

**Supporting Statement Part A:
Information Collection Request
for the Mandatory Reporting of Greenhouse Gases from Magnesium Production,
Underground Coal Mines, Industrial Wastewater Treatment, and Industrial Waste
Landfills – Final Rule**

EPA ICR No. 2396.01

1. IDENTIFICATION OF THE INFORMATION COLLECTION

1(a) Title of the Information Collection

TITLE: “Mandatory Reporting of Greenhouse Gases from Magnesium Production, Underground Coal Mines, Industrial Wastewater Treatment, and Industrial Waste Landfills– Final Rule.”

OMB Control Number: 2060-NEW

1(b) Short Characterization/Abstract

The United States (U.S.) Environmental Protection Agency (EPA) is promulgating rules that supplement the Mandatory Reporting of Greenhouse Gases Program at 40 CFR 98 to require reporting of greenhouse gas emissions from magnesium production, underground coal mines, industrial wastewater treatment, and industrial waste landfills. The changes add these four source categories and add paragraphs on rule applicability, schedule, definitions, and incorporation by reference. This information collection supplements the information collection in 2060-0629.

EPA first proposed provisions to require reporting of GHG emissions from these source categories 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 EPA decided to delay finalizing the reporting requirements for the four source categories subject to this supplemental rulemaking to allow for additional time to review public comments, perform additional analysis, and consider alternatives to the proposed methodologies.

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 extending 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 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 require this reporting 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 will inform future climate change policy decisions.

Because EPA does not yet know the specific policies that will be adopted, the data reported through the mandatory reporting system should be of sufficient quality to inform policy and program development. Also, consistent with the Appropriations Act, the supplemental rule 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 is promulgating provisions for facilities producing GHG, supplementing the Mandatory GHG rule published on October 30, 2009. Specifically, EPA is finalizing rules for four of the source categories (magnesium production, underground coal mines, industrial waste landfills, and industrial wastewater treatment) that were proposed but not finalized in the October 30, 2009, action, and amending the general provisions for the Mandatory GHG Reporting Rule (40 CFR part 98, subpart A) to incorporate T (Magnesium Production), FF (Underground Coal Mines), TT (Industrial Waste landfills), and II (Wastewater Treatment).

As discussed in the proposal (74 FR 16448, April 10, 2009), data from magnesium production, underground coal mines, industrial waste landfills, and industrial wastewater treatment facilities will inform decisions about whether and how to use CAA section 111 to establish new source performance standards (NSPS) for these four source categories, including whether there are any additional categories of sources that should be listed under CAA section 111(b). The data collected will also inform EPA's implementation of section 103(g) of the CAA regarding improvements in sector based nonregulatory strategies and technologies for preventing or reducing air pollutants.

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

3. NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

3(a) Nonduplication

In developing the initial proposal was released in April 2009, as well as this rulemaking, EPA reviewed monitoring methods included in international guidance (e.g., Intergovernmental Panel on Climate Change (IPCC)), as well as Federal voluntary programs and industry guidance.

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 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 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 are described in the ICR for the proposed rule.

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

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

As part of the Federal Register notice on the April 10, 2009, proposed rule, EPA solicited comments on specific aspects of the information collection, as described below:

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

No comments specifically addressing the ICR were received. However, the Agency received and considered comments relating to the proposed reporting provisions for the source categories that are the subject of this supplemental rulemaking. These comments, together with other information collected by EPA, raised concerns regarding the feasibility of implementing the reporting requirements for the source categories included in the supplemental. EPA decided to delay finalizing the reporting requirements for these source categories to allow for additional time to review public comments, perform additional analysis, and consider alternatives to the proposed methodologies. Upon further consideration, EPA decided not to proceed with finalizing reporting requirements for ethanol production, food processing, and suppliers of coal. The public comments and EPA's responses are summarized in the preamble of the final rule.

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.

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).

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. The rule requires annual reporting.

