

**SUPPORTING STATEMENT  
ENVIRONMENTAL PROTECTION AGENCY**

Greenhouse Gas Reporting Program (Revisions to Reporting and Recordkeeping Requirements, and Proposed Confidentiality Determinations Proposed Rule)

**1. IDENTIFICATION OF THE INFORMATION COLLECTION**

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

Greenhouse Gas Reporting Program (Revisions to Reporting and Recordkeeping Requirements, and Proposed Confidentiality Determinations Proposed Rule); OMB control number 2060-0629; ICR number 2300.12.

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

This supporting statement addresses information collection activities that would be imposed by these proposed revisions to the greenhouse gas reporting rule (40 CFR part 98; henceforth referred to as Part 98), finalized by EPA on October 30, 2009 (74 FR 56260). Part 98, which became effective on December 29, 2009, requires that certain facilities and suppliers emitting above certain threshold levels of carbon dioxide (CO<sub>2</sub>) equivalent (CO<sub>2</sub>e) monitor and report emissions of greenhouse gases (GHGs). These proposed revisions address how these emissions are reported and recorded.

In a July 7, 2010 action, the EPA proposed that data elements categorized as "inputs to emission equations" are emission data. The CAA precludes "emission data" from being treated as confidential. Due to stakeholder concerns regarding potential competitive harm that would result from public release of these data elements, EPA deferred reporting of these data

elements (see August 25, 2011 final action, 76 FR 53057) to allow EPA time to complete an evaluation of the potential impact from the public release of these data elements (see 76 FR 53060). Reporting of certain of these data elements was deferred to March 31, 2013, and reporting of the remainder of these data elements was deferred to March 31, 2015.

Based on its evaluation of the data elements for which reporting was deferred to March 31, 2015 (henceforth referred to as “inputs to equations” data elements)<sup>1</sup>, EPA is proposing amendments to reporting and recordkeeping requirements for reporters subject to 24 subparts that require reporting of these inputs to emission equations. These revisions include:

- For reporters subject to 24 subparts that use “inputs to equations” data elements to calculate reported GHGs, replacing current reporting and recordkeeping requirements (previously included in an information collection request approved by OMB) with new requirements, as follows:<sup>2</sup>
  - o Replacing the requirement to report “inputs to equations” data elements via the web-based Electronic Greenhouse Gas Reporting Tool (e-GGRT) (i.e., entering these data into e-GGRT), and, instead, requiring that these data be entered into an inputs verification tool<sup>3</sup>

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<sup>1</sup> Using the same evaluation procedures, we evaluated all data elements for which reporting was deferred to March 31, 2013 (Table A-6 to Part 98) and took no further action. As a result, applicable facilities were required to report these data by April 1, 2013.

<sup>2</sup> Stationary fuel combustion sources subject to subpart C (e.g., individual units, aggregations of units, common pipes, or common stacks) are not affected by the proposed amendments if they meet both of the following criteria: (1) the stationary fuel combustion source contains at least one combustion unit connected to a fuel-fired electric generator that has been granted access by the Public Utilities Commission to deliver power to the local or regional electric power grid (excluding generators connected to combustion units subject to subpart D of Part 98); and (2) the stationary fuel combustion source is located at a facility for which the sum of the nameplate capacities for all such electric generators is greater than or equal to 1 megawatt electric output. Refer to Section III.A.3 of this preamble for a discussion of the EPA’s rationale for proposing that combustion units meeting these criteria not be affected by the proposed amendments.

<sup>3</sup> All data reported in the annual report via e-GGRT are retained in e-GGRT. Data entered into the inputs verification tool would not be reported (or otherwise accessible) to EPA. The tool would use entered data to conduct electronic verification of reported data and generate a verification summary made available to EPA for verification purposes. All “inputs to equations”

provided in e-GGRT. This proposed amendment would not apply to reporters for any reported GHG for which the reporter uses a CEMS or an EPA-approved alternative method (as allowed under sections 98.33(a)(5), 98.53(a)(2), and 98.223(a)(2) of Part 98) to calculate the reported GHG value.

- o Regarding the current requirement that reporters keep records of these “inputs to equations” data elements, changing the format of these records to be a file generated by the inputs verification tool, which lists these entered data. The current requirement is to maintain these records in any format allowed under Subpart A of Part 98.
- o Lengthening the record retention period from three to five years for all records maintained under Part 98.
- Requiring reporting of 26 new data elements.

These activities would enable EPA to verify emissions and ensure compliance with the GHGRP.

Compared with the estimated respondent burden identified in the information collection for the GHGRP currently approved by OMB, this proposed information collection would increase the estimated respondent burden by 10,786 hours and \$620,140. This increase reflects the additional costs incurred for: (1) 5,736 respondents from the one-time activity of training to use the inputs verification tool and (2) 781 respondents from the on-going activity of reporting the new data elements.

