national emissions inventories, and permit review cycles. There is also a lag time associated with obtaining emissions test reports from State agencies (*i.e.*, agencies may be reluctant to release emissions test results they have not yet processed). The Agency's proposed information collection seeks up-to-date operational and control technique data for the 2010 operating year, and thus avoids the effects of any such lag time on data availability. Although some State permits are provided to the public as searchable portable document format files (pdfs), many States do not provide electronic versions of their issued title V permits. Even when the permit is available, the unit-specific operating data are often not contained within the permit. Some of the initial notifications, compliance reports, and emissions test reports submitted are available in hard-copy only, whereas only the facility-level information (facility name, location, contact) is available in an electronic format. Such variation in the level of detail of permits, notifications, and reports means that it would be extremely time-consuming for EPA to extract the level of process detail needed for regulatory analyses from existing documents (assuming that these documents were readily available to EPA), and that significant data gaps would remain even after data from existing documents were compiled.

To summarize, the information requested relevant to the current (post-MACT) emissions source operation, regulatory alternatives, emissions data, and the effectiveness of various control systems at removing HAP is not readily available from other sources. In the absence of an industry data collection, EPA would be forced to try to obtain permits, compliance reports, and emissions test reports from States; extract information from these reports (which vary in detail and method of reporting); and then attempt to fill data gaps where information is not available

from the reports obtained. This process of acquiring and extracting data from existing reports would require more time than an industry data collection, and ultimately would be expected to yield incomplete and inconsistent information. The robust and uniform information being collected directly from petroleum refineries would provide the most timely and complete data set with the greatest practical utility for purposes of performing the NSPS review, developing GHG standards, and performing the RTR that are due to be completed under CAA sections 111(b), 111(d), 112(d), and (f)(2).

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

This ICR is being submitted to the Office of Management and Budget (OMB) as required by the Paperwork Reduction Act of 1995 (PRA) and the subsequent rule issued by the OMB on August 29, 1995 (60 FR 44978). The Agency previously submitted the draft ICR for public review, and the ICR being submitted to the OMB includes revisions to address the public comments received during that review period.

(c) Consultations

Initial feedback was received from the affected industry regarding the procedures for developing their RTR emissions inventory, and their comments have been considered. In addition, as noted previously, the public was given an opportunity to provide detailed comments on the draft ICR, and EPA has considered and addressed those comments. A summary of the comments and EPA's responses is located in the docket for this ICR as Docket Item No. EPA-HQ-OAR-2010-0682-0028.

(d) Effects of Less Frequent Collection

This ICR will require the owner/operator of each petroleum refinery to provide a full emissions inventory to be used for regulatory purposes under CAA sections 111 and 112. In addition, refineries will be asked to complete an electronic survey of general facility information (production processes and capacities), equipment details, permit limits, emission control measures, and emissions test data (for previously conducted tests). Some refineries will be asked to complete emissions testing on a specific emissions source. The information requested in this survey is a one-time effort.

(e) General Guidelines

This ICR will adhere to the guidelines for Federal data requestors, as provided at 5 CFR 1320.6.

(f) Confidentiality

Respondents will be required to respond under the authority of CAA section 114. If a respondent believes that disclosure of certain information requested would compromise a trade secret, it should be clearly identified as such and will be treated as confidential until and unless it is determined in accordance with established EPA procedure as set forth in 40 CFR Part 2 not to be entitled to confidential treatment. 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 Part 2, Subpart B, entitled "Confidentiality of Business Information." Any information subsequently determined to constitute a trade secret will be protected under 18 U.S.C. 1905. If no claim of confidentiality accompanies the information when it is received by EPA, it may be made available to the public without further notice (40 CFR 2.203). Because CAA section 114(c) exempts emissions data from claims of confidentiality, the emissions data provided may be made available to the public. Therefore, emissions data should not be marked confidential. A definition of what EPA considers emissions data is provided in 40 CFR 2.301(a)(2)(i).

