SUPPORTING STATEMENT PART A:
INFORMATION COLLECTION REQUEST
FOR THE
GREENHOUSE GAS REPORTING PROGRAM

EPA ICR No. 2300.18

August 2019

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FOR THE GREENHOUSE GAS REPORTING PROGRAM
EPA ICR # 2300.18

1. IDENTIFICATION OF THE INFORMATION COLLECTION

1(a) Title of the Information Collection

TITLE: "Information Collection Request for the Greenhouse Gas Reporting Program (GHGRP)."

ICR Number: 2300.18

1(b) Short Characterization/Abstract

In response to the FY2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161) and under authority of the Clean Air Act (CAA), EPA finalized a greenhouse gas reporting rule in October of 2009 (henceforth referred to as the Greenhouse Gas Reporting Program or GHGRP) (74 FR 56260; October 30, 2009). The Rule, which became effective on December 29, 2009, requires reporting of greenhouse gases (GHGs) from certain large facilities and suppliers. It does not require control of GHGs. Instead, it requires that sources emitting GHGs, supplying certain products that contain GHGs, or injecting carbon dioxide (CO_2) underground in quantities above certain threshold levels of CO_2 equivalent (CO_2e) monitor and report GHG data and other relevant information. Subsequent rules have promulgated requirements for additional facilities, and suppliers; provided clarification and corrections to existing requirements; and finalized confidentiality business information (CBI) determinations, amended recordkeeping requirements, and implemented an alternative verification approach.

Applicable facilities and suppliers are required by the GHGRP to follow specific monitoring, QA/QC, and calculation procedures to determine GHG emissions and supplies to the economy. Reporters must electronically report monitored and calculated data to EPA using an interactive, web-based tool called the Electronic Greenhouse Gas Reporting Tool (e-GGRT). EPA conducts electronic and manual verification of the reported data and then publishes all non-CBI data on the internet.

For the three years covered by this ICR, the total respondent burden associated with this information collection will average 740,012 hours per year and the respondent cost will average $87,945,711 per year. This includes $29,526,397 per year for capital investment and operation and maintenance and $58,419,314 per year for labor. Over the same time period, the total estimated cost for EPA of the information collection will average $9,847,181 per year. The total estimated cost for all respondents and EPA will average $97,792,892 per year.

There is an increase in the average annual respondent burden of 825 hours and an increase in average annual cost for all respondents of $113,910 compared with the last ICR renewal. These changes reflect an update in the number of respondents, an adjustment of labor rates to 2017 Bureau of Labor and Statistics (BLS) labor rates, an adjustment of capital and

O&M costs to reflect 2017 dollars, updates to the tax law for future years (Tax Cuts and Jobs Act, Pub. L. No. 115–97 (2017)), and a wholesale re-evaluation of the hours and costs to monitor, calculate, and report emissions across the entire program.

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" to develop a 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 Section 821" of the 1990 CAA amendments.

Section 114 of the CAA provides 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 monitor and 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, install and operate monitoring equipment and, among other things, provide such information the Administrator may reasonably require.

2(b) Practical Utility/Users of the Data

The GHGRP collects information from facilities that directly emit GHGs or inject CO_2 underground and from suppliers of certain products that contain GHGs. Reporting entities use uniform methods for calculating emissions, which enables data to be compared and analyzed. The comprehensive GHG data reported directly from large facilities and suppliers across the country are easily accessible to the public via EPA's online data publication tool, also known as FLIGHT (Facility Level Information on Greenhouse gases Tool) at: http://ghgdata.epa.gov/ghgp/main.do. FLIGHT is designed for the general public and allows users to view and sort GHG data for every data year starting with 2010 from over 8,000 entities in a variety of ways including by location, industrial sector, and type of GHG emitted. To

support the needs of data users, all non-confidential data collected through the GHGRP are made available for download through Envirofacts (http://www.epa.gov/enviro/), a cross-EPA data publication website.

Data collected through the GHGRP complement the Inventory of U.S. Greenhouse Gas Emissions and Sinks (Inventory) and are used to significantly improve our understanding of key emissions sources by allowing EPA to better reflect changing technologies and emissions from a wide range of industrial facilities. For example, within the industrial processes and product use sector of the Inventory, EPA directly uses annual GHGRP data in 11 categories to improve the national estimates. The industrial sectors that utilize GHGRP data include, but are not limited to, adipic acid production, aluminum production, cement production, petrochemical production, semiconductor manufacturing, and substitution of ozone depleting substances. The Inventory uses GHGRP data as both updates to activity data and emission factors. For example, GHGRP data are used as activity data within the cement production sector (e.g., utilizing aggregated reported clinker production), as updates to emissions factors for nitric acid production (e.g., nitric acid production data by abatement type used to develop country-specific emission factors), and as direct emissions captured within the lime production sector (e.g., capture of CO_2 reported by lime facilities is incorporated directly into emissions calculations). In addition to direct use of GHGRP data as emission factors and activity data, the Inventory also uses GHGRP data as quality assurance and verification for calculated emissions estimates, emission factors, and other assumptions used in the Inventory. EPA continues to assess the GHGRP data for further updates to the Inventory.

The GHGRP has been used to support CAA policy in numerous ways. For example, GHGRP data on Petroleum and Natural Gas Systems (Subpart W) were analyzed to inform targeted improvements to the 2016 New Source Performance Standards (NSPS) for the oil and gas industry and to update emission factor and activity data used for that proposal and the 2016 NSPS, as updated in the US GHG Inventory (83 FR 52056; October 15, 2018).

As part of the final New Source Performance Standard (81 FR 59332; August 29, 2016) and Emissions Guidelines (81 FR 59276; August 29, 2016) revisions for municipal solid waste (MSW) landfills, a database was developed to calculate the cost and emission impacts associated with varying certain control parameters and applying these parameters to a dataset of existing and model future landfills. Information collected through MSW Landfills (Subpart HH) of the GHGRP about the landfill itself (such as landfill open and closure year, landfill design capacity, landfill design area, and landfill depth), current and historical annual waste acceptance rates, as well as gas collection and control system data (as applicable) were incorporated into the database. These annual historical waste rate data serve as a significant improvement to the data input file used to generate emission estimates. Of the 1,970 landfills in the dataset, 1,217 were from GHGRP Subpart HH data. In addition, in support of the recent review of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for MSW landfills, GHGRP data were reviewed for changes in technologies and practices that could lead to further reductions in HAP emissions from MSW landfills.

