# SUPPORTING STATEMENT PART A: INFORMATION COLLECTION REQUEST FOR THE MANDATORY REPORTING OF GREENHOUSE GASES – FINAL RULE

OMB Control No. 2060-NEW EPA ICR No. 2300.03

**September 18, 2009** 

# SUPPORTING STATEMENT FOR MANDATOR REPORTING OF GREENHOUSE GASES - FINAL RULE EPA ICR #2300.01

#### 1. IDENTIFICATION OF THE INFORMATION COLLECTION

# 1(a) Title of the Information Collection

TITLE: "Mandatory Reporting of Greenhouse Gases (GHG Reporting Rule) – Final Rule."

ICR Number: 2300.03

OMB Control Number: 2060-NEW

## 1(b) Short Characterization/Abstract

The United States (U.S.) Environmental Protection Agency (EPA) is promulgating the GHG Reporting Rule, which requires reporting of GHG emissions from all sectors of the economy.

The rule establishes mandatory reporting requirements for some direct greenhouse gas emitters as well as some fossil fuel suppliers, industrial gas suppliers, and manufacturers of heavy-duty and off-road vehicles and engines. The rule does not require control of greenhouse gases. Instead, it requires that sources emitting above certain threshold levels of carbon dioxide (CO<sub>2</sub>) equivalent (CO<sub>2</sub>e) monitor and report emissions. Additionally, all facilities in certain industry sectors, such as petroleum refineries, must report emissions to EPA.

Under the rule, respondents must collect and report data on anthropogenic greenhouse gas emissions including  $CO_2$ , methane  $(CH_4)$ , nitrous oxide  $(N_2O)$ , sulfur hexafluoride  $(SF_6)$ , hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and other fluorinated gases (e.g., nitrogen trifluoride and hydrofluorinated ethers, HFEs). Those that determine they are under their sector-specific reporting threshold are not required to report and have no further obligation under the rule; those that exceed this threshold or that belong to a sector in which all must report are required to implement the reporting requirements of the rule.

#### 2. NEED FOR AND USE OF THE COLLECTION

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

Signed into law on December 26, 2007, the FY2008 Consolidated Appropriations Act (henceforth referred to as the "Appropriations Act") directed EPA to "develop and publish a draft rule not later than 9 months after the date of enactment of this Act, and a final rule not later than 18 months after the date of enactment of this Act, to require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy of the United States."

The accompanying explanatory statement further directed EPA to "use its existing authority under the Clean Air Act" (CAA) to develop a mandatory GHG reporting rule. "The Agency is further directed to include in its rule reporting of emissions resulting from upstream production and downstream sources, to the extent that the Administrator deems it appropriate. The Administrator shall determine appropriate thresholds of emissions above which reporting is required, and how frequently reports shall be submitted to EPA. The Administrator shall have discretion to use existing reporting requirements for electric generating units" under §821 of the 1990 CAA amendments.

In accordance with this directive, EPA is establishing a mandatory reporting program using its authority under §114 and §208 of the CAA.

- CAA §114(a) provides EPA broad authority to collect data for the purpose of, among other things, "carrying out any provision" of the Act. Under §114(a)(1), EPA may require any person who owns or operates any emission source or may have information necessary to carry out the provisions of the Act to measure emissions (including installing monitoring equipment), maintain records, submit reports, and provide other information the Administrator may reasonably require.
- CAA §208, in Title II of the Act, provides EPA with similar authority regarding the manufacturers of new motor vehicles or new motor vehicle engines.

Further information on the authority provided under §114 and §208 of the CAA is contained in section I.C. of the preamble.

The Agency believes that establishing a mandatory reporting program for facilities that emit greenhouse gases or supply fuel or chemicals that will eventually be emitted as greenhouse gases will inform future climate change policy decisions.

Because EPA does not yet know the specific policies that will be adopted, the data reported through the mandatory reporting system should be of sufficient quality to inform policy and program development. Also, consistent with the Appropriations Act, the reporting rule covers a broad range of sectors of the economy.

EPA has identified the following goals of the mandatory reporting system, including:

- Obtain data that is of sufficient quality that it can be used to analyze and inform the development of a range of future climate change policies and potential regulations.
- Balance the rule's coverage to maximize the amount of emissions reported while excluding small emitters.
- Create reporting requirements that are, to the extent possible and appropriate, consistent with existing GHG reporting programs in order to reduce reporting burden for all parties involved.

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

The rule provides EPA, other government agencies, and the public with GHG emissions data that cover a broad range of sectors in the economy. Accurate and timely information on GHG emissions is essential for informing many future climate change policy decisions. Although additional data collection (e.g., for other source categories or to support additional policy or program needs) will no doubt be required as the development of climate policies evolves, the data collected in this rule will provide useful information for a variety of polices. Through data collected under this rule, EPA, states, and the public will gain a better understanding of the relative emissions of specific industries across the nation and the distribution of emissions from individual facilities within those industries. The facility-specific data will also improve our understanding of the factors that influence GHG emission rates and actions that facilities could in the future or already take to reduce emissions. In addition, the data collected on some source categories could also potentially help inform the design of flexible programs (e.g., offsets, set-asides, or other incentives).

Using the rich data set provided by this rulemaking, EPA, states, and the public will be able to track emission trends from industries and facilities within industries over time, particularly in response to policies and potential regulations. The data collected by this rule will also improve the U.S. government's ability to formulate climate policies, and to assess which industries might be affected, and how these industries might be affected by potential policies. Finally, EPA's experience with other reporting programs is that such programs raise awareness of emissions among reporters and other stakeholders, and thus contribute to efforts to identify and implement emission reduction opportunities. These data can also be coupled with efforts at the local, state, and federal levels to assist corporations and facilities in determining their GHG footprints and identifying opportunities to reduce emissions (e.g., through energy audits or other forms of assistance).

The rule is not intended to be a survey and the respondents affected by the rule are not intended to be a statistical sample of a larger universe of entities. EPA does not intend to use the data collected under this rule to characterize non-reporting entities or to draw statistical inferences about a larger population.

# 3. NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

# 3(a) Nonduplication

EPA evaluated existing GHG programs and the GHG data currently available to determine whether this request duplicates other information collections. While some programs collect similar information on GHG emissions, the Agency has determined that the GHG reporting program will supplement and complement, rather than duplicate, existing programs' data. For example, EPA anticipates that facility-level GHG emissions data will lead to improvements in the quality of the *Inventory of U.S. Greenhouse Gas Emissions and Sinks* (Inventory), which EPA prepares annually, with input from several other agencies, and submits to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC). In addition, this mandatory reporting program has broader coverage of U.S. GHG emissions than most voluntary programs, which typically focus on a specific industry and/or goal (e.g., reduction of CH<sub>4</sub> emissions or development of corporate inventories). It will improve EPA's understanding of emissions from facilities not currently included in these programs and increase the coverage of these industries.