Facilities with existing magnesium production, underground coal mines, industrial waste landfills, and industrial wastewater treatment must begin monitoring GHG emissions on January 1, 2011 in accordance with the methods specified in subparts T, FF, TT, and II. Facilities must report the GHG emissions and associated verification data required under each of these subparts by March 31, 2012. Existing facilities are not required to collect or report the data required under subparts T, FF, TT, and II in 2011 for the reporting year 2010.

EPA decided to require reporting of calendar year 2011 emissions for the four source categories finalized in today's action because the data are crucial to the timely development of future GHG policy and regulatory programs. In the Appropriation Act, Congress requested EPA to develop this reporting program on an expedited schedule, and Congressional inquiries along with public comments reinforce that data collection for calendar year 2011 is a priority. Delaying data collection until calendar year 2012 would mean the data would not be received until 2013, which would likely be too late for many ongoing GHG policy and program development needs.

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 and operators of magnesium production facilities (subpart T), facilities that contain an active underground coal mine (subpart FF), facilities that contain an industrial waste landfill (subpart TT), and industrial wastewater treatment facilities (subpart II) that are required to report their GHG emissions to EPA to comply with the rulemaking.

The source category for subpart T consists of : 1) any site where magnesium metal is produced through smelting, refining, or remelting operations; and 2) any site where molten magnesium is used in alloying, casting, drawing, extruding, forming, or rolling operations. The source category for subpart FF consists of active underground coal mines and any underground mines under development. The source category for subpart TT consists of industrial waste landfills whose total landfill design capacity is greater than or equal to 300,000 metric tons and that accepted waste on or after January 1, 1980 and, if present, landfill gas collection systems and landfill gas destruction devices (including flares). The source category for subpart II applies to anaerobic processes used to treat industrial wastewater and industrial wastewater treatment sludge at pulp and paper mills, food processing facilities, ethanol production facilities, and petroleum refineries. 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 are required to participate in Subparts T, FF, TT, and II of the GHG Reporting Rule program, the data items required of program participants, and the activities in which participants must 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 CO₂e 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 T: Magnesium Production | 331419 Primary refiners of nonferrous metals by electrolytic methods. 331492 Secondary magnesium processing plants. |
| Subpart FF: Underground Coal Mines | 212113 Underground anthracite coal mining operations. 212112 Underground bituminous coal mining operations. |

| Part and Subpart | NAICS code(s) |
|---|---|
| Subpart 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. |
| Subpart 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. |

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 are 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 (2060-0629). In addition, many facilities that are affected by the four new source categories have GHG emissions from multiple source categories of 40 CFR Part 98, and they are required to meet the reporting requirements of the specific subparts that describe these requirements.

Special provisions for reporting year 2010 that apply to all facilities that are covered under Subpart T, FF, TT, and II. There are special provisions on the use of best available monitoring methods (BAMM) for the four new source categories for the reporting year 2010.

During January 1, 2010 through March 31, 2010, owners or operators may use BAMM for any parameter (e.g., fuel use, daily carbon content of feedstock by process line) that cannot reasonably be measured according to the monitoring and QA/QC requirements of a relevant subpart. Starting no later than April 1, 2010, the owner or operator must discontinue using BAMM and begin following all applicable monitoring and QA/QC requirements. Exceptions

include: 1) Administrator approval of an owner or operator request to use one or more BMM beyond March 31, 2010; or 2) submittal of an abbreviated GHG report for GHGs emitted in 2010 for facilities containing only general stationary fuel combustion sources.

