Supporting Statement Part A:
Information Collection Request
for the Mandatory Reporting of Greenhouse Gases,
Subparts I, L, OOa, and SS: Fluorinated Greenhouse Gas Emissions – Proposed Rule

Including:
Subpart I: Electronics Manufacturing;
Subpart L: Fluorinated Compound Production;
Subpart OOa: Imports and Exports of Fluorinated GHGs Inside Pre-Charged Equipment and Closed-Cell Foams;
Subpart SS: Sulfur Hexafluoride (SF_6) from Electrical Equipment Manufacture or Refurbishment and Manufacturing of Electrical Components

EPA ICR No. 2373.01

1. IDENTIFICATION OF THE INFORMATION COLLECTION

1(a) Title of the Information Collection

TITLE: "Mandatory Reporting of Greenhouse Gases, Subparts I, L, OOa, and SS: Fluorinated Greenhouse Gas Emissions – Proposed Rule."

OMB Control Number: 2060-NEW

1(b) Short Characterization/Abstract

The United States (U.S.) Environmental Protection Agency (EPA) is proposing to supplement the Mandatory Reporting of Greenhouse Gases Program at 40 CFR 98 to require reporting of fluorinated greenhouse gas (fluorinated GHG) emissions from electronics manufacturing, production of fluorinated compounds, use of electrical equipment, manufacture of electrical equipment, and import and export of pre-charged equipment and closed cell foams. The changes in Subparts I, L, OOa, and SS affect paragraphs on rule applicability, schedule, definitions, and incorporation by reference.

EPA first proposed provisions to require reporting of GHG emissions from electronics manufacturing, production of fluorinated GHGs, and use of electrical equipment source categories (under 40 CFR, Part 98, Subparts I, L, and DD) in April 2009. EPA received a substantial number of complex, technical comments on the initial proposal for those source categories. For this reason, EPA decided not to finalize the rule for electronics manufacturing, production of fluorinated GHGs, and electric power systems, and instead to issue a supplemental proposal. In the supplemental proposal, EPA is also proposing recordkeeping and reporting requirements for manufacturing of electrical equipment (Subpart SS) and for imports and exports of pre-charged equipment and closed-cell foams for the first time (Subpart OOa).

This ICR supplements the ICR for ICR for the Mandatory Reporting of Greenhouse Gases; Final Rule (EPA ICR No. 2300.03). EPA will merge these ICRs when they are renewed in the future.

2. NEED FOR AND USE OF THE COLLECTION

2(a) Need/Authority for the Collection

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

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

In accordance with this directive, EPA is proposing to extend the mandatory reporting program using its authority under §114 of the CAA. CAA §114(a) provides EPA broad authority to collect data for the purpose of, among other things, "carrying out any provision" of the Act. Under §114(a)(1), EPA may require any person who owns or operates any emission source or may have information necessary to carry out the provisions of the Act to measure emissions (including installing monitoring equipment), maintain records, submit reports, and provide other information the Administrator may reasonably require.

The CAA provides EPA with broad authority to require the comprehensive and accurate information mandated in this proposed rule because such data would inform, and are relevant to, EPA's analyses of various CAA provisions. EPA may gather information for purposes of establishing implementation plans (CAA §110) or emissions standards (CAA §111) and for the purposes of determining compliance (CAA §113). In addition, CAA §103 authorizes EPA to establish a national research and development program, including non-regulatory approaches and technologies for the prevention and control of air pollution as it relates to GHGs and climate change.

Although this discussion is not a comprehensive listing of how information may be collected to assist EPA in carrying out provisions of the CAA, it illustrates why it is reasonable for EPA to propose this rule under the CAA because it gathers information from targeted sources to ensure a comprehensive assessment of how to best use the CAA to address GHG emissions and climate change.

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

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

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

- Obtain data that is of sufficient quality that it can be used to analyze and inform the development of a range of future climate change policies and potential regulations.

- Balance the rule's coverage to maximize the amount of emissions reported while excluding small emitters.

- Create reporting requirements that are, to the extent possible and appropriate, consistent with existing GHG reporting programs in order to reduce reporting burden for all parties involved.

2(b) Practical Utility/Users of the Data

EPA proposes provisions for facilities producing, importing, and exporting fluorinated GHGs in several separate subparts. Although there are many similarities across the chemicals and processes covered by the subparts, the subparts and the destruction provisions within them were deliberately tailored to different sources and types of emissions.

EPA is proposing the reporting of imports and exports of fluorinated GHGs inside pre-charged equipment and foams in Subpart OOa because as observed by several commenters, draft legislation being considered by Congress would include fluorinated GHGs imported inside products under GHG caps, along with fluorinated GHGs that are imported in bulk or produced domestically. In order to prepare for the possible implementation of this legislation, it is prudent for EPA to gather information on the nature and magnitude of such imports.