Documentation of EPA's review of GHG monitoring protocols for each source category used by federal, state, and international voluntary and mandatory GHG programs, and the review of state mandatory GHG rules, can be found in the docket at EPA-HQ-OAR-2008-0508-056. A few of these programs are described below:

- A number of EPA's voluntary partnership programs include a GHG emissions and/or reductions reporting component (e.g., Climate Leaders, the Natural Gas STAR program, etc.). However, EPA's mandatory reporting program would have much broader coverage than the voluntary programs, and therefore would help EPA learn more about emissions from facilities not included in current programs and identify ways to broaden coverage of data related to emissions sources to provide economywide data on facility-level GHG emissions.
- The Agency also examined the voluntary GHG gas registry that the U.S. Department of Energy's (DOE's) Energy Information Administration (EIA) implements under §1605b of the Energy Policy Act. Under EIA's "1605b program," reporters can choose to prepare an entity-wide greenhouse gas inventory and identify specific greenhouse gas reductions made by the entity. EPA's mandatory GHG reporting rule covers a much broader set of reporters, primarily at the facility rather than entity-level, but this reporting rule is not designed with the specific intent of reporting of emission reductions, as is the 1605(b) program.
- EPA also considered CO<sub>2</sub> data currently collected under §821 of the 1990 Clean Air Act Amendments. To avoid duplication, and because the Acid Rain Program already requires reporting of high quality CO<sub>2</sub> data from electrical generating units (EGUs), the rule allows for use of the same CO<sub>2</sub> data rather than requiring additional reporting

- of CO<sub>2</sub> from EGUs. However, facility operators must report the emissions of GHGs that are not included under §821, such as CH<sub>4</sub> and N<sub>2</sub>O.
- In addition, EPA reviewed the Inventory, which is a comprehensive top-down assessment of national greenhouses gas emissions, compiled from national energy data and other national statistics (e.g., on agriculture). To achieve the goal of comprehensive national emissions coverage, most greenhouse gas emissions in the report are calculated via activity data from national-level surveys, which are not broken down at the geographic or facility level. In contrast, the rule focuses on bottom-up data from individual facilities that exceed appropriate thresholds to provide specific data that will allow the Agency to analyze and inform future climate policy decisions.
- Other federal agencies collect some of the same supporting data that EPA is requesting as inputs to GHG emissions calculations such as fuel production. For example, mine-specific coal production data is an input to the total emission calculation and is currently reported to the Mine Safety and Health Administration, and refinery and gas liquid production data are reported to the EIA. Importers of coal and refined products may report similar data to the Department of Homeland Security/Customs and Border Protection. Where such reporting requirements already exist, the rule requires that facilities report the same data as they report to the other entities, i.e., it does not require them to alter that data for this collection. The Agency has determined that generally existing programs' data do not fit the needs for the GHG reporting rule because either industry participation is voluntary, only a relatively small number of sources report, or the scope and level of detail in the collected data differ from the rule's collection requirements.

A growing number of programs at the state, tribal, territorial, and local level require emission sources in their respective jurisdictions to monitor and report GHG emissions. To reduce burden on reporters and program agencies, the Agency will share emissions data with the exception of any confidential business information (CBI) data with relevant agencies or approved entities using, where practical, shared tools and infrastructure.

# **3(b) Public Notice Required Prior to Information Collection Request (ICR)** Submissions to OMB

As part of the Federal Register notice on the proposed regulation, EPA solicited comments on this information collection and the estimates in the proposed ICR (74 FR 16448). EPA also solicited comments on specific aspects of the information collection, as described below:

- 1) Whether the proposed collection of information is necessary for the proper performance of the functions of the Agency, including whether the information would have practical utility;
- 2) Whether the Agency's burden estimate is accurate, including the validity of the methodology and assumptions used;

- 3) How to enhance the quality, utility, and clarity of the information to be collected; and
- 4) How to minimize the burden on respondents, including use of appropriate automated electronic, mechanical, or other technological collection techniques or other forms of information technology.

No comments on the ICR for the proposed rule were received. However, EPA received 16,800 comments on the proposed rule itself, and many of these comments addressed the recordkeeping or reporting activities required by the rule and the cost associated with these activities. For example, public comments on the proposed rule suggested that EPA require retention of records for three years rather than the five years specified in the proposed rule. (In response, EPA changed the record retention requirement in the final rule from five years to three years.)

The preamble to the final rule summarizes the comments received on the proposed rule as well as EPA's responses. In addition, responses to significant comments on the proposed rule can be found in the comment response documents. Both the preamble and the comment response documents are in the docket for the rule (EPA-HQ-OAR-2008-0508).

In compliance with the Paperwork Reduction Act (44 USC 3501 *et seq.*), EPA is submitting this ICR for the final GHG Regulation to the Office of Management and Budget (OMB) for review and approval.

# **3(c) Consultations**

In developing the mandatory GHG reporting rule, EPA established several Agency workgroups to develop the reporting requirements for the GHG emitting processes within each of seven categories of processes that emit greenhouse gases. These workgroups addressed: (1) Fossil Fuel Combustion: Stationary, (2) Fossil Fuel Combustion: Mobile, (3) Fuel Suppliers, (4) Industrial Processes, (5) Industrial GHG Suppliers, (6) Fossil Fuel Fugitive Emissions, and (7) Biological Processes. An eighth workgroup developed the electronic data reporting system. The Climate Change Division within the Office of Atmospheric Programs coordinated the eight workgroups.

Prior to developing the proposed rule, each of the workgroups performed a comprehensive review of existing voluntary and mandatory GHG reporting programs, as well as guidance documents for quantifying greenhouse gas emissions from specific sources. These reviews included the following:

- International programs, including the Intergovernmental Panel on Climate Change, the EU Emissions Trading System, the Australian GHG Reporting System, and the Canadian Mandatory Greenhouse Gas Reporting Program;
- United States national programs, such as the Inventory, the §1605b program, the Acid Rain Program, and voluntary GHG partnership programs;

- State and regional GHG reporting programs in place or under development, such as The Climate Registry, the Regional Greenhouse Gas Initiative, and programs in several states including California, New Mexico, Connecticut, and New Jersey;
- Reporting protocols developed by nongovernmental organizations, such as the World Resources Institute/World Business Council for Sustainable Development; and
- Programs from industrial trade organizations, such as the American Petroleum Institute's Compendium of Greenhouse Gas Estimation Methodologies for the Oil and Gas Industry and the Cement Sustainability Initiative's CO<sub>2</sub> Accounting and Reporting Standard for the Cement Industry, developed by the World Business Council for Sustainable Development.

In reviewing these programs, the workgroups analyzed the sectors covered, reporting thresholds, monitoring or emissions estimating methods used, quality assurance measures, the point of monitoring, data input needs, and information that respondents must report or retain.

EPA also conducted a proactive communications outreach program to inform the public about the rule development effort. Prior to the proposal signature (March 10, 2009), EPA staff held more than 100 meetings with stakeholders, including:

- Trade associations and firms in potentially affected industries/sectors;
- State, local, and tribal environmental control agencies and regional air quality planning organizations;
- State and regional organizations already involved in GHG emissions reporting, such as The Climate Registry, California Air Resources Board, and the Western Climate Initiative; and
- Environmental groups and other nongovernmental organizations.