GHGRP data have also been used to support voluntary programs. For example, GHGRP data are used by the Natural Gas STAR Methane Challenge Program, which leverages GHGRP

reporting to track partner petroleum and natural gas company activities related to their Methane Challenge commitments. In addition, GHGRP data are used by the Landfill Methane Outreach Program (LMOP) to supplement the LMOP Landfill and Landfill Gas Energy Project Database which includes data collected from LMOP Partners about landfill gas energy projects or potential for project development. LMOP has an approved ICR (OMB Control # 2060-0446) that allows for collection of these data. When the requested data are similar between GHGRP and LMOP, LMOP does not request the data from LMOP Partners; rather the data collected by GHGRP are used.

Several states also use GHGRP data to inform their own policymaking. For example, the state of Hawaii is using GHGRP data to establish an emissions baseline for each facility subject to their GHG Reduction Plan and to assess whether facilities meet their targets in future years. The state of Iowa uses annual GHGRP data to support their annual report to the governor and general assembly on GHG emissions in the state. The state of Oregon uses EPA's GHGRP data to support verification of data collected under the state's own GHG reporting requirements. In addition, to meet requirements for reporting oil and gas activities to EPA under the National Emissions Inventory, states without their own data collection programs can leverage GHGRP data collected via Subpart W.

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 and track their GHG footprints, find cost- and fuel-saving efficiencies that reduce GHG emissions (e.g., through energy audits or other forms of assistance), and foster technologies to protect public health and the environment. In addition, transparent, public data on emissions allow for accountability of polluters to the public who bear the cost of the pollution. This powerful data resource provides a critical tool for communities to identify nearby sources of GHGs and provide information to state and local governments. One example of this type of practical utility of GHGRP data was outlined in a paper on Electrical Transmission and Distribution Equipment Use (Subpart DD) and Electrical Equipment Manufacture or Refurbishment (Subpart SS) authored by EPA staff and contractors (see Docket EPA-HQ-OAR-2012-0333). The paper explains that fluorinated GHG emissions from these industries decreased significantly between 2011 and 2013, and that possible explanations for these reductions include increased awareness by facilities of the magnitude of their emissions (both in absolute terms and relative to the emissions of similar facilities) and/or concerns regarding public perception of those emissions.

GHGRP data are also being used to improve estimates of GHG emissions internationally. Specifically, GHGRP data are informing several of the updates to emission estimation methods included in the 2019 Refinement of the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National GHG Inventories (the Refinement). These data include emission factor measurements submitted to support GHGRP reporting by the semiconductor industry, which reflect recent technological changes in that industry and are therefore being used to update the default emission factors for semiconductor manufacturing in the Refinement. It also includes emissions and production data reported by fluorinated gas producers under the GHGRP, which are also being used to update a default emission factor for that industry in the Refinement.

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. 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 Bureau of Ocean Energy Management's Gulfwide Offshore Activity Data System; the EPA's Acid Rain Program, 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_2 Accounting and Reporting Standard for the Cement Industry.

These are important programs that not only led the way in reporting of GHG emissions before the Federal Government acted but also assisted in quantifying the GHG reductions achieved by various policies. Many of these programs collect different or additional data as compared to the GHGRP. For example, state programs may establish lower thresholds for reporting, request information on areas not addressed in the GHGRP, or 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 several years to facilitate reporting in the event a single entity has to report both the federal and state level. For example, EPA supported efforts by the California Air Resources Board to develop the California Electronic Greenhouse Gas Reporting Tool, or Cal e-GGRT. In addition, Washington State has harmonized its GHG reporting requirements with GHGRP and EPA has established a workflow that allows Washington State facilities to use EPA's Electronic Greenhouse Gas Reporting Tool (e-GGRT) as a single, common reporting form, to satisfy requirements for both federal and state programs.

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:

- EPA considered CO_2 data currently collected under Section 821 of the 1990 CAA Amendments (i.e., the Acid Rain program). To avoid duplication and because the Acid Rain program already requires reporting of CO_2 data from electrical generating units (EGUs), the GHGRP allows for use of the same CO_2 data. Facility operators do, however, have to report the emissions of GHGs that are not included under Section 821, such as methane (CH_4) and nitrous oxide (N_2O). EPA recently facilitated the automatic carryover of data reported to the Acid Rain program into e-GGRT to avoid duplication completely.

- EPA reviewed the Inventory, which is an annual comprehensive top-down assessment of national GHG emissions. The Inventory assesses GHG emissions from all sectors: energy, industry, waste, agriculture and forestry. 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 as applicable, GHGRP information serves to complement and inform the Inventory. For example, GHGRP data are applied to assess the quality of the top-down data, update activity data, and improve upon methodological approaches in the GHG inventory such as in the development of country-specific emission factors.

- EPA published the "Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide Geologic Sequestration (GS) Wells Final Rule" (henceforth referred to as the "GS Rule") (75 FR 77230; December 10, 2010). EPA determined that the GHGRP data are complementary to and build upon EPA's UIC permit requirements. Requirements under the UIC program are focused on demonstrating that underground sources of drinking water are not endangered as a result of CO_2 injection into the subsurface, while requirements under the GHGRP through Subpart RR enable reporters to quantify the amount of CO_2 that is geologically sequestered. For example, the UIC Class VI permit (including the Testing and Monitoring Plan) and Subpart RR's monitoring, reporting, and verification plan have separate monitoring objectives.

- 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 (e.g., California, Massachusetts, North Carolina, and New Jersey). To reduce burden on

reporters and program agencies, the Agency publishes and shares emissions data with the exception of any CBI as appropriate.

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

This Supporting Statement is appended to an FR notice that was published when the ICR was submitted to the OMB in compliance with the Paperwork Reduction Act (44 USC 3501 *et seq*.). The public comment period for this notice is 30 days. EPA also published a notice in the FR on February 26, 2019, announcing plans to submit this ICR renewal request to OMB. The public comment period for that notice was 60 days. EPA received comments to that notice from American Gas Association and Interstate Natural Gas Association of America. The comments as well as the EPA responses to those comments can be found in the Response to Comment document which is available in the docket for this ICR (Docket ID Number EPA-HQ-OAR-2019-0027).