In general, reporting of fluorocarbons can be used to assess the overall volume and importance of compounds for which global warming potentials (GWPs) have not been evaluated and to help identify which compounds should have their GWPs evaluated first. In addition, once GWPs have been identified for these compounds, historical reports in tons of chemical can be converted into CO_2e. Without a comprehensive reporting requirement, such historical information could be lost. Ultimately, all of this information can be used to inform policy decisions regarding the appropriate type and scope of emission reduction measures for these gases. Considering the modest cost of reporting production, import, and export of such compounds, the potential value of this information justifies a comprehensive definition of fluorinated GHG.

Accounting for the quantities of fluorinated GHGs in equipment, manufacturing, and imports and exports significantly improves our understanding of the U.S. supply of fluorinated GHGs. Using the rich data set provided by the rulemaking, EPA, states, and the public would be able to track emission trends from facilities within the electrical equipment and manufacture industry over time, particularly in response to policies and potential regulations. These data collected are expected to be used in analyzing and developing a range of potential CAA GHG policies and programs. A consistent and accurate data set is crucial to serve this intended purpose.

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

3. NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

3(a) Nonduplication

In developing the initial proposal was released in April 2009, as well as this supplemental proposed rulemaking, EPA reviewed monitoring methods included in international guidance (e.g., Intergovernmental Panel on Climate Change (IPCC)), as well as Federal voluntary programs (e.g., EPA Perfluorocarbon (PFC) Reduction/Climate Partnership for the Semiconductor Industry and the U.S. Department of Energy (DOE) Voluntary Reporting of Greenhouse Gases Program (1605(b))), corporate protocols (e.g., World Resources Institute and World Business Council for Sustainable Development GHG Protocol) and industry guidance (e.g., 2006 ISMI Guideline for Environmental Characterization of Semiconductor Process Equipment).

EPA also reviewed State reporting programs (e.g., California and New Mexico) and Regional partnerships (e.g., The Climate Registry, the Western Regional Air Partnership). These are important programs that not only led the way in reporting of GHG emissions before the Federal government acted but also assist in quantifying the GHG reductions achieved by various policies. Many of these programs collect different or additional data as compared to this proposed rule. For example, State programs may establish lower thresholds for reporting, request information on areas not addressed in EPA's reporting rule, or include different data elements to support other programs (e.g., offsets). For further discussion on the relationship of this proposed rule to other programs, please refer to the preamble to the Final Mandatory GHG Reporting Rule ("Final MRR") (40 CFR Part 98).

Documentation of EPA's review of GHG monitoring protocols used by federal, state, and international voluntary and mandatory GHG programs, and the review of state mandatory GHG rules, can be found in the docket at EPA-HQ-OAR-2008-0508-056. The programs that specifically relate to fluorinated GHG reporting are described below:

- EPA reviewed the *Inventory of U.S. Greenhouse Gas Emissions and Sinks* (Inventory), which is an annual comprehensive top-down assessment of national GHG emissions. While the Inventory is compiled from national surveys, which are not broken down at the geographic or facility level, the rule focuses on bottom-up data from individual facilities that exceed appropriate thresholds. The bottom-up approach to data collection in the proposed rule can help EPA transition to the IPCC 2006 guidelines for capture, transport, and geological storage at the appropriate time.

- The Agency also examined the voluntary GHG registry that the U.S. DOE's Energy Information Administration (EIA) implements under §1605b of the Energy Policy Act. Under EIA's "1605b program," reporters can choose to prepare an entity-wide GHG inventory and identify specific GHG reductions made by the entity. EPA's mandatory GHG reporting rule covers a much broader set of reporters, primarily at the facility rather than entity-level, but this reporting rule is not designed with the specific intent of reporting of emission reductions, as is the 1605(b) program.

- The DOE also administers the Climate Vision program (Voluntary Innovative Sector Initiatives: Opportunities Now), whose goal includes accelerating the transition to technologies, practices, and processes that are capable of reducing, capturing, or sequestering GHGs. All voluntary reporting under the Climate Vision Program is covered under 1605(b), and as such, it also does not meet EPA's needs for mandatory reporting.

- Launched in 1999, the "EPA SF_6 Emission Reduction Partnership for Electric Power Systems" currently has over 80 systems from across the U.S. reporting and has proven to be a practical and reasonable approach for the collection of emissions data. The reporting requirements for Subpart SS of the proposed rule are modeled after the system-wide reporting of the SF_6 Emission Reduction Partnership. This method is consistent with the reported servicing and maintenance practices of many SF_6-insulated equipment owners, which makes the approach less burdensome and more efficient than using a substation or per piece of equipment source definition for "facility" in Subpart SS.