Requirements that apply to all facilities that are covered under Subpart T. Each annual report must include the following information for the magnesium production and processing facility:

1. Consumption of each cover or carrier gas in kg and total GHG emissions for the facility by gas, and across all gases, in metric tons of CO₂e. GHGs to report include:
 - a. Sulfur hexafluoride (SF₆).
 - b. HFC-134a.
 - c. The fluorinated ketone, FK 5-1-12.
 - d. CO₂.
 - e. Any other GHGs (as defined in §98.6).
2. CO₂, N₂O, and CH₄ emissions from each combustion unit on site by following the calculation procedures, monitoring and QA/QC methods, missing data procedures, reporting requirements, and recordkeeping requirements of subpart C.
3. Type of production process or processes (e.g., primary, secondary, die casting).
4. Magnesium production amount in metric tons for each process type.
5. Typical cover and carrier gas flow rate (e.g., standard cubic feet per minute) for each production unit and composition in percent by volume.
6. Amount of CO₂ used as a carrier gas during the reporting period.
7. For any missing data, report the length of time the data were missing for each cover gas or carrier gas, the method used to estimate emissions in their absence, and the quantity of emissions thereby estimated.
8. The facility's overall cover gas usage rate (kg gas/MT Mg), excluding the carrier gas, for the reporting year (e.g., 1 kg SF₆ /MT Mg).
9. If applicable, an explanation of any change greater than 30 percent in the facility's cover gas usage rate (e.g., installation of new melt protection technology or leak discovered in the cover gas delivery system that resulted in increased consumption).
10. A description of any new melt protection technologies adopted to account for reduced or increased GHG emissions in any given year.

Requirements that apply to all facilities that are covered under Subpart FF. Each annual report must include the following information for each active underground coal mine:

1. Quarterly CH₄ liberated from each ventilation monitoring point, and from each degasification system monitoring point (this includes degasification systems deployed before, during, or after mining operations are conducted in a mine area)(CH_{4V} and CH_{4D}).
2. Quarterly CH₄ destruction at each ventilation and degasification system destruction device or point of offsite transport(CH_{4Destroyed}).
3. Quarterly CH₄ emissions (net) from all ventilation and degasification systems (this includes degasification systems deployed before, during, or after mining operations are conducted in a mine area) (CH₄ emitted (net)).

4. Quarterly CO₂ emissions from on-site destruction of coal mine gas CH₄, where the gas is not a fuel input for energy generation or use (e.g., flaring) (CO₂).
5. Quarterly volumetric flow rate estimates for each ventilation monitoring point, including date(s) and location(s) of measurement, whether based on quarterly sampling or continuous monitoring (V).
6. Quarterly CH₄ concentration estimates for each ventilation monitoring point, including date(s) and location(s) of measurement, whether based on quarterly sampling or continuous monitoring (C).
7. Quarterly sum of CEMS volumetric flow data used to calculate CH₄ liberated from degasification systems (summed from daily CEMS data), or quarterly reporting of volumetric flow data based on results from weekly sampling data)(V).
8. Quarterly sum of CEMS CH₄ concentration data used to calculate CH₄ liberated from degasification systems (average from daily data), or quarterly reporting of CH₄ concentration data based on results from weekly sampling data)(C).
9. Dates in quarterly reporting period where active ventilation of mining operations is taking place .
10. Dates in quarterly reporting period where degasification of mining operations is taking place .
11. Dates in quarterly reporting period when continuous monitoring equipment is not properly functioning, if applicable.
12. Temperatures and pressure values at the time, location (shaft or vent, degasification well or measurement point), and at the conditions for which measurements are made (T and P).
13. For each destruction device, a description of the device, including an indication of whether destruction occurs at the coal mine or off-site. If destruction occurs at the mine, also report an indication of whether a back-up destruction device is present at the mine, the annual operating hours for the primary destruction device, the annual operating hours for the back-up destruction device (if present), and the destruction efficiencies assumed (percent).
14. A description of the gas collection system (manufacture, capacity, number of wells, etc.), the surface area of the gas collection system (square meters), and the annual operating hours of the gas collection system.
15. Identification information and description for each well and shaft, indication of whether the well or shaft is monitored individually, or as part of a centralized monitoring point.
16. For each centralized monitoring point, identification of the wells and shafts included in the point.
17. Annual CO₂, CH₄, and N₂O emissions from stationary fuel combustion devices under 40 CFR part 98, subpart C (General Stationary Combustion Sources).