3(c) Consultations

To learn of ways to minimize burden on reporters, EPA engages in consultations with reporters on a regular basis. Since the GHGRP's inception, EPA has conducted over 140 training webinars reaching over 17,000 people and has responded to approximately 40,000 questions received by our help desk. EPA also communicates with GHGRP reporters directly after every data submission deadline during our annual verification period. The program maintains an open-door policy and has consulted on numerous occasions with trade associations as well as individual companies with issues or concerns. As a result of these consultations, EPA has identified specific sections of the rule language that could be clarified or did not have the intended effect. EPA has promulgated amendments to the rule to resolve these issues and to correct technical and editorial errors that have been identified.

For example, in October 2018, EPA held a stakeholder workshop on the GHG data for petroleum and natural gas systems. Stakeholders participated in person and via webinar. A session of this workshop was used to garner feedback on potential burden reduction opportunities for the GHGRP. The session included EPA and stakeholder presentations, as well as an open stakeholder discussion.

To monitor the usefulness of this data collection, the GHGRP staff are in regular communication with other EPA programs that use the data, such as voluntary and mandatory GHG reduction programs within the Office of Air and Radiation. EPA also consults regularly with state, local, and tribal environmental control agencies, environmental groups, research entities, and other nongovernmental organizations.

In addition, EPA contacted designated representatives from nine randomly selected companies that report to the GHGRP to request consultation about the GHGRP reporting burden values that were revised in this ICR renewal. These nine companies and the subparts for which their facilities report are shown in Exhibit 3.1.

Exhibit 3.1 Consultations

Parent Company	Applicable Subparts*
Dow Texas Operations Freeport	C, W, X, DD, TT
Dominion Energy	C, W, NN
Standard Steel	C, Q
Waste Management	C, HH
G & W Electric Company	SS
CF Industries	C, G, V
Southern California Edison	DD
Texas Instruments	C, I
Nova Chemicals Olefins	C, X

*Subpart C – General Stationary Fuel Combustion Sources
Subpart G – Ammonia Manufacturing
Subpart I – Electronics Manufacturing
Subpart Q – Iron and Steel Production
Subpart V – Nitric Acid Production
Subpart W – Petroleum and Natural Gas Systems
Subpart X – Petrochemical Production
Subpart DD – Electrical Transmission and Distribution Equipment Use
Subpart HH – Municipal Solid Waste Landfills
Subpart NN – Suppliers of Natural Gas and Natural Gas Liquids
Subpart SS – Electrical Equipment Manufacture or Refurbishment
Subpart TT – Industrial Waste Landfills

As a result of the consultations, EPA received a comment from Waste Management. The comment and the EPA response can be found in the Response to Comment document which is available in the docket for this ICR (Docket ID Number EPA-HQ-OAR-2019-0027).

3(d) Effects of Less Frequent Collection

Annual reporting of the data is necessary to ensure that the Agency's objectives for the GHGRP are met. Annual reporting is critical for assessing year-to-year variations in emissions both at the facility and sector level. With less frequent reporting, the EPA would be unable to discern multi-year trends. As the Agency evaluates potential GHG emission reduction opportunities, it is critical to be able to analyze up-to-date, multi-year data for all sectors covered by the program. For example, GHGRP collects critical information necessary to evaluate potential GHG reduction approaches, such as number of facilities in a sector, production or capacity of each facility, abatement technologies used across a sector, number of facilities using continuous emission monitoring systems, and chemical-specific GHG emission information. These data are essential for understanding the sources that would be impacted by potential regulations, emissions monitoring approaches and abatement technologies currently employed within a sector, and the general emissions profile of the industry. Furthermore, an annual collection frequency supports the critical linkage (described in section 2(b) of this document) between the GHGRP and its data sharing with the Inventory, an annual reporting requirement of the U.S. Government and led by EPA to the United Nations Framework Convention on Climate Change.

With annual data, stakeholders can monitor changes in facility emissions over time with respect to comparable facilities in the industry. Annual reporting also lines up with the reporting

frequency of all existing State GHG reporting programs as well as other Agency and State programs that require reporting of environmental data.

The frequency with which facilities and suppliers subject to the GHGRP monitor, sample, or measure data varies across the 41 subparts, from weekly to annually. These collection frequencies are necessary to ensure adequate data quality and were designed to match the variability of activities conducted by the source category.

3(e) General Guidelines

Generally, the GHGRP has a three-year requirement for record retention consistent with the retention period specified in the general information collection guidelines in 5 CFR 1320.5(f) of the OMB regulations implementing the Paperwork Reduction Act. However, for 23 subparts, some data used to calculate GHG emissions, such as process or production data specific to each facility's operation, are not reported to EPA because of disclosure concerns (79 FR 63750, October 24, 2014). Reporters instead enter those data into a web-based verification tool called Inputs Verification Tool (IVT) housed within e-GGRT. IVT does not retain the entered inputs; instead it calculates emissions using "inputs to equations" and conducts verification checks at the time of data entry. Facilities using IVT for any subpart are required to retain all records for five years.

The EPA has determined that five years is a reasonable time period given the large number of reporters and the likely increase in follow-up activities due to IVT. It is 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 is important to be able to examine not only the current year's records but those from previous years as well. Employing year-to-year comparisons are useful for verifying the current year's data. A 5-year record retention period ensures the availability of relevant records for the follow-up activities described above. EPA proposed the change from three to five years for record retention for some facilities through a rulemaking process and took all comments received into consideration upon promulgating the final action.

This collection of information is consistent with all other OMB guidelines under 5 CFR 1320.5.