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

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

As part of the preamble to the proposed regulation, EPA is soliciting comments on this information collection and the estimates in the proposed ICR. EPA is also soliciting comments on specific aspects of the information collection, as described below:

1) Whether the proposed collection of information is necessary for the proper performance of the functions of the Agency, including whether the information would have practical utility;
2) Whether the Agency's burden estimate is accurate, including the validity of the methodology and assumptions used;
3) How to enhance the quality, utility, and clarity of the information to be collected; and
4) How to minimize the burden on respondents, including use of appropriate automated electronic, mechanical, or other technological collection techniques or other forms of information technology.

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

3(c) Consultations

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

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

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

Prior to the Final MRR signature, EPA held two public hearings, on April 6 and 7, 2009, in Arlington, Virginia, and on April 16, 2009, in Sacramento, California. During the sixty day comment period, EPA received approximately 16,800 comments, 15,800 of which were identical mass mailers. In addition, EPA met with over 4,000 additional people in over 150 groups via

webinars, conferences, individual meetings, and other forms of outreach. Details of these meetings are available in the docket (EPA-HQ-OAR-2008-0508).

Although the Agency did not receive comments on the proposed ICR, EPA received a number of lengthy, detailed comments that raised concerns about the costs and technical feasibility of implementing Subparts I and L as proposed in April 2009, requested clarification of how "facility" should be interpreted under Subpart DD, and both favored and opposed a requirement to report imports of fluorinated GHGs contained in imported and exported pre-charged equipment and closed-cell foams.

EPA recognized the concerns raised by stakeholders and decided not to finalize Subparts I, L, and DD with the Final MRR, but instead to re-propose significant pieces of these subparts and re-present them as Subparts I, L, and SS. The proposed supplemental rule incorporates a number of changes including, but not limited to, different methodologies that provide improved emissions coverage at a lower cost burden to facilities than would have been covered under the initial proposed rule. In addition, EPA is proposing requirements to report emissions from manufacture of electrical equipment and to report the quantities of fluorinated GHGs imported and exported inside pre-charged equipment and foams (Subpart OOa).

3(d) Effects of Less Frequent Collection

The reporting frequency for emissions data to EPA has been established to minimize the burden on owners and operators of affected facilities, while ensuring that the reporting rule collects facility-specific data of sufficient quality to achieve the Agency's objectives. For entities required to report, the rule requires annual reporting.

EPA would require reporting of calendar year 2011 emissions in 2012 because the data are crucial to the timely development of future GHG policy and regulatory programs. EPA needs the data quickly at the beginning of every reporting year in order to electronically verify it, publish it as authorized by the CAA, and use it for the purposes described. If the information collection were not carried out on this schedule, the Agency would not be able to develop an informed tracking system of emissions trends across the country. In addition, the annual reporting may eventually be used to climate policies and potential future regulations.

3(e) General Guidelines

This collection of information is consistent with all OMB guidelines under 5 CFR 1320.6.

3(f) Confidentiality

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

3(g) Sensitive Questions

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

4. THE RESPONDENTS AND THE INFORMATION REQUESTED

The respondents in this information collection include owners or operators of electronics manufacturing facilities, fluorinated gas production facilities, electric power systems, and electrical equipment manufacturing facilities, as well as importers and exporters of pre-charged equipment and closed-cell foams that would be required to report their GHG emissions to EPA to comply with the rulemaking. To facilitate the analysis, EPA has divided respondents into groups that align with the source categories identified in the rule.

This section lists the industry sectors (GHG source categories) that would be required to participate in Subparts I, L, OOa, and SS of the GHG Reporting Rule program, the data items required of program participants, and the activities in which participants would 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. Industry sectors are listed below by their corresponding subpart of the rule and their NAICS code for reference.

Part and Subpart	NAICS code(s)
Part 98	
Subpart 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 Microelectricomechanical devices (MEMS) manufacturing facilities.
Subpart L: Fluorinated GHG Production	325120 Industrial gases manufacturing facilities.
Subpart SS: SF_6 from Electrical Equipment	221121 Electric bulk power transmission and control facilities.

Part and Subpart	NAICS code(s)
Subpart OOa: 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 423620 Air-conditioners, room, merchant wholesalers 443111 Household Appliance Stores 326150 Polyurethane foam products manufacturing 335313 Circuit breakers, power, manufacturing 423610 Circuit breakers merchant wholesalers

4(b) Information Requested

(i) Data Items

Reporting Requirements

General requirements that apply to all sources. All respondents that exceed the reporting threshold or that belong to a source category in which all respondents report would be required to submit the general information required in 40 CFR 98.3 and adhere to the reporting, certification, and notification requirements in 40 CFR 98.4 and 40 CFR 98.2, if applicable. EPA is not proposing any changes to these requirements. This information is described in the ICR for the Final MRR (EPA ICR No. 2300.03). In addition, many facilities that are affected by the proposed supplemental rule have GHG emissions from multiple source categories of 40 CFR Part 98, and they would be required to meet the reporting requirements of the specific subparts that describe these requirements.