EPA also met with federal agencies, including DOE and the U.S. Department of Agriculture, which have programs relevant to GHG emissions.

On April 10, 2009 (74 FR 16448), EPA proposed the GHG reporting rule. EPA held two public hearings, on April 6 and 7, 2009, in Arlington, Virginia, and on April 16, 2009, in Sacramento, California. In addition, the Agency received approximately 16,800 written public comments. The public comment period ended on June 9, 2009.

In addition to the public hearings, EPA had an open door policy, similar to the outreach conducted during the development of the proposal. As a result, EPA has met with over 4,000 people and 135 groups since proposal signature (March 10, 2009). Details of these meetings are available in the docket (EPA-HQ-OAR-2008-0508).

#### 3(d) Effects of Less Frequent Collection

The reporting frequency for emissions data to EPA has been established to minimize the burden on owners and operators of affected facilities, while ensuring that the reporting rule collects facility-specific data of sufficient quality to achieve the Agency's objectives. For entities required to report, the rule requires annual reporting, except where existing programs must provide data on a more frequent basis. If the information collection were not carried out on this schedule, the Agency would not be able to develop an informed tracking system of trends in GHG emissions across the country. The year-by-year GHG emissions information from a broad range of industry sectors may eventually be used to inform future climate change policy decisions. The quarterly reporting required of electric generating units that are subject to the Acid Rain Program is consistent with the facilities' current reporting requirements.

#### 3(e) General Guidelines

This collection of information is consistent with all OMB guidelines under 5 CFR 1320.6. However, facilities or suppliers that have emissions or products with emission less than 25,000 metric tons  $CO_2e$  for five years in a row may cease reporting. Those that cease reporting must have records to cover those five years of emissions. EPA selected a 5-year period, instead of a shorter time frame, because it allows facilities or suppliers that consistently report less than 25,000 metric tons  $CO_2e$  to stop reporting, but avoids the situation where a facility or supplier near this level would be constantly moving in and out of the reporting program due to small variations from one year to the next. EPA believes 5 years of records for these respondents is needed to document that they meet the provisions to cease reporting and so that questions about past emission estimates can be resolved, if needed.

## **3(f) Confidentiality**

In general, emission data collected under §114 and §208 of the CAA cannot be declared CBI. However, if any CBI is reported under this GHG reporting rule, EPA would protect CBI in accordance with regulations in 40 CFR Chapter 1, part 2, subpart B. Although CBI determinations are usually made on a case-by-case basis, EPA has issued guidance on what constitutes emissions data that cannot be considered CBI (956 FR 7042 –7043, February 21, 1991).

#### **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

The respondents in this information collection include operators of facilities that must report their GHG emissions to EPA to comply with the rulemaking, as well as facilities that must determine whether the rule's reporting requirements apply to them, but are not required to report. To facilitate the analysis, EPA has divided respondents into groups that align with the source categories identified in the rule.

This section lists the industry sectors (GHG source categories) that must participate in the GHG Reporting Rule program, the data items required of program participants, and the activities in which participants must engage to collect, assess, and in some cases submit the required data items.

#### 4(a) Respondents/North American Industrial Classification Systems (NAICS) Codes

Reporting facilities include, but are not limited to, those operating one or more units that exceed the CO<sub>2</sub>e threshold for the industry sectors listed below or those in the categories in which all must report, such as petroleum refining facilities. Other facilities must calculate their emissions in order to determine whether they must report. Additionally, EPA is amending other parts of the CFR to require reporting of certain emissions information associated with mobile sources (e.g., for permit applications or emissions control certification testing procedures).

Industry sectors are listed below by their corresponding subpart of the rule and their NAICS code for reference.

Part and Subpart	NAICS code(s)
Parts 86, 87, 89, 90, 94, 600, 1033, 1039, 1042, 1045, 1048, 1051, 1054, 1064, 1065	481 Air transportation; 482 Rail transportation; 483 Water transportation; 484 Truck transportation; 485 Transit and ground passenger transportation
Part 98	
C. General Stationary Fuel Combustion Sources	Facilities operating boilers, process heaters, incinerators, turbines, and internal combustion engines: 211 Extractors of crude petroleum and natural gas; 321 Manufacturers of lumber and wood products; 322 Pulp and paper mills; 325 Chemical manufacturers; 324 Petroleum refineries, and manufacturers of coal products; 316, 326, 339 Manufacturers of rubber and miscellaneous plastic products; 331 Steel works, blast furnaces; 332 Electroplating, plating, polishing, anodizing, and coloring; 336 Manufacturers of motor vehicle parts and accessories; 221 Electric, gas, and sanitary services; 622 Health services; 611 Educational services
D. Electricity Generation	221112 Fossil-fuel fired electric generating units
E. Adipic Acid Production	325199 Adipic acid manufacturing facilities

Part and Subpart	NAICS code(s)			
F. Aluminum Production	331312 Primary Aluminum production facilities			
G. Ammonia Manufacturing	325311 Anhydrous and aqueous ammonia manufacturing facilities			
H. Cement Production	327310 Owners and operators of Portland cement manufacturing plants			
K. Ferroalloy Production	331112 Ferroalloys manufacturing facilities			
N. Glass Production	327211 Flat glass manufacturing facilities; 327213 Glass contains manufacturing facilities; 327212 Other pressed and blown glass and glassware manufacturing facilities			
O. HCFC-22 Production and HFC-23 Destruction	325120 Chlorodifluoromethane manufacturing facilities			
P. Hydrogen Production	325120 Hydrogen manufacturing facilities			
Q. Iron and Steel Production	331111 Integrated iron and steel mills, steel companies, sinter plants, blast furnaces, basic oxygen process furnace (BOPF) shops			
R. Lead Production	331419 Primary lead smelting and refining facilities; 331492 Secondary lead smelting and refining facilities			
S. Lime Manufacturing	327410 Calcium oxide, calcium hydroxide, dolomitic hydrates manufacturing facilities			
U. Miscellaneous Uses of Carbonate	Facilities included elsewhere			
V. Nitric Acid Production	325311 Nitric acid manufacturing facilities			
X. Petrochemical Production	32511 Ethylene dichloride manufacturing facilities; 325199 Acrylonitrile, ethylene oxide, methanol manufacturing facilities; 325110 Ethylene manufacturing facilities; 325182 Carbon black manufacturing facilities			
Y. Petroleum Refineries	324110 Petroleum refineries			
Z. Phosphoric Acid Production	325312 Phosphoric acid manufacturing facilities			
AA. Pulp and Paper Manufacturing	322110 Pulp mills; 322121 Paper mills; 322130 Paperboard mills			
BB. Silicon Carbide Production	327910 Silicon carbide abrasives manufacturing facilities			
CC. Soda Ash Manufacturing	325181 Alkalis and chlorine manufacturing facilities, 212391 Soda ash, natural, mining and/or beneficiation			
EE. Titanium Dioxide Production	325188 Titanium dioxide manufacturing facilities			