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

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

The EPA is proposing this information collection under its existing CAA authority provided in CAA section 114. As stated in the October 30, 2009 preamble to Part 98 (74 FR 56260), CAA section 114(a)(1) provides EPA broad authority to require the

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data elements not reported in the annual report would be kept on record by reporters. Refer to section 5(b) for further discussion of the proposed tool.

information proposed to be gathered by Part 98 because such data would inform and are relevant to EPA's carrying out a wide variety of CAA provisions. Additionally, signed into law on December 26, 2007, the FY2008 Consolidated 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."

Sections 114 and 208 of the Clean Air Act (CAA) provide EPA authority to require the information mandated by the GHGRP because such data will inform and are relevant to future policy decisions. CAA section 114(a)(1) authorizes the Administrator to require emissions sources, persons subject to the CAA, or persons whom the Administrator believes may have necessary information to report emissions and provide such other information the Administrator requests for the purposes of carrying out any provision of the CAA. For these reasons, the Administrator may request that a person, on a one-time, periodic or continuous basis, establish and maintain records, make reports, and, among other things, provide such information the Administrator may reasonably require. Because EPA does not yet know the specific policies that will be adopted, the data reported under the GHGRP is of sufficient quality to inform policy and program development.

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

This information collection collects information from facilities that directly emit GHGs and from suppliers of products that release GHGs if combusted, oxidized, or used. The

comprehensive GHG data reported directly from large facilities and suppliers across the country are now easily accessible to the public at: <http://ghgdata.epa.gov/ghgp/main.do>. Reporting entities use uniform methods for estimating emissions, which enables data to be compared and analyzed. EPA's online data publication tool allows users to view and sort GHG data for calendar year 2010 from over 6,000 entities in a variety of ways, including by location, industrial sector, and the type of GHG emitted.

Data collection in the GHGRP complements the Inventory of U.S. Greenhouse Gas Emissions and Sinks (Inventory) and can help EPA transition to use of the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories.

Transparent, public data on emissions allows for accountability of polluters to the public stakeholders who bear the cost of the pollution. This data resource provides a critical tool for communities to identify nearby sources of GHGs and provide information to state and local governments.

The standardization of GHG data provides businesses with the necessary information to benchmark themselves against similar facilities, better understand their relative standing within their industry, and achieve and disseminate their environmental achievements. Businesses and other innovators can use the data to determine their GHG footprints, find cost- and fuel-saving efficiencies that reduce greenhouse gas emissions (e.g., through energy audits or other forms of assistance), and foster technologies to protect public health and the environment.

The facility-specific GHG emissions data improve the understanding of the factors that influence GHG emission rates as well as the actions that facilities take to reduce emissions. The facility-based data can be aggregated to the corporate level in

order to track emission trends from industries, within industries, and across industries over time, particularly in response to policies and potential regulations.

Information collected from the oil and gas facilities (in subpart W) and CO<sub>2</sub> injection facilities (in subparts RR and UU) allows EPA to gain a better understanding of the entire CO<sub>2</sub> capture and sequestration (CCS) system.

Information collected from fluorocarbons allows EPA to assess the overall volume and importance of compounds for which global warming potentials (GWPs) have not been evaluated and help identify which compounds should have their GWPs evaluated first. In addition, historical reports in tons of chemical can be converted into CO<sub>2</sub>e, provided GWPs have been identified for these compounds. Without this comprehensive reporting requirement, such historical information could be lost.

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

### **3. NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA**

#### **3(a) Nonduplication**

The new information proposed to be collected under the proposed revisions are 26 new data elements affecting 10 subparts of Part 98 (refer to section 4(b) for a list of these data elements). These proposed new data elements consist primarily of quantities that provide information on the activity level at the facility, emission factors used, characteristics of carbon-containing streams, and other process information that would

provide key information for verification, including confirming that emissions are appropriate for a given activity-level and estimating expected emissions based on data provided. These proposed new reporting elements, described above, are the same types of industry data currently collected under the GHGRP. EPA previously evaluated these types of industry data currently collected under Part 98, and concluded that they do not duplicate other information collections, as described below. This conclusion, as described below, applies to the proposed new data elements as well.

In developing the GHGRP, EPA reviewed monitoring methods, including:

- Federal programs within the United States, such as the Inventory, the U.S. Department of Energy's (DOE's) Energy Information Administration's (EIA's) 1605b program, the Acid Rain Program, EPA Natural Gas STAR Program, and voluntary GHG partnership programs;
- State and regional GHG reporting programs, such as The Climate Registry, the Regional Greenhouse Gas Initiative, the Western Regional Air Partnership, 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 Interstate Natural Gas Association of America's GHG Emission Estimation Guidelines, the American Petroleum Institute's Compendium of GHG Estimation Methodologies for the Oil and Gas Industry, and the World Business Council for Sustainable Development's Cement Sustainability Initiative's CO<sub>2</sub> Accounting and Reporting Standard for the Cement Industry.