Requirements that apply to all facilities that are covered under Subpart I. All facilities that meet the definition of this source category would be required to include in each annual report the following information for each electronics manufacturer:

1. Emissions of each GHG emitted from all plasma etching processes, all chamber cleaning, all chemical vapor deposition processes, and all heat transfer fluid use, respectively. Use the Refined Method to estimate emissions from all semiconductor facilities and use a slightly modified 2006 IPCC Tier 2b method to estimate emissions from LCD, MEMS, and PV facilities.
2. The method, mass of input fluorinated GHGs, and emission factors used for estimating fluorinated GHG emissions.
3. Production in terms of substrate surface area (e.g., silicon, PV-cell, LCD).
4. Factors used for gas utilization by process category and by-product formation, and the source for each factor.
5. Annual gas consumed during the reporting year and gas-and facility-specific heel factors used.
6. The apportioning factors used, a description of the engineering model used for apportioning gas usage, and the total gas consumed as calculated using the apportioning factors.
7. Fraction of each gas fed into each process type with abatement devices.

8. For each abatement device through which fluorinated GHGs or N_2O flows at your facility, for which you are reporting controlled emissions, the following:
    a. Certification that the abatement device is installed, operated, and maintained according to manufacturer specifications and in a manner to achieve the design goals of the device;
    b. The uptime and the calculations to determine uptime for that reporting period;
    c. The verified DRE for each abatement device used in that reporting period to reflect controlled emissions, if you have verified the DRE pursuant to §98.94(c) and (d); and
    d. The DRE used (i.e. either the EPA default DRE value or a properly measured DRE).
9. Description of all abatement devices through which fluorinated GHGs or N_2O flows at your facility, including the number of devices of each manufacturer, model numbers, manufacturers guaranteed DRE, if any, and record of DRE measurements over its in-use life. The inventory of abatement devices shall also include a description of the associated tools and/or processes for which these devices treat exhaust.
10. For heat transfer fluid emissions, inputs in the mass-balance equation.
11. Example calculations for fluorinated GHG, N_2O, and heat transfer fluid emissions. Where process categories defined in the Refined Method and/or default gas utilization and by-product formation rates are not used, descriptions of individual processes or processes categories used to estimate emissions.
12. Identification and descriptions of the engineering method used for apportioning gas usage per §98.94(a)(2).

Requirements that apply to all facilities that are covered under Subpart L. All facilities that meet the definition of this source category would be required to report the following:

1. The annual emissions of each fluorinated GHG.
2. The method used to determine the mass emissions of each fluorinated GHG, i.e., mass balance, process-vent-specific emission factor, or process-vent-specific emission calculation factor, for each process at the facility.
3. The monthly mass of each process input and output that are used to determine annual mass.
4. The total mass of the fluorinated GHG produced in metric tons, by chemical.
5. The total mass of each reactant fed into the production process in metric tons, by chemical.
6. The total mass of each reactant permanently removed from the production process in metric tons, by chemical.
7. The total mass of the fluorinated GHG product removed from the production process and destroyed.
8. The mass of each by-product generated.
9. The mass of each by-product destroyed at the facility.
10. The mass of each by-product recaptured and sent off-site.
11. The mass of each by-product recaptured for other purposes.
12. The mass of each fluorinated GHG emitted.

Where missing data have been estimated pursuant to §98.125, all facilities that meet the definition of this source category would be required to report the following information:

1. The reason the data were missing, the length of time the data were missing, the method used to estimate the missing data, and the estimates of those data.
2. Where the missing data have been estimated pursuant to §98.125(a), applicable facilities would be required to also report the rationale for the methods used to estimate the missing data and why the methods would lead to a significant under- or overestimate of the parameter(s).

A fluorinated GHG production facility that destroys fluorinated GHGs would be required to report the monitoring results (i.e., continuous monitoring that demonstrates continuous achievement of the destruction efficiency of the device) for the destruction device that are deviations from the monitoring limit set (e.g., parametric monitoring of incinerator temperature, outlet concentration checks, etc.) during the emissions test.