Part and Subpart	NAICS code(s)				
GG. Zinc Production	331419 Primary zinc refining facilities; 331492 Zinc dust reclaiming facilities, recovering from scrap and/or alloying purchased metals				
HH. Landfills	562212 Solid waste landfills; 221320 Sewage Treatment Facilities				
JJ. Manure Management	112111 Beef cattle feedlots; 112120 Dairy cattle and milk production facilities; 112210 Hog and pig farms; 112310 Chicken egg production facilities; 112330 Turkey production; 112320 Broilers and other meat type chicken production				
LL. Suppliers of Coal- based Liquid Fuels	211111 Coal liquefaction at mine sites				
MM. Suppliers of Petroleum Products	324110 Petroleum refineries				
NN. Suppliers of Natural Gas and Natural Gas Liquids	221210 Natural gas distribution facilities; 211112 Natural gas liquid extraction facilities				
OO. Suppliers of Industrial Greenhouse Gases	325120 Industrial greenhouse gas manufacturing facilities				
PP. Suppliers of Carbon Dioxide	325120 Industrial greenhouse gas manufacturing facilities				
Mobile Sources	333618 Heavy-duty, non-road, aircraft, locomotive, and marine diesel engine manufacturing; 336120 Heavy-duty vehicle manufacturing facilities; 336312 Small non-road, and marine spark-ignition engine manufacturing facilities; 336999 Personal watercraft manufacturing facilities; 336991 Motorcycle manufacturing facilities				

#### 4(b) Information Requested

#### (i) Data Items

# Reporting Requirements

The owner or operator of a facility that exceeds the threshold specific to its respective source category(ies) in 40 CFR part 98 must report emissions annually from all source categories present at the facility for which methods are specified in 40 CFR part 98, subparts D through PP. (Facilities that are already reporting quarterly for the Acid Rain Program must continue to report quarterly.) In addition, facilities that are not in the listed source categories but that emit 25,000 metric tons/yr CO<sub>2</sub>e from stationary combustion must report stationary combustion emissions annually. Respondents must comply with the following categories of requirements (if

applicable): the General Provisions applicable to all sources; stationary combustion; and requirements applicable to other specific source categories identified in subparts D through PP of the rule. In addition, vehicle and engine manufacturers subject to the requirements of CFR parts 86, 87, 89, 90, 94, 600, 1033, 1039, 1042, 1045, 1048, 1051, 1054, 1064, and 1065 must report  $CO_2$ ,  $N_2O$ , and  $CH_4$  emissions associated with the mobile sources that they produce.

The following is a summary of the information requested by source category.

**General requirements that apply to all sources.** All respondents that exceed the reporting threshold or that belong to a source category in which all respondents report must submit the following information electronically:

- 1. Facility or supplier name and physical address.
- 2. Year and months covered by the report;
- 3. Date of submittal;
- 4. For facilities, annual emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and each fluorinated GHG (as defined in §98.6) as follows:
  - a. Annual emissions (excluding biogenic CO<sub>2</sub>) aggregated for all GHG from all applicable source categories in subparts C through JJ of this part and expressed in metric tons of CO<sub>2</sub>e calculated using Equation A-1 provided in subpart A;
  - b. Annual emissions of biogenic CO<sub>2</sub> aggregated for all applicable source categories in subparts C through JJ of this part;
  - c. Annual emissions from each applicable source category in subparts C through JJ of this part, expressed in metric tons of each GHG listed as follows: i) Biogenic CO<sub>2</sub>; ii) CO<sub>2</sub> (excluding biogenic CO<sub>2</sub>); iii) CH<sub>4</sub>; iv); N<sub>2</sub>O; and v) Each fluorinated GHG (including those not listed in Table A-1 of this subpart); and
  - d. Emissions and other data for individual units, processes, activities, and operations as specified in the "Data reporting requirements" section of each applicable subpart of this part.
- 5. For suppliers, annual quantities of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and each fluorinated GHG (as defined in §98.6) that would be emitted from combustion or use of the products supplied, imported, and exported during the year. Calculate and report quantities at the following levels:
  - a. Total quantity of GHG aggregated for all GHG from all applicable supply categories in subparts KK through PP of this part and expressed in metric tons of CO<sub>2</sub>e calculated using Equation A-1 of this subpart;
  - b. Quantity of each GHG from each applicable supply category in subparts KK through PP of this part, expressed in metric tons of each GHG. For fluorinated GHG, report emissions of all fluorinated GHG, including those not listed in Table A-1 of this subpart; and
  - c. Any other data specified in the "Data reporting requirements" section of each applicable subpart of this part.
- 6. A written explanation, as required under §98.3(e), if emission calculation methodologies are changed during the reporting period.

- 7. A brief description of each "best available monitoring method" used according to paragraph (d) of this section, the parameters measured using the method, and the time period during which the "best available monitoring method" was used.
- 8. Each data element for which a missing data procedure was used according to the procedures of an applicable subpart and the number of times in the year that a missing data procedure was used for each data element.
- 9. A signed and dated certification statement provided by the designated representative of the owner or operator, according to the requirements of §98.4(e)(1).

Under 40 CFR 98.3(h), the owner or operator must submit a revised reoprt within 45 days of discovering or being notified by EPA of errors in its GHG report.

Under 40 CFR 98.4(i), the designated representative must submit the certificate of representation at least 60 days before the report deadline. The certificate of representation must include:

- 1. An identification of the facility or supplier for which the certificate of representation is submitted;
- 2. The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of the designated representative and any alternate designated representative;
- 3. A list of the owners and operators of the facility or supplier, provided that, if the list includes the operators of the facility or supplier and the owners with control of the facility or supplier, the failure to include any other owners does not make the certificate of representation incomplete;
- 4. The certification statements listed in 40 CFR 98.4(i)(4); and
- 5. The signature of the designated representative and any alternate designated representative and the dates signed.

The rule also includes notification procedures for changing a designated representative or alternate designated representative (40 CFR 98.4(g)).

Under 40 CFR 98.4(m)(2), in order to delegate his or her own authority to one or more individuals to submit an electronic submission of the GHG reports, the designated representative or alternate designated representative must submit electronically to the Administrator a notice of delegation that includes the following elements:

- 1. The name, address, e-mail address (if any), telephone number, and facsimile transmission number (if any) of such designated representative or alternate designated representative.
- 2. The name, address, e-mail address, telephone number, and facsimile transmission number (if any) of each such individual (referred to as an "agent").
- 3. For each such individual, a list of the type or types of electronic submissions under paragraph (m)(1) of this section for which authority is delegated to him or her.
- 4. For each type of electronic submission listed in accordance with clause (iii), the facility or supplier for which the electronic submission may be made.
- 5. The certification statement  $\sin 40 \text{ CFR } 98.4(m)(2)(v)(A)$ .

6. The signature of such designated representative or alternate designated representative and the date signed.

**Facilities that may discontinue reporting.** Under 98.2(i), if reported emissions are less than 25,000 metric tons CO2e per year for five consecutive years, then the owner or operator may discontinue complying with this part provided that the owner or operator submits a notification to the Administrator that announces the cessation of reporting and explains the reasons for the reduction in emissions. If reported emissions are less than 15,000 metric tons CO2e per year for three consecutive years, then the owner or operator may discontinue complying with this part provided that the owner or operator submits a notification to the Administrator that announces the cessation of reporting and explains the reasons for the reduction in emissions.