(g) Sensitive questions

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

4. The Respondents and the Information Requested

(a) Respondents/NAICS Codes.

Respondents affected by this action are owners/operators of petroleum refineries, all of which are expected to have the potential to be subject to one of the regulatory standards being reviewed or developed by EPA. Based on the Energy Information Administration's *Refinery Capacity Report 2009*, there are 152 operable petroleum refineries in the United States (U.S.) and the U.S. territories. Petroleum refineries are located in 35 States, as well as Puerto Rico and the U.S. Virgin Islands. The North American Industry Classification System (NAICS) code for respondents affected by the information collection is 32411.

(b) Information Collected

(i) Data Items. The proposed data-gathering effort has four components: i) a questionnaire to be completed by all 152 petroleum refineries; (ii) an emissions inventory to be developed by all petroleum refineries; (iii) distillation feed sampling and analysis to be conducted by all petroleum refineries; and (iv) emissions testing to be completed in accordance with an EPA-approved protocol for 88 selected emissions sources. The following paragraphs provide additional details about the components of the survey and the testing requirements contained in those components.

Component 1 will require the owner/operator of each petroleum refinery to complete a survey about their facility and process information, submit cost data, and provide copies of recent emissions test reports and CEMS/CMS data. Some questions about particular emissions sources will not be applicable to petroleum refineries that do not have those types of sources. The survey will be administered electronically through files available on the ICR website (https://refineryicr.rti.org). A hard copy of Component 1 was provided in Docket ID No. EPA-HQ-OAR-2010-0682 solely for the purposes of soliciting comments on the Component 1 questions, and the electronic files were included in the ICR submittal to OMB. The survey will require each facility to provide information to EPA by May 31, 2011.

Component 2 will require the owner/operator of each petroleum refinery to develop and provide a facility-wide emissions inventory in accordance with the *Emission Estimation Protocol for Petroleum Refineries* (Refinery Emissions Protocol), which is available in the Docket ID No. EPA-HQ-OAR-2010-0682. The information will be collected electronically through files available on the ICR website (https://refineryicr.rti.org). A hard copy of Component 1 was provided in Docket ID No. EPA-HQ-OAR-2010-0682 solely for the purposes of soliciting comments on the Component 1 questions, and the electronic files were included in the ICR submittal to OMB. Each facility will be required to provide information to EPA by June 30, 2011.

Component 3 will require the owner/operator of each petroleum refinery to conduct distillation feed sampling and analysis three times, each time approximately 30 days from the last. The results of these analyses will be collected electronically through files available on the ICR website (https://refineryicr.rti.org). A hard copy of the Component 3 instructions and response template was provided in Docket ID No. EPA-HQ-OAR-2010-0682 solely for the

purposes of soliciting comments on the Component 3 questions and procedures, and the electronic files were included in the ICR submittal to OMB. Each facility will be required to provide information to EPA by August 31, 2011.

Component 4 provides instructions and guidance for emissions testing for those petroleum refinery emissions sources that are selected to complete emissions testing. This testing will occur once. The results of each series of tests and analyses will be required to be reported to EPA by using a specified standardized electronic format by August 31, 2011. Specified QA/QC procedures will be required for each part of the emissions data collection effort. For this effort, EPA believes it is highly advisable for each emissions source subject to emissions testing under Component 4 of the ICR to devise a site-specific test plan. A site-specific test plan addresses the planning and quality assurance and quality control procedures and acceptance criteria for all of the testing, including the collection of process data, and developing such a plan will ensure that you address all of the testing and reporting requirements. Such a plan could include the project elements as enumerated in chapter 3 of the EPA quality assurance document. In addition, the EPA Electronic Reporting Tool (ERT) Version 3, in which EPA requires that data be reported, requires that elements of a test plan be entered into the program prior to submitting test results. The cost of performing each test includes the burden of developing a site-specific test plan. Note, however, that these quality assurance test plans will not be reviewed or approved by EPA.