A fluorinated GHG production facility that destroys fluorinated GHGs would be required to submit the emissions test report for the emission test conducted every 5 years. The emissions testing report would be required to contain the following information:

1. Destruction efficiency (DE) of each destruction unit for each fluorinated GHG, or if a surrogate was used, the DE of the surrogate.
2. Test methods used to determine the destruction efficiency.
3. Methods used to record the mass of fluorinated GHG destroyed.
4. Chemical identity of the fluorinated GHG(s) used in the performance test conducted to determine DE, including surrogates, and information on why the surrogate is sufficient to demonstrate DE for all fluorinated GHG vented to the destruction unit.
5. Name of all applicable federal or state regulations that may apply to the destruction process.
6. If any process changes affect the destruction efficiency of the destruction device or the methods used to record mass of fluorinated GHG destroyed, then a revised report would be required to be submitted to reflect the changes. The revised report would be required to be submitted to EPA within 60 days of the change.

Requirements that apply to all facilities that are covered under Subpart OOa. Each importer of fluorinated GHGs contained in pre-charged equipment or closed-cell foams would be required to submit an annual report that summarizes its imports at the corporate level, except for transshipments, as specified:

1. Total mass in metric tons of each fluorinated GHG imported in pre-charged equipment or closed-cell foams.
2. The identity of the fluorinated GHG used as a refrigerant or electrical insulator, charge size (holding charge, if applicable), and number imported for each type of pre-charged equipment.
3. For closed-cell foams that are imported inside of appliances, the identity of the fluorinated GHG contained in the foam, the quantity of fluorinated GHG contained in

the foam in each appliance, and the number of appliances imported for each type of appliance.
4. For imported closed cell-foams that are not imported inside of appliances, the identity of the fluorinated GHG, the density of the fluorinated GHG in the foam (kg fluorinated GHG/cubic foot), and the quantity of foam imported (cubic feet) for each type of closed-cell foam.
5. Dates on which the pre-charged equipment or closed-cell foams were imported.
6. Ports of entry through which the pre-charged equipment or closed-cell foams passed.
7. Countries from which the pre-charged equipment or closed-cell foams were imported.

Requirements that apply to all facilities that are covered under Subpart SS. All facilities that meet the definition of this source category would be required to include in each annual report the following information for each manufacturer, by chemical:

1. SF_6 and PFC sales and purchases.
2. SF_6 and PFCs sent off site for destruction.
3. SF_6 and PFCs sent off site to be recycled.
4. SF_6 and PFCs returned from off site after recycling.
5. SF_6 and PFCs returned by equipment users with or inside equipment
6. SF_6 and PFCs stored in containers at the beginning and end of the year.
7. SF_6 and PFCs inside equipment delivered to customers.
8. SF_6 and PFCs returned to suppliers.
9. For any missing data, you would be required to report the length of time the data were missing, the method used to estimate emissions in their absence, and the quantity of emissions thereby estimated.

Recordkeeping Requirements

General requirements that apply to all sources. EPA is not proposing any changes to the general recordkeeping requirements that apply to all sources. This information is described in the ICR for the Final MRR (EPA ICR No. 2300.03). In addition, many facilities that are affected by the proposed supplemental rule have GHG emissions from multiple source categories of 40 CFR Part 98, and they would be required to meet the reporting requirements of the specific subparts that describe these requirements.

Requirements that apply to all facilities that are covered under Subpart I. All facilities that meet the definition of this source category would be required to retain the following records:

1. Data used to estimate emissions including all spreadsheets and copies of calculations used to estimate emissions.
2. Documentation for the values used for GHG utilization rates and by-product emission factors. If you developed facility-specific, recipe-specific factors, documentation that these were measured using the 2006 ISMI Guidelines would be required to be retained.
3. For each abatement device through which fluorinated GHGs or N_2O flows at your facility, for which you are reporting controlled emissions, the following:

a. Documentation to certify that each abatement device used at your facility is installed, maintained, and operated according to manufacturer specifications and in a manner to achieve the design of the devices.
b. Records of the uptime and the calculations to determine uptime used to discount DREs.
c. The date and results of the initial and any subsequent tests of emission control device DRE, including the following information:
    i. Dated certification, by the technician who made the measurement, that the dilution factor was determined using the tracer method.
    ii. Dated certification, by the technician who made the measurement, that the DRE was calculated using the formula given in §98.94(c)(1)(iv).
    iii. Documentation of the measured flows, concentrations and calculations used to calculate DF, relative precision (ε), and DRE.

4. The date and results of the initial and any subsequent tests to determine process tool gas utilization and by-product formation factors.