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. EPA typically makes CBI determinations under the CAA on a case-by-case basis under 40 CFR 2.301. Due to the large numbers of entities reporting under the GHGRP and the large number of data reporting elements, EPA concluded that case-by-case determinations would not result in a timely release of emission data and other non-CBI data (75 FR 39094; July 7, 2010). Therefore, the EPA has published confidentiality determinations for most information reported under the GHGRP (76 FR 30782; May 26, 2011, 77 FR 48072; August 13, 2012, 77 FR 51477; August 24, 2012, 78 FR 68162; November 13, 2013, 78 FR 71904; November 29, 2013, 79 FR 3507; January 22, 2014, 79 FR 63750; October 24, 2014, 79 FR 70352; November 25, 2014, 79 FR 73750; December 11, 2014,

80 FR 64262; October 22, 2015, 81 FR 86490; November 30, 2016, and 81 FR 89188; December 9, 2016). These confidentiality 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 the EPA to be CBI are safeguarded in accordance with regulations in 40 CFR Chapter 1, Part 2, Subpart B.

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 owners and operators of facilities that must report their GHG emissions to EPA to comply with the GHGRP rule. 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 (i.e., GHG source categories) that must report to the GHGRP, 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_2e threshold for the industry sectors listed below or those in the categories in which all must report, such as petroleum refining facilities and all other large emitters listed in Table A-3 of 40 CFR 98.2(a)(1).

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

Subpart	**NAICS code(s)**
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[1]; 221 Electric, gas, and sanitary services; 622 Health services; 611 Educational services
D. Electricity Generation	221112 Fossil-fuel fired electric generating units, including units owned by federal and municipal governments and units located in Indian Country
E. Adipic Acid Production	325199 Adipic acid manufacturing facilities
F. Aluminum Production	331313 Primary Aluminum production facilities
G. Ammonia Manufacturing	325311 Anhydrous and aqueous ammonia manufacturing facilities
H. Cement Production	327310 Portland Cement manufacturing plants

[1] Includes reporting for combustion only and is not representative of the GHG process emissions from the automotive sector as a whole.

Subpart	NAICS code(s)
I. Electronics Manufacturing	334111 Microcomputers manufacturing facilities; 334413 Semiconductor, photovoltaic cells (PV) (solid-state) device manufacturing facilities; 334419 Liquid crystal display (LCD) unit screens manufacturing facilities; 334419 Micro-electro-mechanical devices (MEMS) manufacturing facilities
K. Ferroalloy Production	331110 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	331110 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
T. Magnesium Production	331419 Primary refiners of nonferrous metals by electrolytic methods; 331492 Secondary magnesium processing plants
U. Miscellaneous Uses of Carbonate	Facilities included elsewhere
V. Nitric Acid Production	325311 Nitric acid manufacturing facilities
W. Petroleum and Natural Gas Systems	486210 Pipeline transportation of natural gas; 221210 Natural gas distribution facilities; 21112 Crude petroleum extraction; 21113 Natural gas extraction
X. Petrochemical Production	32511 Ethylene dichloride manufacturing facilities; 325199 Acrylonitrile, ethylene oxide, methanol manufacturing facilities; 325110 Ethylene manufacturing facilities; 325180 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	325180 Alkalis and chlorine manufacturing facilities, 212391 Soda ash, natural, mining and/or beneficiation
DD. Electrical Equipment Use	221121 Electric bulk power transmission and control facilities
EE. Titanium Dioxide Production	325180 Titanium dioxide manufacturing facilities
FF. Underground Coal Mines	212113 Underground anthracite coal mining operations; 212112 Underground bituminous coal mining operations

Subpart	NAICS code(s)
GG. Zinc Production	331410 Primary zinc refining facilities; 331492 Zinc dust reclaiming facilities, recovering from scrap and/or alloying purchased metals
HH. Municipal Solid Waste Landfills	562212 Solid waste landfills; 221320 Sewage Treatment Facilities
II. Industrial Wastewater Treatment	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
LL. Suppliers of Coal-based Liquid Fuels	211130 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
QQ. Importers and Exporters of Pre-charged Equipment and Closed-Cell Foams	423730 Air-conditioning equipment (except room units) merchant wholesalers; 333415 Air-conditioning equipment (except motor vehicle) manufacturing; 336391 Motor vehicle air-conditioning manufacturing; 423620 Air-conditioners, room, merchant wholesalers; 443111 Household Appliance Stores; 423730 Automotive air-conditioners merchant wholesalers; 326150 Polyurethane foam products manufacturing; 335313 Circuit breakers, power, manufacturing; 423610 Circuit breakers merchant wholesalers
RR. Geologic Sequestration of Carbon Dioxide	211 Oil and gas extraction projects using CO_2 enhanced oil and gas recovery; 211120 or 211130 Projects that inject acid gas containing CO_2 underground; N/A CO_2 geologic sequestration projects
SS. Electrical Equipment Manufacture or Refurbishment	33531 Power transmission and distribution switchgear and specialty transformers manufacturing facilities
TT. Industrial Waste Landfills	562212 Solid waste landfills; 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; 221320 Sewage treatment facilities
UU. Injection of Carbon Dioxide	211 Oil and gas extraction projects using CO_2 enhanced oil and gas recovery; 211120 or 211130 Projects that inject acid gas containing CO_2 underground

4(b) Information Requested

(i) Data Items

Reporting and Recordkeeping Requirements

The GHGRP applies to certain facilities that directly emit GHGs or inject CO_2 underground and to certain suppliers of products that contain GHGs. Applicability depends on the source categories located at the facility and, for some source categories, the emission level or production capacity. Fossil fuel and industrial GHG suppliers, and facilities that emit 25,000 metric tons or more of CO_2e/year report GHG data to EPA annually.

Specifically, the facilities in the source list of Table A-3 of 40 CFR 98.2(a)(1) are subject to an all-in threshold, in which they report emissions regardless of a CO_2e/year emissions threshold. EPA established the all-in source categories for simplification because all or almost all of the sources in these subparts have emissions well over the 25,000 CO_2e/year threshold. These emitters report all emissions from all-in emission source categories as well as threshold source categories (Table A-4 of 40 CFR 98.2(a)(2) source list), stationary fuel combustion sources (Subpart C), and miscellaneous use of carbonates (Subpart U). Suppliers in the source list of Table A-5 of 40 CFR 98.2(a)(4) report all applicable products in Table A-5.