Requests for use or one or more best available monitoring methods beyond March **31, 2010.** Under 98.3(d)(2), the owner or operator may submit a request to the Administrator to use one or more best available monitoring methods beyond March 31, 2010. Requests must contain the following information:

- 1. A list of specific item of monitoring instrumentation for which the request is being made and the locations where each piece of monitoring instrumentation will be installed.
- 2. Identification of the specific rule requirements (by rule subpart, section, and paragraph numbers) for which the instrumentation is needed.
- 3. A description of the reasons why the needed equipment could not be obtained and installed before April 1, 2010.
- 4. If the reason for the extension is that the equipment cannot be purchased and delivered by April 1, 2010, include supporting documentation such as the date the monitoring equipment was ordered, investigation of alternative suppliers and the dates by which alternative vendors promised delivery, backorder notices or unexpected delays, descriptions of actions taken to expedite delivery, and the current expected date of delivery.
- 5. If the reason for the extension is that the equipment cannot be installed without a process unit shutdown, include supporting documentation demonstrating that it is not practicable to isolate the equipment and install the monitoring instrument without a full process unit shutdown. Include the date of the most recent process unit shutdown, the frequency of shutdowns for this process unit, and the date of the next planned shutdown during which the monitoring equipment can be installed. If there has been a shutdown or if there is a planned process unit shutdown between promulgation of this part and April 1, 2010, include a justification of why the equipment could not be obtained and installed during that shutdown.
- 6. A description of the specific actions the facility will take to obtain and install the equipment as soon as reasonably feasible and the expected date by which the equipment will be installed and operating.

**Stationary combustion.** Stationary combustion is a source of emissions in most of the source categories included in this rule. The rule allows users to calculate CO<sub>2</sub> emissions using one of four calculation methodologies referred to as "Tier 1" through "Tier 4"; the rule also

allows alternative methods for units that are not subject to the Acid Rain Program, but which have continuous emission monitoring systems (CEMS – a Tier 4 methodology).

In addition to the information required above, each facility with a stationary combustion unit that is subject to the requirements of 40 CFR part 98, subpart C and that uses Tier 1, 2, 3, or 4 methods must include the following information in its annual GHG emissions report (see 40 CFR 98.36(b)):

- 1. Unit ID number;
- 2. Code representing the type of unit;
- 3. Maximum rated heat input of the unit (boilers, combustion turbines, engines, and process heaters only);
- 4. Each type of fuel combusted in the unit during the report year;
- 5. The tier used to calculate the CO<sub>2</sub> emissions for each type of fuel;
- 6. For a unit that uses Tiers 1, 2, and 3, the calculated CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions for each type of fuel combusted;
- 7. For a unit that uses Tier 4, the annual CO<sub>2</sub> emissions for all fuels combined, if the unit uses CEMS to determine CO<sub>2</sub> emissions and burns fossil fuels only; the annual CO<sub>2</sub> emissions for all fuels combined and the annual CO<sub>2</sub> emissions from combustion of biomass (if the unit uses CEMS to determine CO<sub>2</sub> emissions and burns both fossil fuels and biomass); and the CH<sub>4</sub> and N<sub>2</sub>O emissions for each type of fuel combusted expressed in metric tons of each gas and in metric tons of CO<sub>2</sub>e (reporting CO<sub>2</sub> emissions by type of fuel is not required);
- 8. Calculate CO<sub>2</sub> emissions from sorbent (if any);
- 9. The total GHG emissions from the unit for the reporting year, i.e., the sum of the  $CO_2$ ,  $CH_4$ , and  $N_2O$  emissions for all fuel types, expressed in metric tons of  $CO_2e$ ; and
- 10. Customer meter number for units that combust natural gas.

There are reporting alternatives available for facilities that use one of the four tiers and that have two or more small units with a combined maximum rated heat input capacity of 250 mmBtu/hr or less; for facilities with common stack or duct configurations, if CEMS are used to continuously monitor  $CO_2$  mass emissions at the common stack or duct; and for facilities with common pipe configurations. These reporting alternatives are described in 40 CFR 98.6(c).

Facilities with stationary combustion units that are also subject to 40 CFR part 75 must provide the following information (see 40 CFR 98.36(d)(1)):

- 1. Unit ID or stack number, as they are also reported under 40 CFR 75.64;
- 2. The annual CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions at each monitoring location, in metric tons of CO<sub>2</sub>e; and
- 3. A flag to indicate that GHG emissions data were derived from CEMS measurements.

Facilities that use the alternative monitoring methods mentioned above must report the following information (see 40 CFR 98.36(d)(2)):

1. Unit ID or stack number, as they are also reported under 40 CFR 75.64;

- 2. The following information, if the unit uses the methods described in 40 CFR 98.33(a) (5)(i) or §98.33(a)(5)(ii):
  - a. Each type of fuel combusted in the unit during the reporting year;
  - b. The methodology used to calculate the CO<sub>2</sub> mass emissions for each fuel type;
  - c. A code or flag to indicate whether heat input is calculated according to 40 CFR part 75, Appendix D or 40 CFR 75.19; and
  - d. The total annual CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions at each monitored location, across all fuel types, expressed in metric tons of CO<sub>2</sub>e;
- 3. The following information, if the unit uses the methods described in 40 CFR (a)(5) (iii) to monitor heat input year-round in accordance with 40 CFR part 75:
  - a. The fuel combusted during the reporting year;
  - b. The methodology used to calculate the CO<sub>2</sub> mass emissions;
  - c. A code or flag to indicate that the heat input data is derived from CEMS measurements; and
  - d. The total annual CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions at each monitored location, expressed in metric tons of CO<sub>2</sub>e.

In addition, respondents with stationary combustion sources must report certain verification data listed in 40 CFR 98.36(e).

**Abbreviated facility reports.** Owners and operators of facilities that do not contain any of the source categories listed in Section 4(a) of this ICR, but emit more than 25,000 metric tons of  $CO_2e$  per year from stationary combustion units having an aggregate maximum rated heat input capacity of 30 mmBtu/hr or greater, have the option of submitting an abbreviated facility report for the first report due in 2011. Respondents must report this information electronically and must include the following information (40 CFR 98.3(d)(3)):

- 1. Facility name, address, latitude, longitude, and ID number;
- 2. Year and months covered by the report;
- 3. Date of submittal:
- 4. Total facility GHG emissions aggregated for all stationary fuel combustion units calculated according to any specified method and expressed in metric tons of  $CO_2$ ,  $CH_4$ ,  $N_2O$ , and  $CO_2e$ ;
- 5. Any facility operating data or process information used for the GHG emission calculations; and
- 6. A signed and dated certification statement provided by the owner or operator.

Other source categories. Facilities that contain any of the source categories listed in Section 4(a) and that exceed the threshold for any source category (or include a source category in which all facilities report) must report information specific to each source category at the facility for which methods are specified in 40 CFR part 98, subparts D through PP, in addition to the general reporting and stationary combustion requirements outlined above. Many facilities that are affected by the rule emit GHGs from multiple sources. The facility must assess every source category that could potentially apply to each when determining if a threshold has been exceeded. If any one source category exceeds the threshold, the facility must report emissions

from all source categories, including those source categories that do not exceed the applicable threshold.