Requirements that apply to all facilities that are covered under Subpart L. All facilities that meet the definition of this source category would be required to retain the following dated records:

1. Process information records.
    a. Identify all products and processes subject to this subpart. Include the unit ID as appropriate.
    b. Records of all analyses and calculations conducted, including all information reported as required under §98.123 and 98.126.
2. Mass balance method. Retain the following records for each process at the facility.
    a. The monthly mass of each process input and output that are used to determine annual mass.
    b. The total mass of the fluorinated GHG produced in metric tons, by chemical.
    c. The total mass of each reactant fed into the production process in metric tons, by chemical.
    d. The total mass of each reactant permanently removed from the production process in metric tons, by chemical.
    e. The total mass of the fluorinated GHG product removed from the production process and destroyed.
    f. The mass of each by-product generated.
    g. The mass of each by-product destroyed at the facility.
    h. The mass of each by-product recaptured and sent off-site for destruction.
    i. The mass of each by-product recaptured for other purposes.
    j. The mass of each fluorinated GHG emitted.
3. Emission factor and emission calculation factor method. Retain the following records for each process at the facility.
    a. Identify all process vents above and below the 10,000 lb/yr uncontrolled emission limit for fluorinated GHG.
    b. Identify the method used to develop the factor (i.e., emission factor by emissions test or emissions calculation factor).

c. The emissions test data and reports and the calculations used to determine the process-vent-specific emissions factor and the actual process-vent-specific emission factor, including the average hourly fluorinated GHG emission rate from the process vent during the test or the average fluorinated GHG emissions per batch and the process rate, production rate, or other process rate activity during the test.
d. The calculations used to determine the emissions calculation factor and the actual emissions calculation factor.
e. The ongoing monthly, campaign, or batch process production quantity and annual process production quantity or other process feed or other activity information in the appropriate units.
f. For continuous processes, identify whether the process was representative or whether it was another operating scenario. For batch processes, identify whether each batch operated was considered a typical batch or whether it was another operating scenario.
g. Calculations used to determine annual fluorinated GHG emissions for each process and the total fluorinated GHG emissions for all processes, i.e., total for facility.
h. The time periods when the process vent emissions from a campaign or batch were vented to the destruction device.

4. Missing data records. Where missing data have been estimated pursuant to §98.125, facilities would be required to record the following information:
   a. The reason the data were missing, the length of time the data were missing, the method used to estimate the missing data, and the estimates of those data.
   b. Where the missing data have been estimated pursuant to §98.125(a), also report the rationale for the methods used to estimate the missing data and why the methods would lead to a significant under- or overestimate of the parameter(s).
5. 5-year process vent emission testing. A fluorinated GHG production facility that conducts process vent emission testing to determine process-vent-specific emission factor for fluorinated GHGs would be required to retain the results of the emission testing, including:
   a. Test methods used to determine the flow rate and fluorinated GHG concentrations of the process vent stream.
   b. Flow rate of fluorinated GHG stream.
   c. Concentration (mass fraction) of each fluorinated GHG.
   d. Emission rate calculated from sections (3)(b) and (3)(c) in kg/hr.
6. 5-year destruction efficiency testing. A fluorinated GHG production facility that destroys fluorinated GHGs shall retain the emissions performance testing report containing the following information:
   a. Destruction efficiency (DE) of each destruction device.
   b. Test methods used to determine the destruction efficiency.
   c. Methods used to record the mass of fluorinated GHG destroyed.
   d. Chemical identity of the fluorinated GHG(s) used in the performance test conducted to determine DE.
   e. Name of all applicable federal or state regulations that may apply to the destruction process.

f. If any process changes affect unit destruction efficiency or the methods used to record mass of fluorinated GHG destroyed, then a revised report would be required to be submitted to reflect the changes. The revised report would be required to be submitted to EPA within 60 days of the change.
g. Records of test reports and other information documenting the facility's five-year destruction efficiency report in §98.126(c) and (d).

7. All facilities. Dated records documenting the initial and periodic calibration of the gas chromatographs, [GC/MS, GC/ECD, and NMR devices,] weigh scales, flowmeters, and volumetric and density measures used to measure the quantities reported under this subpart, including the industry standards or manufacturer directions used for calibration pursuant to §98.124(g) and (h).
8. In addition to the data required by paragraph (a) of this section, the designated representative of a fluorinated GHG production facility that destroys fluorinated GHGs shall keep records of test reports and other information documenting the facility's one-time destruction efficiency report and annual destruction device outlet reports in §98.126(c) and (d).

Requirements that apply to all facilities that are covered under Subpart OOa.

Importers of fluorinated GHGs in pre-charged equipment and closed-cell foams would be required to retain the following records substantiating each of the imports that they report:

1. A copy of the bill of lading for the import.
2. The invoice for the import.
3. The U.S. Customs entry form.

Exporters of fluorinated GHGs in pre-charged equipment and closed-cell foams would be required to retain the following records substantiating each of the exports that they report:

1. A copy of the bill of lading for the export
2. The invoice for the export.

Persons who transship pre-charged equipment and closed cell foams containing fluorinated GHGs would be required to maintain records that indicated that the pre-charged equipment or foam originated in a foreign country and was destined for another foreign country and did not enter into commerce in the U.S.