Although a large amount of information is needed for regulatory reviews under sections 111 and 112 of the CAA, EPA has designed the information collection in a way to minimize the burden associated with supplying and processing this information. The survey will collect information to supply multiple regulatory actions in order to minimize the burden associated with multiple collections. A table containing only the relevant and current source classification codes (SCC) will be provided to ensure that valid codes are used and to reduce respondent time associated with locating codes on the NEI website. The electronic survey files will be provided to refineries through a website, and respondents can use that same website to upload their non-confidential survey responses. The electronic format will allow EPA to import the responses into database software, eliminating the time required for EPA to key-enter data. The burden associated with collection of emissions test data has been reduced in several ways:

(1) Respondents are required to submit existing emissions test reports in order for EPA (or EPA contractor) personnel familiar with extracting test data from test reports to enter the data in a manner that ensures consistent and reliable treatment of the data (*e.g.*, with respect to data averaging and non-detects).

(2) Respondents may provide electronic or hard copy versions of existing emissions test reports, whichever they find to be less burdensome.

(3) Not all refineries will be required to conduct new emissions testing, and EPA has spread the required testing over as many refineries as possible to minimize the burden to any one refinery.

Finally, EPA has minimized the collection of control measure cost information by focusing the collection of cost information on air pollution controls and process changes of particular interest for purposes of the NSPS review or RTR. The Agency expects cost information obtained from the industry to be some of the most reliable and valid information available since the cost data would be specific to petroleum refinery applications. In addition, collection of cost information from the industry (as opposed to a separate collection from other sources such as vendors) would accelerate EPA's ability to analyze the cost impacts of regulatory options.

This information is being collected under the authority of CAA section 114(a), which states that the Administrator may require any owner or operator subject to any requirement of the 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.

(ii) Respondent Activities. The owner/operator of each petroleum refinery will be required to enter all data through the website data collection tool, enter these data using proper unit terminology, and to QA/QC the data entered into the website. The specific activities a respondent must undertake to fulfill the requirements of the information collection are presented in Attachment 1. These include: i) read instructions; ii) provide information on each affected source through electronic survey; iii) submit hard or electronic copies of previous emissions test

reports and available CEMS or CMS data; and iv) conduct distillation feed sampling and analysis. If one of the refinery's emissions sources was selected for emissions testing, the respondent must additionally: i) review the emissions testing plan and procure a testing contractor; ii) monitor/supervise emissions testing; iii) review emissions sampling data for accuracy and completeness; and iv) submit emissions sampling data and test reports.

The owner/operator of each petroleum refinery will be required to keep records: i) documenting that distillation feed samples were obtained in accordance with an approved sampling protocol; ii) establishing proper chain of custody for each distillation feed sample; iii) describing the QA/QC procedures followed in preparing each distillation feed sample for analysis and performing the required analysis; and iv) setting forth the results of the analyses performed on each distillation feed sample. The owner/operator of each petroleum refinery emissions source required to conduct emissions testing will be required to keep records: i) documenting that each emissions test was conducted in accordance with an approved testing protocol; and ii) setting forth the results of each emissions test. These records must be retained for 3 years so that respondents can answer EPA questions about the analysis or testing procedures as needed to review and amend the standards as described previously.

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

(a) Agency Activities

A list of activities required of the Agency is provided in Attachment 2. These include: i) develop electronic questionnaire and packages for mailout; ii) determine which emissions sources will be required to complete emissions testing; iii) develop and deploy a website for data entry from facilities; iv) answer respondent questions; v) review and analyze responses and emissions data; vi) analyze requests for confidentiality; vii) review emissions test data for accuracy and completeness; and viii) analyze emissions test data.