In addition, facilities that do not contain sources listed in Table A-3 of 40 CFR 98.2(a)(1), but that emit at least 25,000 metric tons CO_2e/year in combined emissions from stationary combustion sources and other sources listed in Table A-4 of 40 CFR 98.2(a)(2) report emissions from Subpart C, Subpart U, and all applicable source categories listed in Table A-4 of 40 CFR 98.2(a)(2). Facilities with only combustion emissions that emit at least 25,000 metric tons CO_2e/year are only required to report emissions from combustion sources.

Respondents 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 UU of the rule.

Appendix B contains a list of the reporting requirements applicable to all facilities as well as those specific to each source category. Appendix C contains a similar list for recordkeeping requirements.

(ii) Respondent Activities

The owner or operator of a facility or supplier that is subject to the GHGRP's reporting requirements reports total annual GHG emissions in metric tons of CO_2e, as applicable. The primary tasks that respondents perform include:

1. Implementing and updating, as necessary, appropriate monitoring plans for each affected source and each affected unit at a source, as applicable;
2. Monitoring activities, where required;

3. Conducting operation and maintenance activities associated with the monitoring, including quality assurance activities;
4. Ensuring data quality, preparing annual reports for submission to EPA, and submitting these reports to EPA;
5. Potentially responding to questions or error messages from EPA; and
6. Maintaining records for a period of three years or five years, as specified by the GHGRP.

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

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

5(b) Collection Methodology and Management

EPA has established a central repository of data for all respondents, the web-based Electronic Greenhouse Gas Reporting Tool (e-GGRT). Respondents report data electronically, and EPA stores the data in the database. Facilities and suppliers subject to the GHGRP register online through the e-GGRT system.

All data are submitted to EPA electronically in e-GGRT except the one-time Electronic Signature Agreement (ESA) for new users. In most cases, the ESA is also submitted electronically; however, it is possible for users to opt out of submitting the ESA electronically and for those cases, the ESA must be submitted on paper. e-GGRT has an XML reporting schema that allows facilities to upload GHG data directly in lieu of using the guided web forms provided through e-GGRT. The XML reporting schema contains all data elements needed to comply with the GHGRP. The electronic reports submitted under the GHGRP 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. Additionally, e-GGRT is designed to collect and store CBI.

The system follows Agency standards for design, security, data element and reporting format conformance, and accessibility. EPA designed the database to minimize respondents' burden by integrating with existing data collection and data management systems, when feasible.

All facilities or suppliers must assign a Designated Representative (DR) in order to report. The DR may appoint an Alternative Designated Representative (ADR) and multiple agents. The DR, ADR, and agents are all able to enter data and submit the electronic report on behalf of the regulated facility. Before submitting a report, the DR (or ADR) must certify the annual report. An electronic signature device (e.g., a PIN or password) is required to submit a report.

EPA ensures data quality by conducting robust verification checks using both electronic software and manual review. EPA contacts facilities when annual reports contain potential errors, and the statute requires that the facilities either resolve the error or explain that it is not an error in a timely manner. EPA makes all data accessible to the public on a web-based, user-friendly publication tool called FLIGHT, as detailed in Section 2(b) of this document.

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 uses existing GHG emissions estimation and reporting methodologies and provides simplified methodological options to reduce reporting burden. 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 any type of fossil fuel, would not exceed 25,000 metric tons CO_2e/year. Exempting facilities based on combustion unit capacity has allowed for small entities to perform a simple calculation to determine if they are even required to estimate emissions for applicability purposes.

Additionally, EPA minimized the impact on small entities in Subpart NN (Suppliers of Natural Gas and Natural Gas Liquids) by previously amending the reporting threshold from an all-in threshold to a capacity-based threshold. EPA revised the applicability threshold so that only local distribution companies that deliver 460,000 thousand standard cubic feet (mscf) or more of natural gas per year are subject to the GHGRP (75 FR 79092; December 17, 2010).

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_2e/year for five consecutive years or less than 15,000 metric tons CO_2e/year for three consecutive years to cease annual reporting to EPA.

5(d) Collection Schedule

For each reporting year, facilities collect data and calculate emissions at varying frequencies, as described in the GHGRP, and summarized in Appendices B and C of this document. Facilities then submit GHG reports on March 31 of each calendar year for GHG emissions that occurred in the previous calendar year. EPA conducts a verification process of the data typically from April 1 through the end of September of each calendar year and publishes the data in FLIGHT in October. During the verification period, EPA notifies facilities if their report contains potential errors. The regulation requires that these facilities resubmit their reports with corrected data or respond to the notification with an explanation of why it is not an error within 45 days of receiving the notification. Facilities may request a 30-day extension if necessary, which is automatically granted by EPA.

Facilities or suppliers that cease annual reporting as described in Section 5(c) of this document must first submit a notification to discontinue reporting to the Administrator no later than March 31 of the year immediately following the fifth (or third) consecutive year of emissions less than 25,000 (or 15,000) tons CO_2e/year. Likewise, facilities or suppliers that change operations such that all applicable GHG-emitting processes and operations cease to operate are exempt from reporting in the years following the year in which cessation of such operations occurs, provided that the owner or operator submits a notification to the Administrator no later than March 31 of the year immediately following the operation cessation.

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 of this document as well as the federal burden hours and costs associated with the activities described in Section 5(a) of this document. EPA estimates that, over the three years covered by this request, the total respondent burden associated with this reporting will average 740,012 hours per year and the cost of all respondents of the information collection will average $87,945,711 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. Section 6(f) provides reasons for any change in burden compared with the last ICR renewal approved. The burden statement for this information collection is in Section 6(g).

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 740,012 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.

Exhibit 6.1 of this document presents aggregate burden by subpart only. Note that the total cost numbers in Exhibit 6.1 may not add up due to rounding of the labor hours to the nearest tenth of an hour and rounding of costs to the nearest dollar. For further details of burden calculations, please see Appendix H to the Supporting Statement, which contains the subpart-specific costs that are expected to be associated with this information collection.

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 used an approach consistent with the ICR associated with the GHGRP currently approved by OMB, updated to incorporate the 2017 BLS labor rates. For all but two subparts the labor rates are: $71.45 for technical workers, $87.45 for managers, $36.28 for clerical support, and $112.23 for legal support. Sector-specific labor rates are used for two subparts in the oil and gas industry (Subpart W and Subpart RR): $141.54 for senior managers, $105.68 for middle managers, $91.06 for engineers, and $60.72 for technicians.[2] Labor and non-labor costs (capital and O&M) for individual subparts are summarized in Exhibit 6-1.