Requirements that apply to all facilities that are covered under Subpart SS. All facilities that meet the definition of this source category would be required to keep the following:

1. All information reported and listed in §{].
2. Accuracy certifications and calibration records for all scales and monitoring equipment, including the method or manufacturer's specification used for calibration.
3. Check-out and weigh-in sheets and procedures for cylinders.
4. Residual gas amounts in cylinders sent back to suppliers.
5. Invoices for gas purchases and sales.

(ii) Respondent Activities

The owner or operator of a facility that is subject to the rule's reporting requirements would be required to report total annual GHG emissions in metric tons of CO_2e from all the source categories at the facility. Under the electronics manufacturing section of the proposed rule (Subpart I), facilities would be required to report fluorinated GHG and N_2O emissions for all plasma etching, chemical vapor deposition, chamber cleaning, and wafer cleaning processes as well as all heat transfer fluid use. Under the fluorinated compound production section of the proposed rule (Subpart L), facilities that produce fluorinated gases would be required to report their fluorinated GHG emissions from fluorinated gas production, transformation, and destruction, as well as combustion-related CO_2, CH_4, and N_2O emissions from stationary fuel combustion. Under Subpart OOa, the import and export of fluorinated GHGs inside pre-charged equipment and closed-cell foams would be subject to requirements similar to the import and export of bulk GHGs. In addition, equipment importers would be required to report the types and charge sizes of equipment and the number of pieces of each type of equipment that they imported or exported, while foam importers would be required to report the volume of foam and fluorinated GHG density of the foam that they imported. Under Subpart SS, electrical equipment manufacturers would be required to report their SF_6 and PFC emissions, including those from equipment testing, manufacturing, decommissioning and disposal, refurbishing, and from storage cylinders.

The primary tasks that reporting program respondents would perform include:

1. Developing appropriate monitoring plans for each affected source and each affected unit at a source, as applicable;
2. Operation and maintenance activities associated with the monitoring, including quality assurance activities;
3. Ensuring data quality, preparing annual reports of emissions data, and submitting these reports to EPA;
4. Potentially responding to questions or error messages from EPA; and
5. Maintaining records for a minimum of three years. In addition, respondents would be required to purchase the necessary monitoring hardware and purchase the electronic data reporting software (or software upgrades) if they had not done so for another reporting program.

Reports would be required to 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

The ICR for the Final MRR (EPA ICR No. 2300.03) described EPA Headquarters' activities associated with program start-up activities to prepare for receiving the reported data. These activities include database and software design, developing guidance and training affected sources, responding to stakeholders, and communication and outreach on the rule requirements.

This ICR reflects incremental Agency costs for implementing the program once the requirements for the new subparts are in place. EPA program operation activities would include monitoring and verification of emission reports, database and software maintenance, communication and outreach, and program evaluation.

5(b) Collection Methodology and Management

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

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

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

The Agency plans to publish data submitted or collected under this rulemaking through EPA's Web site, reports, and other formats (e.g., XML), with the exception of any CBI data. The data could be used by EPA and other agencies, and other organizations and stakeholders for air

modeling, analyzing emissions by industry sector and region, informing future climate change policy decisions, and answering questions from the public. The new system would follow Agency standards for design, security, data element and reporting format conformance, and accessibility. In designing the data base, EPA would attempt to minimize respondents' burden by integrating the new reporting requirements with existing data collection and data management systems, when feasible.

5(c) Small Entity Flexibility

EPA took several steps to minimize the impacts on small entities. The Agency met several times with industry trade associations to discuss the reporting options considered and their possible impacts on small entities. These provisions apply to facilities in the Initial Mandatory GHG Reporting Rule as well as the Final MRR, including Subparts I, L, OOa, and SS. EPA further minimized impacts on small entities by not requiring facilities below a certain emissions threshold to report their emissions. The rule includes a mechanism in 40 CFR 98.2 to allow facilities and suppliers to cease reporting if their emissions are less than 25,000 mtCO2e per year for five consecutive years or less than 15,000 mtCO2e per year for three consecutive years.

5(d) Collection Schedule

Facilities would be required to collect data and calculate emissions at varying frequencies, as described in the rule, and summarized in Section 4(b) of this ICR. Facilities that would be required to comply with this supplemental proposal would be required to submit GHG emission reports annually. Facilities or suppliers that have emissions or products with emission less than 25,000 mtCO2e for five years in a row may cease reporting.

6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION

This section presents EPA's estimates of the burden and costs to respondents associated with the activities described in Section 4 as well as the federal burden hours and costs associated with the activities described in Section 5(a). EPA estimates that, over the three years covered by this request, the total respondent burden associated with this reporting would average 81,452 hours per year and the cost to respondents of the information collection would average $4,511,277 per year.