These programs led the way in reporting of GHG emissions before the federal government acted and assisted in quantifying

the GHG reductions achieved by various policies. Many of these programs collect different or additional data as compared to the GHGRP and this proposal. For example, state programs may include different data elements to support other programs (e.g., offsets). While some programs collect similar information on GHG emissions, the Agency has determined that the GHGRP supplements and complements, rather than duplicates, existing programs' data. Further, EPA has made significant efforts over the past four years to facilitate the reporting in the event a single entity has to report both the federal and state level. For example, EPA has supported efforts by the California Air Resources Board to harmonize the reporting of information under California's Global Warming Solutions Act, AB32 with EPA's GHGRP. The product of the collaboration is referred to as California Electronic Greenhouse Gas Reporting Tool, or Cal e-GGRT.

Documentation of EPA's review of GHG monitoring protocols used by federal and state voluntary and mandatory GHG programs as well as GHG reporting rules can be found in the docket at EPA-HQ-OAR-2008-0508-056. For further discussion on the relationship of the GHGRP to other programs, please refer to the preambles of each of the GHGRP rulemakings, the June 6, 2008 memorandum entitled Review of Existing Programs (which can be found in the docket at EPA-HQ-OAR-2008-0508-0052), and the January 27, 2009 memorandum entitled Review of Existing State Greenhouse Gas Reporting Rules (which can be found in the docket at EPA-HQ-OAR-2008-0508-0054). Some GHG programs are described below:

- A number of EPA's voluntary partnership programs include a GHG emissions and/or reductions reporting component (e.g., Natural Gas STAR program, etc.). However, the GHGRP has much broader coverage than the voluntary programs and therefore helps EPA learn more about emissions from facilities not included in current programs.



- EPA reviewed the Inventory, which is an annual comprehensive top-down assessment of national greenhouses gas emissions. While the Inventory is generally compiled from national surveys (i.e., not broken down at the geographic or facility level), the GHGRP focuses on bottom-up data from individual facilities that exceed appropriate thresholds. The bottom-up approach to data collection in the GHGRP can help reduce uncertainty in emissions estimates for specific industries, and more broadly, helps EPA transition to use of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, which will be required to meet international reporting obligations under the United Nations Framework Convention on Climate Change in the near future.

As noted in the ICR for the 2009 GHG Reporting Rule, a 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 plans to share reported data, with the exception of any information determined to be CBI, with relevant agencies or approved entities using, where practical, shared tools, and infrastructure.

Based on this evaluation, this information collection request does not duplicate other information collections.

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

A public notice of this collection is provided in the Federal Register notice of proposed rulemaking for the Revisions to Reporting and Recordkeeping Requirements, and Proposed Confidentiality Determinations under the Greenhouse Gas Reporting Program.

### **3(c) Consultations**

In 2010, the EPA proposed confidentiality determinations for the majority of data elements required to be reported under the GHGRP, as well as for the majority of source categories covered by the program. In a July 7, 2010 action, the EPA proposed that data elements categorized as "inputs to equations" data elements are emission data. The CAA precludes "emission data" from being treated as confidential. As further discussed in section 1(b), based on subsequent industry concerns regarding the potential release of data elements categorized as "inputs to equations" data elements, EPA deferred reporting of these data elements to allow EPA to complete its evaluation of the potential impact from the public release of these data elements and, if appropriate, to propose amendments to Part 98 (see 75 FR 81355, December 27, 2010). After having completing its evaluation of the potential impact, EPA is proposing the amendments summarized in section 1(b) to address this issue, while allowing EPA to verify emissions and ensure compliance with the program.

The public will be provided an opportunity during the comment period for the proposed rulemaking to review and comment on this burden estimate.

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

The frequency for reporting emissions information to EPA under the GHGRP was originally established to minimize the burden on owners and operators of affected facilities, while ensuring that the GHGRP collects facility-specific data of sufficient quality to achieve the Agency's objectives. The GHGRP requires annual reporting, except for a limited number of facilities that are already subject to more frequent reporting requirements. This

reporting frequency remains the same in these proposed revisions to Part 98.

Annual reporting will ensure that data are verified and made available to the public, as authorized by the CAA, and use the data for the purposes described in section 2(b). 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.

### **3(e) General Guidelines**

None of the guidelines in 5 CFR 1320.5 would be exceeded, with the exception of requiring records to be maintained for more than three years. EPA is proposing to require that reporters using the proposed inputs verification tool retain records for five years. Given the proposed verification approach described in Section 1(b), EPA considered whether the current record retention period and record format requirements would be sufficient to allow EPA to perform data verification. We considered:

- The time we would need to follow up with reporters to further verify reported GHG emissions.
- The desirability of retaining multiple years of data records to allow for appropriate assessment of compliance and for analyses of trends for policy analysis purposes.
- The format of records, and whether the current format would be adequate for our verification process. For example, we considered whether records of "inputs to equations" data elements contained in multiple separate documents (as currently allowed under Part 98) would allow an EPA inspector to efficiently analyze the consistency of the data elements and use the data elements to perform calculations to confirm reported GHG emissions.