[2] See Appendix D to this Supporting Statement for details.

EPA estimates that the total annual cost to all affected non-federal entities is $88.2 million over the three years covered by this information collection. Exhibit 6.1 presents aggregate costs by sector.

Appendix E contains the burden and costs for Subpart W, including the labor assumptions used for each activity required in Subpart W and the number of respondents expected in each industry segment. All assumptions are documented in Appendix E.

Appendix F contains the burden and costs related to Subpart C compliance, including the labor assumptions used for each activity required for each Tier. All assumptions are documented in Appendix F.

Appendix G contains the burden and costs for Subpart RR.

Appendix H contains the subpart-specific cost summaries for all GHGRP subparts.

Appendix I explains the methodology for determining the number of responses and responses per respondent by subpart.

Exhibit 6.1 Annual Average Respondent Burden and Cost For the GHG Reporting Program

Source Category	Annual Average							
	Number of Respondents	Responses/ Respondent[a]	Total Responses[b]	Total Burden (hrs)	Total Labor Cost ($)	Capital Cost ($)	O&M Cost ($)	Total Cost ($)
C. General Stationary Fuel Combustion Sources (reporters with only Subpart) [c,d,g]	2,093	111	232,323	86,335	$6,108,421	$230,059	$2,069,723	$8,408,203
C. General Stationary Fuel Combustion Sources (reporters with Subpart C plus one or more subparts) [c,d,g]	3,951	111	438,561	174,019	$12,320,056	$181,955	$3,557,490	$16,059,501
D. Electricity Generation [c,g]	1,124	61	68,564	5,058	$345,234	$0	$56,200	$401,434
E. Adipic Acid Production [c,g]	2	31	62	44	$3,175	$0	$5,537	$8,712
F. Aluminum Production [c,g]	7	23	161	446	$32,463	$0	$4,048	$36,511
G. Ammonia Manufacturing [c,g]	34	134	4,556	1,489	$106,666	$0	$167,700	$274,366
H. Cement Production [c,g]	94	112	10,528	2,280	$156,018	$0	$4,700	$160,718
I. Electronics Manufacturing [c,g]	55	379	20,845	13,140	$935,831	$0	$224,576	$1,160,407
K. Ferroalloy Production [c,g]	10	179	1,790	396	$28,760	$0	$500	$29,260
L. Fluorinated Gas Production [c,g]	14	363	5,082	11,755	$817,591	$0	$700	$818,291
N. Glass Production [c,g]	103	60	6,180	4,954	$354,547	$0	$10,380	$364,927
O. HCFC-22 Production and HFC-23 Destruction [c,g]	4	32	128	456	$31,987	$0	$200	$32,187
P. Hydrogen Production [c,g]	117	137	16,029	4,678	$331,590	$0	$50,581	$382,171
Q. Iron and Steel Production [c,g]	122	61	7,442	2,938	$212,776	$0	$116,100	$328,876
R. Lead Production [c,g]	11	79	869	273	$20,051	$0	$11,550	$31,601
S. Lime Manufacturing [c,g]	75	268	20,100	2,057	$150,324	$0	$3,750	$154,074
T. Magnesium Production [c,g]	11	83	913	200	$14,387	$0	$550	$14,937
U. Miscellaneous Uses of Carbonate [c,g]	7	7	49	63	$4,300	$0	$350	$4,650
V. Nitric Acid Production [c,g]	32	23	736	1,150	$82,418	$0	$257,812	$340,231
W. Petroleum and Natural Gas Systems [c,e,g]	2,202	3,294	7,253,388	270,666	$25,051,135	$0	$20,161,288	$45,212,423
X. Petrochemical Production [c,g]	79	672	53,088	12,733	$891,591	$0	$129,770	$1,021,361
Y. Petroleum Refineries [c,g]	144	173	24,912	8,070	$575,893	$0	$7,200	$583,093
Z. Phosphoric Acid Production [c,g]	11	100	1,100	110	$7,992	$0	$550	$8,542
AA. Pulp and Paper Manufacturing [c,g]	107	105	11,235	3,039	$219,446	$0	$25,894	$245,340
BB. Silicon Carbide Production [c,g]	1	10	10	15	$1,017	$0	$229	$1,246
CC. Soda Ash Manufacturing [c,g]	4	28	112	37	$2,508	$0	$2,017	$4,526
DD. Electrical Transmission and Distribution Equipment Use [c,g]	83	206	17,098	3,486	$242,380	$0	$103,750	$346,130
EE. Titanium Dioxide Production [c,g]	6	76	456	92	$6,100	$0	$2,450	$8,550
FF. Underground Coal Mines [c,g]	78	1,614	125,892	4,602	$325,575	$0	$21,900	$347,475
GG. Zinc Production [c,g]	5	44	220	159	$11,575	$0	$7,000	$18,575
HH. Municipal Solid Waste Landfills [c,g]	1,157	514	594,527	74,396	$5,211,182	$0	$1,856,676	$7,067,858
II. Industrial Wastewater Treatment [c,g]	140	437	61,180	4,399	$320,001	$0	$172,667	$492,667
LL. Suppliers of Coal-based Liquid Fuels [c,g]	2	2	4	43	$3,149	$0	$100	$3,249
MM. Suppliers of Petroleum Products [c,g]	241	149	35,909	9,303	$666,789	$0	$12,050	$678,839
NN. Supplies of Natural Gas and Natural Gas Liquids [c,g]	511	64	32,704	8,632	$627,057	$0	$25,550	$652,607
OO. Suppliers of Industrial GHG [c,g]	86	3,635	312,610	8,779	$633,246	$0	$4,300	$637,546
PP. Suppliers of Carbon Dioxide [c,g]	131	94	12,314	1,703	$120,008	$0	$6,550	$126,558
QQ. Importers and Exporters of Fluorinated GHGs Contained in Pre-Charged Equipment or Closed-Cell Foams [c,g]	41	4,092	167,772	2,624	$185,490	$0	$2,050	$187,540
RR. Geologic Sequestration of Carbon Dioxide [c,f,g]	8	1,882	15,056	4,378	$481,406	$0	$16,000	$497,406