(b) Collection Methodology and Management

In collecting and analyzing the information associated with this ICR, EPA will use personal computers and applicable spreadsheet and database software. To better facilitate uniformity in the format of the requested data, and, thus, increase the ease of database entry, standardized survey questions and electronic forms will be distributed to respondents. The Agency will ensure the accuracy and completeness of the collected information by reviewing

each submittal. The Agency may place follow-up calls to refineries should questions remain after reviewing all materials submitted. Following QA/QC of each submittal, the information from each refinery will be uploaded into a database for further analysis. Survey responses claimed as confidential business information (CBI) will be housed in a separate database from the non-CBI survey responses. In addition, a copy of the emissions inventories submitted will be routed for inclusion in EPA's residual risk input database, and it is EPA's intent for this information to be included in future versions of the NEI and its successor, the EIS. Existing emissions test report data will be entered into a database by EPA (or EPA contractor) personnel familiar with extracting test data from test reports. In addition, CEMS data would be uploaded in a database for analysis of emissions variability. Petroleum refineries asked to complete emissions testing will be instructed to provide their results through the Electronic Reporting Tool (ERT), and EPA will review those responses. The resulting databases will be checked for QA/QC prior to and as part of regulatory analyses.

(c) Small Entity Flexibility

The Agency expects that a small percentage of the respondents may be small entities. These small entities are likely to have simpler refining operations and fewer petroleum refining processes, so they would likely have fewer portions of the survey to complete. The Agency also plans to use an electronic format of the questionnaire in order to reduce the burden and improve the data accuracy from all respondents, including small entities. In addition, the survey will contain a question to determine the small entity status of a facility. This question will help to identify, quantify, and consider ways to minimize the burden on small entities during the NESHAP and NSPS review and rulemaking processes.

(d) Collection Schedule

The Agency anticipates issuing the CAA section 114 letters in the first quarter of 2011. These CAA section 114 letters would require the owner/operator of each petroleum refinery to submit responses on the following schedule:

Date	Component Due	Respondents	Details
May 31, 2011	Component 1	Owners/operators of each petroleum refinery	Complete the petroleum refinery sector survey (including submitting cost data and providing copies of recent emissions test reports and CEMS/CMS data)
June 30, 2011	Component 2	Owners/operators of each petroleum refinery	Provide an updated emissions inventory
August 31, 2011	Component 3	Owners/operators of each petroleum refinery	Conduct distillation feed sampling and analysis
August 31, 2011	Component 4	Owners/operators of the refinery emissions sources selected to conduct emissions testing	Complete emissions testing as supplied in the EPA-approved protocol and submit results to EPA

The Agency will compile and analyze survey response data and emissions testing data upon receipt.

6. Estimating the Burden and Cost of the Collection

(a) Estimating Respondent Burden and Costs

Attachment 1 presents estimated costs for the required data collection activities. Labor rates and associated costs are based on Bureau of Labor Statistics (BLS) data. Technical, management, and clerical average hourly rates for private industry workers were taken from the United States Department of Labor, Bureau of Labor Statistics, September 2010, "Table 2. Civilian Workers, by occupational and industry group," available at http://www.bls.gov/news.release/ecec.t02.htm. Total compensation for three occupational groups are used as the basis for the labor rates as shown below:

Labor type	Occupational group	Total compensation ($ per hour worked)
Technical	Professional and related	46.82
Managerial	Management, business, and financial	55.46
Clerical	Office and administrative support	23.41

These rates represent salaries plus fringe benefits but do not include the cost of overhead. An overhead rate of 110 percent is used to account for these costs. The fully-burdened hourly wage rates used to represent respondent labor costs are: technical at $98.32, management at $116.47,

and clerical at $49.16. These estimates represent the one-time burden that will be incurred by the respondents.

(b) Estimating Agency Burden and Costs

The costs the Federal Government would incur are presented in Attachment 2. The Agency labor rates are from the Office of Personnel Management (OPM) 2011 General Schedule which excludes locality rates of pay. These rates can be obtained from Salary Table 2011-GS, available on the OPM website at http://www.opm.gov/oca/11tables/html/gs_h.asp. The government employee labor rates used in this analysis are shown below:

Labor type	Grade	Step	Hourly rate ($ per hour worked)
Technical	13	1	34.34
Managerial	15	1	47.74
Clerical	7	1	16.28

These rates were increased by 60 percent to include fringe benefits and overhead. The fully-burdened wage rates used to represent Agency labor costs are: clerical at $26.05, technical at $54.94, and managerial at $76.38.