Because there may be more direct follow-up activities under this alternative verification approach, we are proposing to

extend the record retention period from 3 to 5 years. We have determined that 5 years is reasonable given the large number of reporters under the subparts identified in Table 2 of this preamble (over 2,000 facilities) and the likely increase in follow-up activities. It would be important that relevant records are available to the EPA for follow-up activities with facilities, including on-site audits if necessary, regarding potential errors, discrepancies, or questions. Should an EPA inspector visit a facility, it would be important to be able to examine not only the current year's records but those from previous years as well, because previous years' data would provide year-to-year comparisons, which are useful for verifying the current year's data. A 5-year record retention period would ensure the availability of relevant records for the follow-up activities described above.

### **3(f) Confidentiality**

Data collected under the GHGRP must be made available to the public unless the data qualify for CBI treatment under the CAA and EPA regulations. The CAA precludes "emission data" from being treated as confidential. For data reported under the CAA that are not emission data, EPA typically makes CBI determinations under 40 CFR 2.301 on a case-by-case basis. Due to the large number of entities reporting under the GHGRP and the large number of data reporting elements, EPA previously concluded that case-by-case determinations would not result in timely release of emission and other non-CBI data (see proposed CBI rule, July 7, 2010, 75 FR 39094). Therefore, EPA has published CBI determinations for most information reported under the GHGRP (May 26, 2011, 76 FR 30782; August 13, 2012, 77 FR 48072; August 24, 2012, 77 FR 51477; and in this proposed rule). These CBI determinations specify which data reporting elements in Part 98: (1) are CBI, (2) are non-CBI,

and (3) are emission data (i.e., ineligible for CBI protection). All data determined by EPA to be CBI are safeguarded in accordance with regulations in 40 CFR Chapter 1, Part 2, Subpart B.

### **3(g) Sensitive Questions**

The revisions to reporting or recordkeeping requirements in the proposed revisions to Part 98 do not include sensitive questions.

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

The respondents in this information collection include owners and operators of facilities that must report "inputs to equations" data elements for which reporting is deferred to 2015 to comply with Part 98. To facilitate the analysis, EPA has divided respondents into groups that align with the source categories identified in Part 98. These industry sectors (i.e., GHGRP subparts) participating in this information collection are listed in subsection 4(a). Additionally this section provides the data elements required of program participants and the activities in which participants must engage to collect, assess, calculate, and in some cases submit the required data elements.

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

The proposed revisions to Part 98 affect facilities subject to the subparts (i.e., industry sectors) listed in the following table. Reporting facilities include, but are not limited to: (1) those operating one or more units that exceed the CO<sub>2</sub>e threshold for certain industry sectors listed below (and listed in Table A-3 of 40 CFR 98.2(a)(1)), and (2) those included in certain industry sectors (listed below) for which all facilities must

report, such as petroleum refineries. Industry sectors are listed by the corresponding subpart of Part 98 and NAICS code for reference. The NAICS codes are not exhaustive, but rather provide a list of facilities and suppliers likely to be affected.

<b>Part and Subpart</b>	<b>NAICS code(s)</b>
<b>40 CFR Part 98</b>	
C. General Stationary Fuel Combustion Sources	Facilities operating boilers, process heaters, incinerators, turbines, and internal combustion engines; 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
E. Adipic Acid Production	325199 Adipic acid manufacturing facilities
F. Aluminum Production	331312 Primary Aluminum production facilities
G. Ammonia Manufacturing	325311 Anhydrous and aqueous ammonia manufacturing facilities
H. Cement Production	327310 Portland Cement manufacturing plants
K. Ferroalloy Production	331112 Ferroalloys manufacturing facilities
L. Fluorinated GHG Production	325120 Industrial gases manufacturing facilities
N. Glass Production	327211 Flat glass manufacturing facilities; 327213 Glass container 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

<b>Part and Subpart</b>	<b>NAICS code(s)</b>
W. Petroleum and Natural Gas Systems <sup>1</sup>	Pipeline transportation of natural gas, natural gas distribution facilities, extractors of crude petroleum and natural gas, natural gas liquid extraction 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
GG. Zinc Production	331419 Primary zinc refining facilities; 331492 Zinc dust reclaiming facilities, recovering from scrap and/or alloying purchased metals
II. Industrial Wastewater Treatment <sup>1</sup>	322110 Pulp mills; 322121 Paper mills; 322122 Newsprint mills; 322130 Paperboard mills; 311611 Meat processing facilities; 311411 Frozen fruit, juice, and vegetable manufacturing facilities; 311421 Fruit and vegetable canning facilities; 325193 Ethanol manufacturing facilities; 324110 Petroleum refineries

<sup>1</sup> The EPA is not proposing amendments related to these categories; however, these categories were evaluated in the EPA's analysis of the potential impact from the release of inputs to emission equations for which reporting was deferred to March 31, 2015. Refer to Section 1.B of this preamble for further discussion of this evaluation.