The sector-specific reporting requirements are outlined in Appendix A.

Recordkeeping Requirements

**Coverage determination.** Facilities that have an aggregate maximum rated heat input capacity for stationary fuel combustion units (combined) of at least 30 mmBtu/hr must assess whether they have emissions above the threshold. Although the rule does not include explicit reporting or recordkeeping requirements for facilities that conduct this assessment and determine that they are below the threshold, this ICR assumes a first-year recordkeeping burden and cost for these facilities.

**General requirements that apply to all sources.** The owner or operator of each facility that is subject to the GHG emissions reporting requirements must keep the following records in an electronic or hard-copy format (as appropriate) for at least three years:<sup>1</sup>

- 1. A list of all units, operations, processes, and activities for which GHG emissions were calculated
- 2. The data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type, including: (i) The GHG emissions calculations and methods used; (ii) Analytical results for the development of site-specific emissions factors; (iii) The results of all required analyses for high heat value, carbon content, and other required fuel or feedstock parameters; and (iv) Any facility operating data or process information used for the GHG emission calculations.
- 3. The annual GHG reports.
- 4. Missing data computations. For each missing data event, respondents must maintain records of the duration of the event, actions taken to restore malfunctioning monitoring equipment, the cause of the event, and the actions taken to prevent or minimize occurrence in the future.
- 5. A written GHG Monitoring Plan, which must include, at a minimum, the following: (i) Identification of positions of responsibility (i.e., job titles) for collection of the emissions data; (ii) Explanation of the processes and methods used to collect the necessary data for the GHG calculations; and (iii) Description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHGs reported under this part.
- 6. The results of all required certification and quality assurance tests of continuous monitoring systems, fuel flow meters, and other instrumentation used to provide data for the GHGs reported under this part.
- 7. Maintenance records for all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHGs reported under 40 CFR part 98.

<sup>&</sup>lt;sup>1</sup> Facilities or suppliers that have emissions or products with emission less than 25,000 mtCO2e for five years in a row may cease reporting. Those that cease reporting must have records to cover those five years of emissions.

**Stationary combustion.** Stationary combustion is a source of emissions in most of the source categories included in this rule. As such, the owner or operator of a facility with a stationary combustion unit that is subject to the requirements of 40 CFR part 98, subpart C must also keep the records listed below:

Whenever company records are used in the calculation of CO<sub>2</sub> emissions, the records required must include both the company records and an explanation of how those records are used to estimate the following parameters:

- 1. Fuel consumption;
- 2. Fossil fuel consumption;
- 3. Sorbent use;
- 4. Quantity of steam generated; and
- 5. Biogenic fuel consumption.

In addition, respondents with stationary combustion sources must retain certain verification data listed in 40 CFR 98.36(e), as well as other information identified in the reporting provisions for stationary combustion (40 CFR 98.36).

**Other source categories.** Facilities that must report and that contain any of the source categories listed in Section 4(a) must also retain records for information specific to the given source category. The sector-specific recordkeeping requirements are outlined in Appendix B.

## (ii) Respondent Activities

Facilities that do not meet the applicability criteria for the source categories listed in section (4)(a) and that have an aggregate maximum rated heat input capacity of the stationary fuel combustion of at least 30 mmBtu/hr must assess whether they have stationary combustion emissions above the threshold. The rule requires facilities to follow methodologies in the rule to make a determination on whether they meet the threshold for reporting. It is assumed that a facility would utilize a fuel sampling methodology, the steps of which include regulatory review, resolving questions, developing a sampling approach, data reduction and review, and fuel sampling (1 sample). This is a one-time burden for facilities that assess whether they must report and determine that they do not meet the reporting threshold.

The owner or operator of a facility that is subject to the rule's reporting requirements must report total annual GHG emissions in metric tons of  $CO_2e$  from all the source categories at the facility. The primary tasks that reporting program respondents will perform include:

- 1. Developing appropriate monitoring plans for each affected source and each affected unit at a source, as applicable;
- 2. Operation and maintenance activities associated with the monitoring, including quality assurance activities;
- 3. Ensuring data quality, preparing annual reports of emissions data, and submitting these reports to EPA;
- 4. Potentially responding to questions or error messages from EPA; and

5. Maintaining records for a minimum of three years. In addition, respondents must purchase the necessary monitoring hardware and purchase the electronic data reporting software (or software upgrades) if they had not done so for another reporting program.

Respondents that use CEMS must also conduct tests to certify the operations of monitors, submit the results of these tests, and record emissions data (this activity generally is performed electronically).

Reports must present the annual mass GHG emissions from each source category separately. The calculations used to determine GHG emissions, the frequency at which those calculations are required, the methods used to estimate missing data, and the QA/QC requirements depend on the specific source category.

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

#### 5(a) Agency Activities

EPA Headquarters activities associated with the rule include program start-up activities to prepare for receiving the reported data. These activities include database and software design, developing guidance and training affected sources, responding to stakeholders, and communication and outreach on the rule requirements.

Once the reporting program is in place, EPA program operation activities will include monitoring and verification of emission reports, database and software maintenance, communication and outreach, and program evaluation.

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

EPA will establish a central repository of inventory data for all respondents. Respondents will report data electronically, and EPA will store the data in the database. The electronic format, which will reflect the underlying electronic data reporting system, will be developed prior to the first reporting date. By specifying in the rule text the exact information that must be reported but not specifying the exact reporting format, EPA informs reporters about exactly what information they must report and has flexibility to modify the electronic reporting format and electronic data reporting system in a timely manner based on implementation experience and new technology. EPA has used this approach successfully in existing programs, such as the Acid Rain Program and the Title VI Stratospheric Ozone Protection Program, facilitating the deployment of new reporting formats and reporting systems that take advantage of technologies such as eXtensible Markup Language (XML), and reduce the burden on reporters and the Agency. The electronic reports submitted under this rule are subject to the provisions of 40 CFR part 3, specifying EPA systems to which electronic submissions must be made and the requirements for valid electronic signatures.

The Designated Representative must use an electronic signature device (e.g., a PIN or password) to submit a report. If the Designated Representative holds an electronic signature device that is currently used for valid electronic signatures accepted under another Agency program, EPA intends to design the new reporting system to also accept valid electronic signatures executed with that device where feasible.

EPA's reporting format for a given reporting year could make use of several ID codes – unique codes for a unit or facility. To ensure proper matching between databases, e.g., EPA-assigned facility ID codes and the ORIS (DOE) ID code, and consistency from one reporting year to the next, we plan for the reporting system to provide each facility with a unique identification code to be specified by the Administrator.

The Agency plans to publish data submitted or collected under this rulemaking through EPA's Web site, reports, and other formats (e.g., XML), with the exception of any CBI data. The data could be used by EPA and other agencies, and other organizations and stakeholders for air modeling, analyzing emissions by industry sector and region, informing future climate change policy decisions, and answering questions from the public. The new system will follow Agency standards for design, security, data element and reporting format conformance, and accessibility. In designing the data base, EPA will attempt to minimize respondents' burden by integrating the new reporting requirements with existing data collection and data management systems, when feasible.