Exhibit 6.1 Annual Average Respondent Burden and Cost For the GHG Reporting Program (continued)

Source Category	Annual Average							
	No. Respondents	Responses/ Respondent[a]	Total Responses[b]	Total Burden (hrs)	Total Labor Cost ($)	Capital Cost ($)	O&M Cost ($)	Total Cost ($)
SS. Electrical Equipment Manufacture or Refurbishment [c,g]	8	465	3,720	376	$26,706	$0	$400	$27,106
TT. Industrial Waste Landfills [c,g]	174	1,661	289,014	9,408	$665,443	$0	$8,795	$674,239
UU. Injection of Carbon Dioxide [c,g]	95	62	5,890	1,235	$87,029	$0	$4,750	$91,779
TOTALS	13,180	748	9,853,129	740,012	$58,419,314	$412,014	$29,114,383	$87,945,711

[a] The number of responses per respondent are rounded.
[b] Total Responses is the number of respondents multiplied by the number of responses per respondent. Because the number of responses per respondent are rounded, the calculated total responses may differ slightly from the numbers shown in Exhibit 6.1.
[c] Number of respondents based on RY2017 data as of August 2018.
[d] See Appendix F for details.
[e] See Appendix E for details
[f] See Appendix G for details.
[g] See Appendix H for all details related to subpart-specific cost and LOE estimates.

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 oversight of the reporting program and required reporting by federally owned GHG generating facilities.

EPA Burden and Cost for Program Oversight

EPA activities associated with the GHG reporting program include 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 it will devote up to 12 full time equivalents (FTEs), or an estimated 24,960 hours annually to these activities.

To develop EPA labor costs, EPA estimated the average hourly labor rate for salary and overhead and benefits for Agency staff to be $57.98. To derive this figure, EPA multiplied the hourly compensation at GS-13, Step 1 on the 2018 GS pay scale ($36.24) by the standard government benefits multiplication factor of 1.6 to account for overhead and benefits.[3]

In addition to the labor cost, EPA will incur a non-labor cost of approximately $8.4 million in each of the three years of the information collection for developing guidance, training, responding to stakeholders, communication and outreach, database maintenance, and other contractor support.

Exhibit 6.2 presents the annual Agency burden and cost.

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

The number of respondents in each sector that 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.

[3] http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2018/GS_h.pdf

Exhibit 6.2 Annual Agency Burden and Cost

Information Collection Activity	Annual Responses	Total Annual Burden (hrs)	Labor Cost	Non-Labor Cost	Total Annual Cost
Developing Guidance, Conducting Training, Audits, and General Oversight	1	24,960	$1,447,181	$8,400,000	$9,847,181

Exhibit 6.3 Bottom Line Annual Burden and Cost

Number of Respondents	13,180			From Exhibit 6.1
Total Annual Responses	9,853,129			From Exhibit 6.1
Number of Responses per Respondent	748	=	9,853,129 13,180	Total annual responses from above / Total respondents from above
Total Respondent Hours	740,012			From Exhibit 6.1
Hours per Response	0.08	=	740,012 9,853,129	Total annual hours from above / Total responses from above
Total Respondent Labor Costs	58,419,314			From Exhibit 6.1
Annual Respondent O&M and Capital Cost	29,526,397			From Exhibit 6.1
Total Respondent Cost (labor + non)	87,945,711			From Exhibit 6.1

6(f) Reasons for Change in Burden

This section presents the change in burden compared with the last ICR renewal approved and explains the reasons for the change in burden. Exhibit 6.4 summarizes the adjustments that have affected the overall burden inventory for the final GHGRP ICRs. There is an increase of 825 hours and an increase of $113,910 in the total estimated respondent burden compared with that identified in the GHGRP ICR renewed by OMB in 2016. This change reflects a number of updates in this ICR renewal as compared to the previous ICR renewal. Overall, EPA adjusted capital costs to reflect 2017 dollars and changes to the tax law; and adjusted the number of respondents by taking the actual number of respondents for each subpart in reporting year 2017 (RY2017). EPA also did a complete and comprehensive re-evaluation of the activities and costs associated with all subparts of the GHGRP and used a new methodology to determine the number of responses and the number of responses per respondent by subpart and for the program as a whole.

The following list details both the programmatic and subpart specific updates made that resulted in the change in burden.

- First, EPA accounted for new segments and reporters added to Subpart W to improve the Agency's coverage of emissions from petroleum and natural gas systems. EPA also re-evaluated the respondent costs related to all segments of Subpart W to accurately reflect the activities conducted by respondents. This includes the addition of O&M costs required by respondents who are subject to the petroleum and natural gas systems source category to monitor and report combustion emissions. This re-evaluation resulted in a large increase in O&M costs for Subpart W and overall for the program. This O&M cost increase is due to a large increase in the number of components that must be surveyed at each reporter. Using actual reported component counts by industry segment, the number increased from an average of 1,000 components per reporter to an average of 4,500 components per reporter.

- Second, EPA re-evaluated the respondent costs related to monitoring and reporting combustion emissions to Subpart C. In previous analyses, the combustion emissions costs had been estimated by subpart and aggregated with each subpart's process emission costs. In preparing this renewal, EPA decided to better represent the burden to facilities by including subpart-specific combustion costs in the Subpart C analysis, where appropriate. With a few exceptions, Exhibit 6.1 of this Supporting Statement presents the costs for subpart-specific process emissions in each subpart-specific row and the costs for all combustion emissions in two Subpart C rows (one for facilities that only report to Subpart C and a second for facilities that report to Subpart C plus another subpart). This reanalysis resulted in the number of respondents in the Subpart C analysis increasing by more than 2,500, in order to account for the impact of the combustion costs appropriately. However, in a few situations, subpart-specific combustion emissions costs were so intertwined with subpart-specific process emissions costs that they could not be separated. Therefore, the following subpart-specific

combustion emissions costs are not included in the Subpart C analysis: ethylene facilities reporting under Petrochemical Production (Subpart X) utilizing Tier 3 methodology in Subpart C; complex refineries operating fluid catalytic cracking units (FCCU) equipped with a CEMS reporting under Petroleum Refineries (Subpart Y) utilizing Tier 4 methodology in Subpart C; and Pulp and Paper Manufacturing (Subpart AA) facilities utilizing Tier 1, 2, or 3 methodologies in Subpart C. For those situations, as well as for Subpart W discussed above, the costs of monitoring and reporting combustion emissions continue to be accounted for and presented in the subpart-specific rows along with process emissions.