#### 4(b) Information Requested

(i) Data Items. EPA is proposing that 26 new data elements be reported. The following table specifies each new data element that would be reported, by subpart:

<b>Subpart</b>	<b>Subpart Name</b>	<b>New Data Element Description</b>
E	Adipic Acid Production	Annual quantity of cyclohexane fed to all production lines (metric tons).
		Annual percent N <sub>2</sub> O emission reduction for all production units combined.
G	Ammonia Production	Annual ammonia production (metric tons).
		Annual methanol production (metric tons), if this

Subpart	Subpart Name	New Data Element Description
		quantity is not reported under subpart X of 40 CFR part 98.
H	Cement Production	Annual clinker production (metric tons).
		Annual average clinker CO <sub>2</sub> emission factor for the facility, averaged across all kilns (metric tons CO <sub>2</sub> /metric ton clinker produced).
		Annual average cement kiln dust (CKD) CO <sub>2</sub> emission factor for the facility, averaged across all kilns (metric tons CO <sub>2</sub> /metric ton CKD produced).
P	Hydrogen Production	Name and annual quantity (metric tons) of each carbon-containing fuel and feedstock.
		Annual methanol production (metric tons), if this quantity is not reported under subpart X of 40 CFR part 98.
Q	Iron and Steel Production	If you use the carbon mass balance method in §98.173(b)(1) to determine CO <sub>2</sub> emissions: The annual mass (metric tons) of all gaseous, liquid, and solid fuels (combined) used in process units specified in Equations Q-1 through Q-7 of 40 CFR part 98, calculated as specified in a proposed new Equation Q-9 in the proposed rule amendments. Do not include fuel used in a stationary combustion unit where emissions are reported under subpart C of this part.
		If you use the carbon mass balance method in §98.173(b)(1) to determine CO <sub>2</sub> emissions: The annual mass (metric tons) of all non-fuel material inputs (combined) specified in Equations Q-1 through Q-7 of 40 CFR part 98, calculated as specified in a proposed new Equation Q-10 in the proposed rule amendments.
		If you use the carbon mass balance method in §98.173(b)(1) to determine CO <sub>2</sub> emissions: The annual mass (metric tons) of all solid and liquid products and byproducts (combined) specified in Equations Q-1 through Q-7 of 40 CFR part 98, calculated as specified in a proposed new Equation Q-11 in the proposed rule amendments.
		If you use the carbon mass balance method in §98.173(b)(1) to determine CO <sub>2</sub> emissions: The weighted average carbon content of all gaseous, liquid, and solid fuels (combined) included in proposed new Equation Q-9, calculated as specified in a proposed new Equation Q-12 in the proposed rule amendments.
		If you use the carbon mass balance method in §98.173(b)(1) to determine CO <sub>2</sub> emissions: The weighted average carbon content of all non-fuel inputs to all furnaces (combined) included in proposed new Equation Q-10, calculated as specified in a proposed new Equation Q-13 in the proposed rule amendments.
		If you use the carbon mass balance method in §98.173(b)(1) to determine CO <sub>2</sub> emissions: The



Subpart	Subpart Name	New Data Element Description
		weighted average carbon content of all solid and liquid products and byproducts from all furnaces (combined) included in a proposed new Equation Q-11 in the proposed rule amendments, calculated as specified in new Equation Q-14.
S	Lime Manufacturing	Annual quantity (metric tons) of lime product sold, by type.
V	Nitric Acid Production	Annual percent N <sub>2</sub> O emission reduction for all production units combined.
X	Petrochemical Production	If using the mass balance method or CEMS method to calculate GHG emissions: Name and annual quantity (in metric tons) of each carbon-containing feedstock.
		If using the mass balance method or CEMS method to calculate GHG emissions: Name and annual quantity (in metric tons) of each carbon-containing co-product.
Y	Petroleum Refineries	Annual quantity of flare gas combusted (in MMscf per year) (only when using Equation Y-3).
		Annual average molecular weight of flare gas combusted (in mmBtu per MMscf) (only when using Equation Y-3).
		Annual average carbon content of flare gas combusted (expressed as a decimal fraction)(only when using Equation Y-3).
AA	Pulp and Paper Manufacturing	For each pulp mill lime kiln: Quantity of calcium oxide (CaO) produced (metric tons).
		For each pulp mill lime kiln: Percent of annual heat input, individually for each fossil fuel type.
		For each chemical recovery furnace and chemical recovery combustion unit for which you are not using Equation C-2c to calculate CO <sub>2</sub> emissions: Annual mass of steam generated (lb steam), individually for each fossil fuel type and for spent liquor solids.
		For each chemical recovery furnace and chemical recovery combustion unit for which you are not using Equation C-2c to calculate CO <sub>2</sub> emissions: Ratio of the unit's maximum rated heat input capacity to its design rated steam output capacity (mmBtu/lb steam), individually for each fossil fuel type and for spent liquor solids.