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

6(a) Estimating Respondent Burden

Respondent burden estimates are presented in Exhibit 6.1. EPA estimates that the total annual burden to all affected entities is 81,452 hours per year over the three years covered by this information collection. Exhibit 6.1 presents aggregate burden by sector only; for the details of burden calculations, please see Appendix A.

6(b) Estimating Respondent Costs

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

To calculate labor costs, EPA estimated technical, managerial, clerical, and legal loaded labor rates for each industry sector using labor rates from the Bureau of Labor Statistics[1] and applying a 60% loading factor[2]; these rates vary somewhat by sector. For all subparts, the labor rates are: $88.79 for electricity managers; $101.31 for refinery managers, $71.03 for industrial managers; $60.84 for electricity engineers/technicians, $63.89 for Refinery Engineers/ Technicians, and $55.20 for Industrial Engineers/Technicians; $29.65 for clerical staff, and $101.00 for legal staff. Non-labor costs (capital and O&M) are presented in Exhibit 6-1 below.

EPA estimates that the total annual cost to all affected non-federal entities is $4.5 million over the three years covered by this information collection. Exhibit 6.1 presents aggregate costs; for the details of EPA's cost calculations, please see Appendix A.

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

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

Exhibit 6.1 Annual Average Respondent Burden and Cost for the GHG Reporting Rule

Source Category	Annual Average - 3 year ICR Period							
	No. Respondents	Responses/ Respondent	Total Responses	Total Burden (hrs)	Total Labor Cost ($K)	Capital Cost ($K)	O&M Cost ($K)	Total Cost ($K)
I - Electronics Production	94	2	117	53,683	$2,949	$0	$0	$2,949
L - Fluorinated Gas Production	14	1	14	15,853	$832	$44	$24	$900
OOa - Imports and Exports of Fluorinated GHGs in Products	158	1	158	11,482	$640	$0	$0	$640
SS - SF6 Equipment Producers	10	1	10	434	$22	$0	$0	$22
TOTAL	276	Varies	299	81,452	$4,443	$44	$24	$4,511

6(c) Estimating Agency Burden and Cost

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

EPA burden and cost

EPA activities associated with Subparts I, L, OOa, and SS of the mandatory GHG reporting rule include Headquarters oversight and implementation of the reporting program, e.g., monitoring and verification of emission reports, database and software maintenance, communication and outreach, and program evaluation. EPA estimates that Headquarters would devote up to 21 full time equivalents (FTEs), or 4,160 hours to these activities. EPA would incur incremental costs for Subparts I, L, OOa, and SS of approximately $384 thousand (Agency labor +contractor costs) for database and software design, developing guidance, training, responding to stakeholders, communication and outreach, contractor support and data base maintenance, and for third-party verification activities.

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

Burden and cost for federal facilities covered by the rule

Exhibit 6.2 presents the annual burden and cost for federal facilities that would be required to comply with the rule.

Exhibit 6.2 Annual Agency Burden and Cost

Information Collection Activity	Annual Responses	Total Annual Burden	Labor Cost	Non-Labor Cost	Total Annual Cost
I, L, OOa, and SS: Fluorinated GHG Emissions	1	4160	$208,582	$175,000	$383,582

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

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

6(e) Bottom Line Burden Hours and Costs

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

Exhibit 6.3 Bottom Line Annual Burden and Cost

Number of Respondents	276			From Exhibit 6.1
Total Annual Responses	299			From Exhibit 6.1
Number of Responses per Respondent	1.1	=	299 276	Total annual responses from above ÷ Total respondents from above
Total Respondent Hours	81,452			From Exhibit 6.1
Hours per Response	272.41	=	81,452 299	Total annual hours from above ÷ Total responses from above
Annual O&M and Capital Cost	$68,105			From Exhibit 6.1
Total Respondent Cost (labor + non)	$4,511,277			From Exhibit 6.1
Total Hours (Respondents and agency)	85,612	=	81,452 4,160	Total respondent hours from above + Total EPA hours
Total Cost (Respondents plus Agency)	$4,894,860	=	$4,511,277 $383,582	Total respondent cost from above + Total EPA cost

6(f) Burden Statement

The respondent reporting burden for this collection of information is estimated to average 81,452 hours per year for a three year period. The average annual burden to EPA for this period is estimated to be 4,160 hours for oversight activities. The annual public reporting and recordkeeping burden for this collection of information is estimated to average 272.41 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2008-0508, which is available for online viewing at http://www.regulations.gov, or in person viewing at the Air and Radiation docket in the EPA Docket Center (EPA/DC), EPA West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, D.C. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation docket is (202) 566-1742. An electronic version of the public docket is available at http://www.regulations.gov. This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OAR-2008-0508 and OMB Control Number 2060-NEW on any correspondence.