- Third, EPA re-evaluated costs related to sampling and analysis and capital costs for Electronics Manufacturing (Subpart I). In preparing this renewal, EPA found that those costs were outdated as they reflected projected rather than actual activity data of reporters. For this ICR renewal, EPA re-calculated the costs of sampling and analysis and applied those calculations to actual activity data in a uniform way. Costs for the Triennial Report were also added to the sampling and analysis costs, scaled to the expected number of reporters and spread out over three years. In addition, costs for measuring site-specific destruction and removal efficiencies were added to the O&M costs and scaled to reported activity.

- Fourth, EPA decreased costs of Subpart RR to reflect the latest industry cost and project analyses and monitoring, reporting and verification plan submissions to show decreased costs per facility and an increased number of CO_2-EOR projects over the three years covered by this information collection (see Appendix G of this Supporting Statement). Previous cost estimates for RR over-represented the cost to industry, as they were based on theoretical information rather than actual data.

- Fifth, as stated above, all costs were completely and comprehensively re-evaluated for all subparts and in some cases involved large changes in burden and cost from the renewal approved by OMB in 2016. In addition to the changes itemized for subparts C, I, W and RR described above, a few examples are listed below:

    - For Subpart G, O&M costs have increased by $12,000 per year per facility for carbon content testing, as a quality assurance measure of carbon content received from feedstock suppliers.
    - For Subpart L, costs have increased due to improved assumptions related to the large facility that reports to Subpart L. In prior analyses, the number of processes at the large facility were underestimated; the current analysis uses the actual number of processes reported by the facility.
    - For Subpart X, assumptions used to calculate costs related to sampling were improved. The prior analyses assumed that all sampling was done manually. The current analysis assumed that continuous on-line equipment is used for hourly and daily sampling; only weekly sampling is assumed to be done manually.

- Sixth, a new methodology was used to determine the number of responses by subpart and thus the number of total responses for the program as shown in Exhibit 6.1. In the interest of transparency, EPA's new method uses the actual data that has been reported to the GHGRP through e-GGRT. The e-GGRT database was queried for the number of individual pieces of data (i.e., data counts) entered by all respondents for reporting year 2017, by subpart, which provided the number of responses by subpart. The number of responses by subpart was then divided by the number of reporters per subpart to arrive at the number of responses per respondent. The number of responses by subpart was also added together to arrive at the number of total responses for the program. The result is a much larger number of responses than in the previous ICR; however, this new methodology is solidly grounded in actual reported data and is therefore considered more accurate than previous estimates. See Appendix I for more detail on the new methodology for determining the number of responses per respondent by subpart and total responses for the GHGRP.

- Seventh, due to the updates to the tax law for future years (Tax Cuts and Jobs Act, Pub. L. No. 115–97 (2017)) and the benefit of writing off expenses in a higher-tax-rate period, it was determined that the majority of reporting facilities will have paid off any remaining annualized capital costs associated with equipment that was purchased during initial compliance prior to the three years covered by this ICR (e.g. installation of a Continuous Emissions Monitoring System (CEMS)); therefore, those costs are not included in the applicable subparts. The only exception is for Subpart C, which requires that new facilities using Tier 4 to purchase CEMS. It is not clear how this tax law (or any other future tax laws) will affect new facilities that purchase equipment in 2019, 2020, or 2021; therefore, those capital costs are included in the applicable table of Subpart C as a conservative estimate of costs." As a result, the capital costs have greatly decreased from the renewal approved by OMB in 2016.
- Lastly, the large decrease in annual cost burden (represented by combined Capital and O&M costs) is due to an error in the previous ICR entry as shown on regulations.gov, which incorrectly used labor costs as the annual cost burden amount instead of non-labor costs. The amount entered for the previous ICR should have been $30,621,791 instead of $58,815,798. The values depicted to Exhibit 6.4 below are correct as previously estimated, but not as shown on regulations.gov.

Exhibit 6.4 Summary of Changes in Annual Burden

Title	Current OMB Control Number	Agency Tracking Number	Number of Respondents	Number of Responses	Total Burden (hrs)	Total Labor Cost ($)	Capital Cost ($)	O&M Cost ($)	Total Cost ($)
Information Collection Request for the Greenhouse Gas Reporting Program									
Current Inventory	2060-0629	2300.17	11,080	1,013,963	739,187	57,210,010	15,102,490	15,519,301	87,831,801
Revised Inventory	2060-0629	2300.18	13,180	9,853,129	740,012	58,419,314	412,014	29,114,383	87,945,711
Change			2,100	8,431,024	825	1,209,304	-14,690,476	13,595,082	113,910

Reason for Change in Burden

- Adjusted the number of respondents to correspond to actual data from RY2017 reports.
- Adjusted labor rates (see Appendix D of this Supporting Statement).
- Updated assumptions used in the burden and cost analysis for Subpart W (see Appendix E of this Supporting Statement).
- Updated assumptions used in the burden and cost analysis for Subpart C (see Appendix F of this Supporting Statement).
- Updated assumptions used in the burden and cost analysis for Subpart RR (see Appendix G of this Supporting Statement).
- Changed labor hours (including recordkeeping and reporting hours) and capital and O&M costs based on a complete re-evaluation of burden and costs for all subparts (See Appendix H of this Supporting Statement).
- Changed capital costs based on updates to the tax law for future years (Tax Cuts and Jobs Act, Pub. L. No. 115–97 (2017)).
- Updated the number of responses per subpart based on RY2017 data (See Appendix I of this Supporting Statement).

Note: Capital and O&M costs for the Current Inventory are correct as depicted here. The "annual burden costs" (represented by the combined Capital and O&M costs) as shown on regulations.gov for the Current Inventory of this ICR were incorrectly entered as $58,815,798.

6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 0.08 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-2019-0027, 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 telephone number for the Reading Center is (202) 566-1744. 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.