Additionally, for certain "inputs to equations" data elements already included in the GHGRP (i.e., already included in the information collection request previously approved by OMB for Part 98), EPA is proposing to change the current recordkeeping and reporting methods used by respondents. These proposed

revisions do not result in a change in the data elements entered by respondents into EPA's e-GGRT system, but rather in the way that the data are received and used by the e-GGRT system. Refer to section 4(b)(ii) for a discussion of changes in this required activity. Refer to section 5(b) for more information about EPA's e-GGRT system. The current requirement to maintain records of these data elements in any format selected by reporters would be replaced with a requirement to maintain an electronic or hard copy of a file generated by the inputs verification tool, which lists the data elements entered into the tool. For any reporter subject to using the inputs verification tool, the retention period for maintaining all Part 98 records would be extended from three to five years. Refer to section 3(e) for EPA's justification for this revision to the record retention period.

(ii) Respondent Activities. Respondent activities associated with each required data element specified in section 4(b)(i) are identified below. Those respondent activities that would result in additional burden are also specified in Table 1 of Attachment 1.

Reporting Proposed New Data Elements. For each of the 26 new data elements required to be reported, respondents would be required to calculate the data element using readily available data, and submit the value via e-GGRT as part of the annual report currently required under Part 98.

Training with Proposed Verification Tool. During their first session using the proposed inputs verification tool, respondents would need to spend time becoming familiar with how the tool operates within e-GGRT. The proposed new requirement to use the inputs verification tool would not result in any change in the respondent activity of entering these data into e-GGRT. Respondents would access e-GGRT to enter their data, as currently required under the rule. However, "inputs to equations" data

elements would be entered into a new inputs verification tool within e-GGRT and would not be reported to the EPA. Refer to section 5(b) for further discussion about the tool. The table below specifies the number of “inputs to equations” data elements per subpart that respondents would enter into the inputs verification tool instead of directly into e-GGRT.

Subpart	Source Category	Number of “Inputs to Equations” Data Elements	
		Currently Required to be Reported	Proposed Not to be Reported, But Instead to be Entered into the Proposed Inputs Verification Tool
C	General Stationary Fuel Combustion Sources except Certain Combustion Units Connected to Devices Connected to the Local or Regional Power Grid <sup>1</sup>	26 <sup>2</sup>	26
E	Adipic Acid Production	21	11
F	Aluminum Production	29	29
G	Ammonia Manufacturing	8	8
H	Cement Production	16	14
K	Ferroalloy Production	13	13
L	Fluorinated Gas Production	55	46
N	Glass Production	3	3
O	HCFC-22 Production and HFC-23 Destruction	15	12
P	Hydrogen Production	7	7
Q	Iron and Steel Production	93	92
R	Lead Production	10	10
S	Lime Manufacturing (non-CEMS)	9	9
U	Miscellaneous Uses of Carbonate	6	6
V	Nitric Acid Production	21	6
X	Petrochemical Production	21	21
Y	Petroleum Refineries	80	75
Z	Phosphoric Acid Production	4	4
AA	Pulp and Paper Manufacturing	31	28

Subpart	Source Category	Number of "Inputs to Equations" Data Elements	
		Currently Required to be Reported	Proposed Not to be Reported, But Instead to be Entered into the Proposed Inputs Verification Tool
BB	Silicon Carbide Production	3	3
CC	Soda Ash Manufacturing	10	4
EE	Titanium Dioxide Production	2	2
GG	Zinc Production	8	8
TT	Industrial Waste Landfills	3	3

<sup>1</sup> The reporting requirements applicable to certain stationary fuel combustion sources (e.g., individual units, aggregations of units, common pipes, or common stacks) subject to subpart C remain the same under the proposed amendment. Subpart C would continue to require reporting of all applicable "inputs to equations" data elements for stationary fuel combustion sources that meet both of the following criteria: (1) the stationary fuel combustion source contains at least one combustion unit connected to a fuel-fired electric generator that has been granted access by the Public Utilities Commission to deliver power to the local or regional electric power grid (excluding generators connected to combustion units that are subject to subpart D of this part); and (2) the stationary fuel combustion source is located at a facility for which the sum of the combined nameplate capacities for all such electric generators is greater than or equal to 1 megawatt electric output. Subpart C reporters would not report "inputs to equations" data elements for all other types of stationary fuel combustion sources subject to subpart C.