# **5(c) Small Entity Flexibility**

EPA took several steps to minimize the impacts on small entities. The Agency met several times with industry trade associations to discuss the reporting options considered and their possible impacts on small entities. EPA further minimized impacts on small entities by not requiring facilities below a certain emissions threshold to report their emissions. Where feasible, EPA also used existing GHG emissions estimation and reporting methodologies or provided simplified methodological options to reduce reporting burden. Because a potentially large number of facilities would need to calculate their emissions in order to determine whether they must report, the rule allows that any facility that with aggregate maximum rated heat input capacity of the stationary fuel combustion units less than 30 mmBtu/hr may presume it has emissions below the threshold. According to the Agency's analysis, a facility with stationary combustion units that have a maximum rated heat input capacity of less than 30 mmBtu/hr, operating full time with all types of fossil fuel, would not exceed 25,000 metric tons CO<sub>2</sub>e/yr. In addition, the rule includes a mechanism in 40 CFR 98.2 to allow facilities and suppliers that report less than 25,000 metric tons of CO<sub>2</sub>e for 5 years to cease annual reporting to EPA. If reported emissions are less than 15,000 metric tons CO2e per year for three consecutive years, then the owner or operator may discontinue reporting.

#### 5(d) Collection Schedule

Facilities must collect data and calculate emissions at varying frequencies, as described in the rule, and summarized in Appendix B. Although EPA does not explicitly require reporting or recordkeeping for facilities that are below the emission threshold, this ICR includes a one-time recordkeeping burden for facilities that must assess whether they must report based on stationary combustion activities, but determine that they do not meet the threshold for reporting. Most facilities that must meet the rule's reporting requirements must submit GHG emission reports annually. Facilities that are already monitoring and reporting emissions of CO<sub>2</sub> under the continuous emission monitoring requirements of 40 CFR part 75 to EPA on a quarterly basis continue to submit quarterly reports. As these reports are already submitted to EPA, there should be no additional burden associated with this approach. Facilities or suppliers that have emissions or products with emission less than 25,000 mtCO2e for five years in a row may cease reporting.

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

This section presents EPA's estimates of the burden and costs to respondents associated with the activities described in Section 4 as well as the federal burden hours and costs associated with the activities described in Section 5(a). EPA estimates that, over the three years covered by this request, the total respondent burden associated with this reporting will average 1.2 million hours per year and the cost to respondents of the information collection will average \$86.3 million per year.

Section 6(a) of this ICR provides estimates of burden (hours) for all respondent types. Section 6(b) contains estimates of respondent costs for the information collection. Section 6(c) summarizes federal burden and costs. Section 6(d) describes the respondent universe and the total burden and cost of this collection to respondents. Section 6(e) presents the bottom line burden and cost. The burden statement for this information collection is in Section 6(f).

#### 6(a) Estimating Respondent Burden

Respondent burden estimates are presented in Exhibit 6.1. EPA estimates that the total annual burden to all affected entities is 1,213,554 hours per year over the three years covered by this information collection. EPA also estimated the number of responses, or actions taken as a result of the rule, per respondent (facility) per year; for facilities collecting samples on a daily basis, this means a minimum of 365 responses per year. Exhibit 6.1 presents aggregate burden by sector only; for the details of burden calculations, please see Appendix C.

#### **6(b)** Estimating Respondent Costs

Costs to respondents associated with this information collection include labor costs (i.e., the cost of labor by facility staff to meet the rule's information collection requirements) and non-labor costs (e.g., the cost of purchasing and installing monitoring equipment or contractor costs associated with providing the required information).

To calculate labor costs, EPA estimated technical, managerial, clerical, and legal loaded labor rates for each industry sector using labor rates from the Bureau of Labor Statistics<sup>[1]</sup>and applying a 60% loading factor<sup>[2]</sup>; these rates vary somewhat by sector. For all subparts except JJ (Manure Management), the labor rates are: \$88.79 for electricity managers; \$101.31 for refinery managers, \$71.03 for industrial managers; \$60.84 for electricity engineers/technicians, \$63.89 for Refinery Engineers/Technicians, and \$55.20 for Industrial Engineers/Technicians; \$29.65 for clerical staff, and \$101.00 for legal staff. For subpart JJ, Manure Management, labor is \$49.53 for the farm owner or designee and \$16.12 for a farm worker. Non-labor costs (capital and O&M) for individual sectors are presented in Appendix C.

EPA estimates that the total annual cost to all affected non-federal entities is \$86.3 million over the three years covered by this information collection. Exhibit 6.1 presents aggregate costs by sector only; for the details of EPA's cost calculations, please see Appendix C.

<sup>&</sup>lt;sup>[1]</sup> These rates reflect adjustments of the manufacturing sector's average productivity increase of 3.7% per year for 6 quarters between 2006 Q2 and 2007 Q4, based on the estimate released by the Bureau of Labor Statistics in March 2008.

<sup>&</sup>lt;sup>[2]</sup> The ICR Handbook (November 2005) recommends using a multiplier of 1.6 to account for benefits and overhead related to government wages; this is considered a conservative estimate (potentially high) for the private sector.

Exhibit 6.1 Annual Average Respondent Burden and Cost For the GHG Reporting Rule (\$K)