(c) Estimating the Respondent Universe and Total Burden and Costs

The potential respondent universe consists of an estimated 152 petroleum refineries. All 152 of these refineries will be required to complete the first three components of the ICR (*i.e.*, the survey, submittal of existing test reports, emissions inventory, and distillation feed sampling). The fourth component (*i.e.*, the required emissions testing) will have 77 respondents.

(d) Bottom Line Burden Hours and Costs Tables

(i) Respondent tally. The bottom line industry burden hours and costs, presented in Attachment 1, are calculated by summing the person-hours column and by summing the cost column. The total burden and cost to the industry for 152 respondents is 66,000 hours and $29 million. No capital or annualized costs are applicable because this is a one-time submittal. The O&M costs of $912 are estimated for postage to mail hard copy test reports and confidential survey responses to EPA.

(ii) Agency tally. The bottom line Agency burden and cost, presented in Attachment 2 is calculated in the same manner as the industry burden and cost. The estimated

burden and cost for 152 respondents is 21,100 hours and $1.1 million, which includes $3,500 in O&M costs to send certified CAA section 114 letters to all respondents with electronic return receipt, printing costs for the CAA section 114 letters and enclosures, costs to maintain a website to provide electronic copies of the questionnaire, and computer storage of data received.

(iii) The complex collection. This ICR is a simple collection; therefore, this section does not apply.

(iv) Variations in the annual bottom line. This section does not apply as this is a one-time collection.

(e) Reasons for Change in Burden

This is the initial estimation of burden for this information collection; therefore, this section does not apply.

(f) Burden Statement

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.

The total cost burden for the petroleum refineries data gathering effort is estimated to be 66,000 hours and $29 million (435 hours and $190,000 per respondent for 152 respondents). The O&M costs of $912 ($6 per respondent) are estimated for postage to mail hard copy test reports and confidential survey responses to EPA.

To comment on EPA's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a docket for this ICR under Docket ID No. EPA-HQ-OAR-2010-0682, which is available for online viewing at www.regulations.gov, or in

hard copy at EPA Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA/DC Public Reading Room is open from 8 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 and Radiation Docket Center 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, DC 20503, Attention: Desk Office for EPA. Please include EPA Docket ID No. EPA-HQ-OAR-2010-0682 in any correspondence.