<sup>2</sup> Includes one "inputs to equations" data element, 40 CFR 98.3(d)(3)(v), which is specified in subpart A of part 98 and applies to only certain reporters under subpart C of part 98.

Recordkeeping for "Inputs to Equations" Data Elements Entered into the Inputs Verification Tool. Respondents would be required to keep a record of a file generated by the inputs verification tool. After completing entry of "inputs to equations" data elements into the inputs verification tool, respondents would download this file (generated by the inputs verification tool) and maintain an electronic or hard copy of the file. This new requirement replaces the current requirement to maintain records of these data elements in any format selected by

reporters. As indicated in section 6, this format change would not result in any change in respondent burden to record these data, as compared to the burden for recording these data elements included in the information collection request previously approved by OMB.

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

### **5(a) Agency Activities**

EPA Headquarters activities include the monitoring and verification of emission reports, database and software maintenance, communication and outreach, and program evaluation.

This ICR reflects an incremental agency burden for program operation activities, which include monitoring and verification of emission reports. Specifically, the additional burden for the review of new data elements for 10 subparts was estimated.

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

To collect data currently reported under the GHGRP, EPA previously established a central repository of inventory data for all respondents, e-GGRT. Respondents report data electronically, and EPA stores the data in the database. The e-GGRT system has an XML reporting schema that allows facilities to upload GHG data directly in lieu of using the web forms provided through e-GGRT. Under the proposed revisions to Part 98, facilities subject to the subparts listed in section 4(a) would report the proposed new data elements via e-GGRT. Additionally, for verification purposes, they would enter their "inputs to equations" data elements into a proposed new inputs verification tool embedded within e-GGRT, without reporting these data.

The inputs verification tool would be deployed within e-GGRT and would be integrated without interrupting the current electronic reporting process. Reporters would enter "inputs to equations" data elements (that EPA is proposing to remove from the reporting requirements) into e-GGRT along with the data required to be reported in the annual report. The tool would use these entered inputs to emission equations data elements to calculate the equation outputs, conduct electronic verification checks on the data elements, and generate a verification summary. The tool would not retain the entered "inputs to equations" data elements for which the EPA is proposing that the reporting requirement be removed. Accordingly, the EPA would not have access to these "inputs to equations" data elements. Instead, the EPA would rely on the verification summary, which would become accessible to the EPA when annual reports are submitted, as a first step for conducting verification once the annual report is submitted.

The new inputs verification tool within e-GGRT follows Agency standards for design, security, data element and reporting format conformance, and accessibility. EPA designed the system in an attempt to minimize respondents' burden by embedding the new inputs verification tool within e-GGRT.

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

This information collection will not have a significant economic impact on a substantial number of small entities. Nonetheless, EPA has tried to reduce the impact of this information collection on small entities. The EPA supports a "help desk" for the GHGRP, which would be available to answer questions on the provisions in this rulemaking.

#### **5(d) Collection Schedule**

All data elements under this information collection would be submitted on an annual basis as part of the respondent's annual report required under Part 98.

### **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). Section 6(a) 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. Section 6(f) provides reasons for any change in burden. The burden statement for this information collection is in section 6(g).

#### **6(a) Estimating Respondent Burden**

EPA estimates the labor hours for the first-year activity of training to use the proposed inputs verification tool to be 1.2 hour per applicable respondent. EPA estimates the labor hours for the annual activity of reporting of new data elements to average 1.8 hour per applicable respondent. Tables 1 through 3 in Attachment 1 present an itemized breakdown of the reporting requirements for the respondents, according to activity and sector.

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

All costs to the regulated industry resulting from information collection activities for the proposed GHGRP are labor costs (i.e., the cost of labor by facility staff to meet the rule's information collection requirements). To calculate labor costs, EPA estimated Bureau of Labor Statistics using an approach consistent with the ICRs associated with the GHGRP currently approved by OMB.<sup>4</sup> For all subparts the labor rates are: \$59.12 for technical workers, \$77.23 for managers, \$31.35 for clerical support, and \$109.94 for legal support.

For the one-time activity of training to use the verification tool, EPA estimates the cost per applicable respondent to be \$66. For the annual activity of reporting the proposed new data elements, EPA estimates the average annual cost per applicable respondent to be \$103. EPA estimates that the annual average cost to all respondents to be \$206,713 for each of the three years covered by this information collection. Respondent costs by sector and activity are presented in Attachment 1.

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

This section describes the burden and cost to the federal government associated with this information collection, and the details are provided in Attachment 2. For the proposed rule, the incremental burden to EPA is associated with the additional time to review the new data elements that would be reported (see section 4(b)(i)).