Source Category	No. Respond- ents	Resp- onses/ Respon- dent	Total Resp- onses	Average Burden per Response (hrs)	Total Burden (hrs)	Total Labor Cost (\$K)	Capital Cost (\$K)	O&M Cost (\$K)	Total Cost (\$K)
Coverage Determination	6,616	1	6,616	13.0	86,006	\$4,748	\$0	\$992	\$5,740
C. Stationary Combustion (general unspecified)	3,000	47	141,234	2.3	324,765	\$17,916	\$1,297	\$3,760	\$22,973
D. Electricity Generation	1,092	3	3,231	18.1	58,537	\$3,231	\$0	\$0	\$3,231
E. Adipic Acid Prod.	4	23	92	9.2	850	\$47	\$0	\$34	\$81
F. Aluminum Production	14	9	126	28.5	3,595	\$215	\$0	\$3	\$218
G. Ammonia Manufacturing	23	102	2,346	1.2	2,840	\$159	\$1	\$139	\$299
H. Cement Production	107	366	39,184	1.1	42,234	\$2,361	\$596	\$2,073	\$5,030
K. Ferroalloy Production	9	93	838	1.0	867	\$48	\$0	\$16	\$64
N. Glass Production	55	97	5,317	1.0	5,167	\$289	\$0	\$65	\$354
O. HCFC-22 Production and HFC-23 Destruction	3	86	258	1.8	459	\$23	<b>\$</b> 0	\$0	\$23
P. Hydrogen Production	41	18	729	5.0	3,612	\$200	\$0	\$86	\$286
Q. Iron and Steel Production	121	86	10,406	4.4	45,729	\$2,269	\$0	\$273	\$2,541
R. Lead Production	13	97	1,257	1.1	1,345	\$75	\$0	\$22	\$97
S. Lime Manufacturing	89	540	48,030	0.6	29,444	\$1,628	\$536	\$1,623	\$3,787
V. Nitric Acid Production	45	47	2,130	4.2	9,040	\$524	\$24	\$243	\$791
X. Petrochemical Prod.	80	86	6,880	2.6	18,105	\$1,083	\$0	\$784	\$1,867
Y. Petroleum Refineries	150	86	12,900	5.4	69,861	\$4,348	\$178	\$230	\$4,755
Z. Phosphoric Acid Prod	14	540	7,555	0.6	4,632	\$256	\$84	\$255	\$596
AA. Pulp & Paper Mnfctrng	425	86	36,550	1.1	40,558	\$2,222	\$6,261	\$158	\$8,640
BB. Silicon Carbide Production	1	31	31	5.1	159	\$9	\$0	\$0	\$9
CC. Soda Ash Manufacturing EE. Titanium Dioxide	5	87	435	2.7	1,191	\$68	\$0	\$9	\$77
Production	8	87	696	1.9	1,300	\$72	\$0	\$3	\$76
GG. Zinc Production	5	103	515	1.3	654	\$36	\$1	\$5	\$42
HH. Landfills	2,524	86	217,064	0.0	136,583	\$7,330	\$139	\$267	\$7,736
JJ. Manure Management	107	85	9,152	0.5	5,003	\$296	\$1	\$0	\$297
LL. Suppliers of Coal-based Liquid Fuels, MM. Suppliers of Petrol. Prod.	315	93	29,154	0.0	73,347	\$1,931	\$0	\$0	\$1,931
NN. Supplies of Nat Gas and Nat Gas Liquids OO. Suppliers of Industrial	1,502	69	103,802	0.0	97,210	\$5,599	\$0	\$0	\$5,599
GHG	167	9	1,503	0.0	9,203	\$511	\$0	\$0	\$511
PP. Suppliers of CO2	13	30	390	0.0	579	\$32	<b>\$</b> 0	\$0	\$32
Mobile Sources	317	1	328	428.9	140,680	\$8,605	\$0	\$0	\$8,605
TOTAL	16,725	Varies	688,748	Varies	1,213,55 4	\$66,130	\$9,118	\$11,039	\$86,287

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

This section describes the burden and cost to the federal government associated with this information collection. Federal activities under this information collection include EPA Headquarters oversight of the reporting program and required reporting by federally owned GHG generating facilities.

#### EPA burden and cost

EPA activities associated with the mandatory GHG reporting rule include Headquarters oversight and implementation of the reporting program, e.g., monitoring and verification of emission reports, database and software maintenance, communication and outreach, and program evaluation. EPA estimates that Headquarters will devote up to 30 full time equivalents (FTEs), or 62,400 hours to these activities.

To develop EPA labor costs, EPA estimates the average hourly labor rate for salary and overhead and benefits for Agency staff to be \$50.14. To derive this figure, EPA multiplied the hourly compensation at GS-12, Step 5 on the 2008 GS pay scale (\$31.34) by the standard government benefits multiplication factor of 1.6 to account for overhead and benefits.

In addition to the labor cost, EPA will incur a cost of approximately \$10.0 million in each of the first three years of the information collection for database and software design, developing guidance, training, responding to stakeholders, communication and outreach, and contractor support and data base maintenance as well as \$7 million per year for third-party verification.

#### Burden and cost for federal facilities covered by the rule

Federally owned stationary combustion facilities that exceed the CO<sub>2</sub>e threshold for this industry sector must report their GHG emissions. EPA calculated the reporting burden and cost for these facilities in the same manner as it did for other reporting facilities. EPA estimates that the federal burden for these facilities is approximately 870 hours, for an annual total cost of \$48,000. Similarly, the federal government must report on behalf of 27 federally owned municipal solid waste (MSW) facilities for which CH<sub>4</sub> emissions exceed the CO<sub>2</sub>e threshold. The Agency estimates that the government will incur 1,555 hours of burden per year for these facilities and nonlabor costs of \$6,620, for an annual total cost of \$95,554.

Exhibit 6.2 presents the annual burden and cost for federal facilities that must comply with the rule.

**Exhibit 6.2 Annual Agency Burden and Cost** 

Information Collection Activity	Annual Responses	Total Annual Burden	Labor Cost	Non-Labor Cost	Total Annual Cost
EPA: Program implementation, database management, verification activities.	1	62,400	3,128,736	13,871,264	17,000,000
D. Flootricity Comparation	10	070	<b>#</b> 40,000	Φ0	<b>\$40,000</b>
D. Electricity Generation	16	870	\$48,000	\$0	\$48,000
HH. Landfills	27	1,555	\$88,934	\$6,620	\$95,554
TOTAL	44	64,824	\$3,265,670	\$13,877,884	\$17,143,554

Totals may not add due to independent rounding.

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

The number of respondents in each sector that will perform the required activities under this information collection is presented in Exhibit 6.1. The required activities depend on whether the facility must report its GHG emissions and on the applicable sector-specific reporting requirements. These activities are described in Section 4(b) of this ICR.

#### **6(e) Bottom Line Burden Hours and Costs**

The bottom line burden hours and costs are shown in Exhibit 6.3.

**Exhibit 6.3 Bottom Line Annual Burden and Cost** 

Number of Respondents	16,725			From Exhibit 6.1
Total Annual Responses	688,748			From Exhibit 6.1
Number of Responses per Respondent	41	=	688,748 16,725	Total annual responses from above   Total respondents from above
Total Respondent Hours	1,213,554		,	From Exhibit 6.1
Hours per Response	1.76	=	1,213,554 688,748	Total annual hours from above ÷ Total responses from above
Annual O&M and Capital Cost	\$20,156,433			From Exhibit 6.1
Total Respondent Cost (labor + non)	\$86,286,807			From Exhibit 6.1
Total Hours (Respondents and agency)	1,278,378	=	1,213,554 64,824	Total respondent hours from above  +  Total EPA hours (Exhibit 6.2)
Total Cost (Respondents plus Agency)	\$103,430,36 0	=	\$86,286,807 \$17,143,554	Total respondent cost from above + Total EPA cost (Exhibit 6.2)

Note: Detail may not add exactly to total due to independent rounding

#### **6(f) Burden Statement**

The respondent reporting burden for this collection of information is estimated to average 1,213,554 hours per year for a three year period, including a first year where initial and capital costs are anticipated, and two subsequent years in which identical annual costs are anticipated. The average annual burden to EPA for this period is estimated to be 62,400 hours for oversight activities and 2,424 hours (869.6 + 1554.5) for other federal facilities that must comply with the rule. The annual public reporting and recordkeeping burden for this collection of information is estimated to average 1.76 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to 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.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2008-0508, which is available for online viewing at http://www.regulations.gov, or in person viewing at the Air and Radiation docket in the EPA Docket Center (EPA/DC), EPA 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 and Radiation docket is (202) 566-1742. An electronic version of the public docket is available at http://www.regulations.gov. This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in 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-2008-0508 and OMB Control Number 2060-NEW on any correspondence.