List of Attachments

1. Industry Burden and Costs for Responding to the Questionnaire
2. Agency Burden and Costs

Attachment 1. Industry Burden and Costs for Responding to the Questionnaire

Respondent Activity	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year[1]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
1. APPLICATIONS (Not Applicable)								
2. SURVEY AND STUDIES (Not Applicable)								
3. ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS (Not Applicable)								
4. REPORT REQUIREMENTS								
A. Read Instructions	12	1	12	152	1,824	91	182	$198,925
B. Required Activities								
a. Component 1: Complete and submit survey								
Part I: General Facility Information	6	1	6	152	912	46	91	$99,462
Part II: Process and Emissions Information								
Section 1. Energy Management	3	1	3	152	456	23	46	$49,731
Section 2. Process Heater Data	4	1	4	152	608	30	61	$66,308
Section 3. Equipment Leaks	5	1	5	152	760	38	76	$82,885
Section 4. Storage Tanks	5	1	5	152	760	38	76	$82,885
Section 5. Catalytic Cracking Unit	3	1	3	101	303	15	30	$33,045
Section 6. Fluid Coking Unit	3	1	3	5	15	1	2	$1,636
Section 7. Delayed Coking Unit	3	1	3	58	174	9	17	$18,976
Section 8. Catalytic Reforming Unit	3	1	3	116	348	17	35	$37,953
Section 9. Sulfur Recovery Unit	3	1	3	111	333	17	33	$36,317
Section 10. Hydrogen Plant Vent	3	1	3	54	162	8	16	$17,668
Section 11. Other Atmospheric Vents	4	1	4	152	608	30	61	$66,308
Section 12. Flares	4	1	4	152	608	30	61	$66,308
Section 13. Fuel Gas Systems	3	1	3	152	456	23	46	$49,731
Section 14. Cooling Water Systems	3	1	3	152	456	23	46	$49,731
Section 15. Wastewater Collection and Treatment	5	1	5	152	760	38	76	$82,885
Section 16. Loading Operations	3	1	3	152	456	23	46	$49,731
Part III: Non-Routine Emissions	2	1	2	152	304	15	30	$33,154
Part IV: Complete and submit cost forms (optional)[2]	20	1	20	76	1,520	76	152	$165,770
Part V: Emissions Monitoring and Source Test Data								
Gather/scan/copy existing test reports[3,4]	1.5	2	3	60.8	182	9	18	$19,892
Fill out Log of Source Tests and Monitoring Data Provided[3]	1	2	2	60.8	122	6	12	$13,262
Submit existing reports[3,5]	1	2	2	60.8	122	6	12	$13,262
Fill out CEMS Daily Templates[6]	2	9	18	136.8	2,462	123	246	$268,548
Subtotal for Component 1								**$1,604,374**
b. Component 2: Emissions Inventory Data (Part VI)	200	1	200	152	30,400	1,520	3,040	$3,315,409
Subtotal for Component 2								**$3,315,409**
c. Component 3: Distillation Feed Analysis (Part VII)[7]		4		152				$9,728,000

Respondent Activity	(A) Hours per Occurrence	(B) Occurrences/ Respondent/ Year	(C) Hours/ Respondent/ Year (A x B)	(D) Respondents / Year[1]	(E) Technical Hours/Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
Subtotal for Component 3								**$9,728,000**
d. Component 4: Emissions Testing and Analysis (Part VIII)[8]								
Read Test Plan provided by EPA for testing	0.7	1	0.7	77	54	3	6	$5,878
Procure contractor to perform testing	20	1	20	206	4,120	206	412	$449,352
Plant personnel for testing oversight	16	2	32	206	6,592	330	659	$718,920
Review the test report data	5	1	5	206	1,030	52	103	$112,331
Submit stack test results through the ERT	2	1	2	206	412	21	41	$44,933
QA/QC entered data on website	1	1	1	206	206	10	21	$22,466
Emissions tests								
Organic compounds (group “a” stack tests for CRU)		12						$1,560,000
Organic compounds (group “a” stack tests for other units)		39						$4,009,200
Dioxin/furan HAP (group “b” stack tests)		28						$1,064,000
Acid gases and reduced sulfur (group “c” stack tests)		6						$272,400
Mercury and metallic HAP (including Cr^{+6} and ammonia) (group “d” stack tests for FCCU, FCU)		12						$1,270,560
Mercury and metallic HAP (group “d” stack tests for other cracking, other coking, and reforming units)		22						$1,757,360
Acid gases (group “e” stack tests)		28						$795,200
Reduced sulfur (group “f” stack tests)		11						$356,400
NO_x and SO_2 (group “e” stack tests)		11						$343,200
Organic compounds, reduced sulfur, and other parameters in refinery fuel gas		21						$777,000
Analysis via Texas El Paso stripping columns		11						$341,000
Wastewater treatment systems		5						$285,000
Subtotal for Component 4								**$14,185,174**
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4B)								
E. Write Report (Not Applicable)								
5. RECORDKEEPING REQUIREMENTS (Included in 4B)								
TOTAL ANNUAL LABOR BURDEN AND COST					57,525	2,876	5,752	**$28,832,957**
			total hours =	*66,154*	*avg. hr/ refinery =*	*435*	*avg. cost/ respondent =*	*$189,691*
ANNUAL CAPITAL COSTS (Not Applicable)								$ -
ANNUALIZED CAPITAL COSTS (Not Applicable)								$ -
TOTAL ANNUAL COSTS (O&M)[9]								$912
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								$912
TOTAL LABOR AND O&M COSTS								**$28,833,869**

[1] **The number of respondents per year is based on the counts listed in Part B, Section 1 - Respondent Universe.**

[2] Assumes that 50% of refineries will provide cost information.