Note that "inputs to equations" data elements will not be reported for multiple subparts and a reduction in EPA costs could be estimated. However, no costs were subtracted from the burden estimate because the verification summaries will still allow EPA

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<sup>4</sup> May 2011 National Industry-Specific Occupational Employment and Wage Estimates (<http://www.bls.gov/oes/current/oessrci.htm>) and Employer Costs for Employee Compensation for June of 2011 ([http://www.bls.gov/news.release/archives/ecec\\_09082011.pdf](http://www.bls.gov/news.release/archives/ecec_09082011.pdf)).



to verify the data. Additionally, there is no certainty that the amount of verification of data will be any less, and additional verification items may be incorporated.

The average annual Agency cost during the three years of the ICR is estimated to be \$14,661 (325 hours).

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

Managerial	\$62.27 (GS-13, Step 5, \$38.92 + 60%)
Technical	\$46.21 (GS-12, Step 1, \$28.88 + 60%)
Clerical	\$25.01 (GS-6, Step 3, \$15.63 + 60%)

These rates are from the Office of Personnel Management (OPM), 2011 General Schedule, which excludes locality rates of pay. The rates have been increased by 60% to account for the benefit packages available to government employees.

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

EPA estimates that 5,736 respondents will complete the one-time activity of training to use the verification tool, and that the burden and costs for such respondents over the three years covered by this information collection are 6,596 hours and \$379,244. EPA estimates that 781 respondents per year will complete the annual activity of reporting the proposed new data elements, and that the burden and costs for such respondents over the three years covered by this information collection are 4,190 hours and \$240,895. Based on these estimates, the total burden and costs for all respondents over the three years covered by this information collection would be 10,786 hours and \$620,140.

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

(i) Respondent Tally. A breakdown for each of the proposed collection, reporting, and recordkeeping activities is presented in Attachment 1. EPA estimates the average annual respondent burden and cost over the three years of this information collection to be 2,199 labor hours at a cost of \$189,622 per year for the one-time activity of training to use the verification tool and 1,397 labor hours at a cost of \$80,298 per year for the annual activity of reporting the proposed new data elements. Based on these estimates, the average annual respondent burden and cost over the three years of this information collection would be 3,595 labor hours at a cost of \$206,713 per year.

(ii) The Agency Tally. The bottom line Agency burden hours and costs are presented in Attachment 2. The average annual Agency burden and cost over the three years of this information collection would be 325 labor hours at a cost of \$14,661.

### **6(f) Reasons for Change in Burden**

The overall reporting for Part 98 would increase slightly due to these proposed revisions to Part 98. Refer to section 4 for a summary of the proposed new data elements and respondent activities that would increase the respondent burden. EPA estimates the increase in burden for all respondents to be 10,786 hours over the first three years of this information collection request, consisting of 6,596 hours for the first-year activity of learning new procedures for the verification tool and 4,190 hours for the annual activity of reporting of new data elements. Refer to section 6(a) for further discussion of the increase to respondent burden.

### **6(g) Burden Statement**

Attachment 1 presents the average annual respondent burden for each sector and activity. For the 5,736 respondents subject to the 24 subparts required to report "inputs to emission equations" data elements, EPA estimates the public reporting burden for learning new procedures for the inputs verification tool to be 1.2 hours per respondent for only the first year of the 3-year information collection period. For all such respondents, the average annual respondent burden over the 3-year collection of information period is estimated to be 2,199 hours, or 0.4 hours per respondent.

For the 781 respondents subject to subparts E, G, H, P, Q, S, V, X, Y, and AA, EPA estimates the public burden for reporting new data elements to average 1.8 hour per respondent per year. This estimate includes the time to gather available data, calculate the new data element, and enter the data element into e-GGRT. For all such respondents, the average annual respondent burden over the 3-year collection of information period is estimated to be 1,397 hours.

For all respondents, the average annual respondent burden over the 3-year collection of information period is estimated to be 3,595 hours. The average annual burden to EPA for this period is estimated to be 330 hours for oversight activities.

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-2010-0929, 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), William Jefferson Clinton Federal Building - West, 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-2010-0929 and OMB Control Number 2060-0629 on any correspondence.

**ATTACHMENT 1**

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

Tables 1 - 3: Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for Revisions to Reporting, Recordkeeping, and Verification Requirements under the Greenhouse Gas Reporting Program - Years 1-3

Table 4: Summary of Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for Revisions to Reporting, Recordkeeping, and Verification Requirements under the Greenhouse Gas Reporting Program

**ATTACHMENT 2**

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

Tables 5 - 7: Annual Designated Administrator Burden and Cost of Recordkeeping and Reporting Requirements for Revisions to Reporting, Recordkeeping, and Verification Requirements under the Greenhouse Gas Reporting Program - Years 1-3

Table 8: Summary of Annual Designated Administrator Burden and Cost of Recordkeeping and Reporting Requirements for Revisions to Reporting, Recordkeeping, and Verification Requirements under the Greenhouse Gas Reporting Program