[3] It is estimated that 40% of refineries will submit two previous reports.

[4] It is estimated that it would take 1.5 hours to locate and scan or copy each test report.

[5] Existing reports include source tests, qualified CEMS data, biological treatment units data, and ambient or remote sensing data.

[6] Assumes 90% of refineries will fill out nine CEMS/CMS forms.

[7] Average number of samples per refinery assuming that 50 refineries will have two distillation columns from which they must sample and test three times (for a total of six samples) and the other 102 refineries will have one distillation column from which they must sample and test sample three times ((102×3 + 50×6) / 152 refineries = 4 tests per refinery).

[8] Some units will be tested for more than one group of pollutants. Number of respondents based on 206 groups of tests on 88 total emissions sources at 77 different refineries.

[9] Postage Costs for mailing survey responses to EPA are estimated at $6 for Federal Express letter size envelope flat rate (1 per respondent).

Attachment 2. Agency Burden and Costs

Agency Activity	(A) EPA Hours/ Occurrence	(B) Occurrences/ Respondent/Year	(C) EPA Hours/Respondent/ Year (A x B)	(D) Respondents/Year[1]	(E) EPA Technical Hours/ Year (C x D)	(F) EPA Managerial Hours/Year (E x 0.05)	(G) EPA Clerical Hours/Year (E x 0.10)	(H) Cost, $
Develop/revise questionnaire spreadsheets and instructions[2]	400	1	400	1	400	20	40	$24,547
Develop survey website	10	1	10	1	10	1	1	$614
Mail out questionnaire[3]	1	1	1	152	152	8	15	$9,328
Answer respondent questions via phone, email, and/or frequently asked questions posted on website[4]	1	1	1	38	38	2	4	$2,332
Handle and review responses for confidentiality[5]	1	1	1	152	152	8	15	$9,328
Review and analyze responses (including follow-up)								
Survey	12	1	12	152	1,824	91	182	$111,935
CEMS/CMS data[6]	8	9	72	136.8	9,850	492	985	$604,450
Cost data[7]	8	1	8	76	608	30	61	$37,312
Emissions inventory data	20	1	20	152	3,040	152	304	$186,559
Review/analyze/input existing emissions test data[8]	7	2	14	60.8	851	43	85	$52,236
Review/analyze electronically submitted emissions test data[9]	8	2.3	18.7	77	1,442	72	144	$88.493
Total Annual Hours					18,367	918	1,837	$1,127,134
						21,122	hours	
Expenses (O&M)[11]								
Printing letter and enclosures								$532
Postage								$912
Computer storage of data & website usage								$2,042
Total Expenses								$3,486
TOTAL ANNUAL LABOR BURDEN AND COST								$1,130,620

[1] The number of respondents per year is based on the refinery counts listed in Part B, Section 1 - Respondent Universe.

[2] Includes determining which emissions sources will be required to complete emissions testing.

[3] Mailout package includes section 114 letter with standard enclosures and hard copy of survey instructions. Assumes EPA will mail one questionnaire per facility.

[4] Assumes that 25% of the facilities will have questions.

[5] Assumes that all facilities will have confidential data.

[7] Assumes 90% of refineries will populate nine CEMS spreadsheet forms with CEMS and/or CMS data.

[8] Assumes that 50% of refineries will provide cost information.

[9] Assumes that 40% of refineries will submit two previous reports.

[10] Based on 206 total groups of tests on 88 total emissions sources at 77 different refineries (206 tests/88 emissions sources = 2.3 tests per emissions source, 77 refineries).

[11] Copy costs are estimated for 70 pages at $0.05/page. Postage Costs are estimated at $6 for Federal Express letter size envelope flat rate. Data storage estimated at $21/GB/mo, assuming 25 MB per response. Website cost estimated at $85/mo for 6 months.