Underground coal mines that are subject to quarterly (or more frequent) sampling of ventilation systems by the Mine Safety and Health Administration (MSHA) are subject to the Final MRR regardless of the actual facility emissions. For the quarterly sampling option, coal mine operators are required to either: (a) independently collect quarterly or more frequently samples of CH₄ released from the ventilation system(s), using MSHA procedures, have these samples analyzed for CH₄ composition, and report the results to EPA, or (b) to obtain the results from the quarterly testing that MSHA already conducts, and report those to EPA.

Requirements that apply to all facilities that are covered under Subpart TT. Each annual report must include the following information for each industrial landfill:

1. A classification of the landfill as “open” (actively received waste in the reporting year) or “closed” (no longer receiving waste), the year in which the landfill first started accepting waste for disposal, the last year the landfill accepted waste (for open landfills, enter the estimated year of landfill closure), the capacity (in metric tons) of the landfill, and an indication of whether leachate recirculation is used during the reporting year and its typical frequency of use over the past 10 years (e.g., used several times a year for the past 10 years, used at least once a year for the past 10 years, used occasionally but not every year over the past 10 years, not used).
2. The number of waste streams (including “bulk waste” stream if used for historic waste quantities) for which Equation TT-1 is used to calculate modeled CH₄ generation, a description of each waste stream, and the decay rate (k) value used in the calculations.
3. For each waste stream identified in §98.346a(b), report the method(s) for estimating historical waste disposal quantities and the range of years for which each method applies. If Equation TT-2 is used, provide the number of years (N) for which disposal and production data are both available, the waste disposal quantity and production quantity for each year Equation TT-2 applies, and the average waste disposal factor (WDF) calculated for that waste stream. If Equation TT-4 is used, provide the value of landfill capacity (LFC), YrData, and YrOpen used in Equation TT-4.
4. For each waste stream identified in §98.346a(b), report the following items for each year of landfilling starting with the “Start Year” (S) to the current reporting year.
 - a. The quantity of waste (W_x) disposed of in the landfill (metric tons, wet weight).
 - b. The degradable organic carbon (DOC_x) value (mass fraction) and an indication as to whether this was the default value from Table TT-1 or a value determined through sampling and calculation.
 - c. The fraction of CH₄ in the landfill gas (volume fraction, dry basis) and an indication as to whether this was the default value or a value determined through measurement data.
5. The surface area of the landfill containing waste at the start reporting year (in square meters), identification of the type of cover material used (as either organic cover, clay cover, sand cover, or other soil mixtures). If multiple cover types are used, the surface area associated with each cover type.
6. The modeled annual methane generation rate for the reporting year (metric tons CH₄) calculated using Equation TT-1.
7. For landfills without gas collection systems, the annual methane emissions (i.e., the methane generation, adjusted for oxidation, calculated using Equation TT-5), reported in metric tons CH₄, and an indication of whether passive vents and/or passive flares (vents or flares that are not considered part of the gas collection system (as defined in §98.6) are present at this landfill.
8. For landfills with gas collection systems, report according to §98.346(i) of subpart HH of this part.

Requirements that apply to all facilities that are covered under Subpart II. Each annual report must include the following information for the industrial wastewater treatment system:

1. The anaerobic processes used to treat industrial wastewater and industrial wastewater treatment sludges, a unique identifier for each process, and whether biogas generated by the process is recovered. The anaerobic processes must be categorized as:
 - a. Anaerobic reactor.
 - b. Anaerobic deep lagoon.
 - c. Anaerobic shallow lagoon.
 - d. Anaerobic sludge digester.
2. For each anaerobic wastewater treatment process (reactor, deep lagoon, or shallow lagoon), report:
 - a. Weekly average COD or BOD₅ concentration of wastewater entering each anaerobic wastewater treatment process, for each week the anaerobic process was operated.
 - b. Volume of wastewater entering each anaerobic wastewater treatment process for each week the anaerobic process was operated.
 - c. Maximum CH₄ production potential (B₀) used as an input to Equation II-1 or II-2.
 - d. Methane conversion factor (MCF) used as an input to Equation II-1 or II-2.
 - e. Annual mass of CH₄ generated by each anaerobic wastewater treatment process, calculated using Equation II-1 or II-2.
3. For each anaerobic wastewater treatment process from which biogas is not recovered, report the annual CH₄ emissions, calculated using Equation II-3.
4. For each anaerobic wastewater treatment process and anaerobic digester from which some biogas is recovered, report:
 - a. Annual quantity of CH₄ recovered from the anaerobic process calculated using Equation II-4.
 - b. Cumulative volumetric biogas flow for each week that biogas is collected for destruction.
 - c. Weekly average CH₄ concentration for each week that biogas is collected for destruction.
 - d. Weekly average temperature for each week at which flow is measured for biogas collected for destruction, or statement that temperature is incorporated into monitoring equipment internal calculations.
 - e. An indication as to whether flow was measured on a wet or dry basis, an indication as to whether CH₄ concentration was measured on a wet or dry basis, and if required for Equation II-4, weekly average moisture content for each week at which flow is measured for biogas collected for destruction, or statement that moisture content is incorporated into monitoring equipment internal calculations.
 - f. Weekly average pressure for each week at which flow is measured for biogas collected for destruction, or statement that pressure is incorporated into monitoring equipment internal calculations.
 - g. CH₄ collection efficiency (CE) used in Equation II-5.
 - h. An indication of whether destruction occurs at the facility or off-site. If destruction occurs at the facility, also report whether a back-up destruction device

is present at the facility, the annual operating hours for the primary destruction device, the annual operating hours for the back-up destruction device (if present), the destruction efficiency for the primary destruction device, and the destruction efficiency for the backup destruction device (if present).

- i. The annual CH₄ emissions, as calculated by Equation II-6.

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 four new source categories have GHG emissions from multiple source categories of 40 CFR Part 98, and they are 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 T. All facilities that meet the definition of this source category must retain the following information for the magnesium production or processing facility:

1. Check-out and weigh-in sheets and procedures for gas cylinders.
2. Accuracy certifications and calibration records for scales including the method or manufacturer's specification used for calibration.
3. Residual gas amounts (heel) in cylinders sent back to suppliers.
4. Records, including invoices, for gas purchases, sales, and disbursements for all GHGs.

Requirements that apply to all facilities that are covered under Subpart FF. All facilities that meet the definition of this source category must retain the following dated records for each active underground coal mine:

1. Calibration records for all monitoring equipment, including the method or manufacturer's specification used for calibration.
2. Records of gas sales.
3. Logbooks of parameter measurements.
4. Laboratory analyses of samples.

Requirements that apply to all facilities that are covered under Subpart TT. All facilities that meet the definition of this source category must retain the calibration records for all monitoring equipment, including the method or manufacturer's specification used for calibration, for each landfill.

Requirements that apply to all facilities that are covered under Subpart II. All facilities that meet the definition of this source category must retain the calibration records for all monitoring equipment, including the method or manufacturer's specification used for calibration, for the wastewater treatment system.

(ii) Respondent Activities

The owner or operator of a facility that is subject to the rule's reporting requirements are required to report total annual GHG emissions in metric tons of CO₂e from all the source categories at the facility. Each magnesium production facility must report total emissions at the facility level for SF₆, HFC-134a, FK 5-1-12, CO₂, and any other GHG as defined in the General Provisions) of the rule. In addition, each facility must report GHG emissions for other source categories for which calculation methods are provided in the rule. For example, facilities must report CO₂, N₂O, and CH₄ emissions from each stationary combustion unit on site by following the requirements of 40 CFR part 98, subpart C (General Stationary Fuel Combustion Sources). For underground coal mines, facilities must report the following: 1) quarterly CH₄ liberation from ventilation and degasification systems; 2) quarterly CH₄ destruction for ventilation and degasification systems and resultant CO₂ emissions, if destruction takes place on-site; and 3) annual CO₂, N₂O, and CH₄ emissions from stationary fuel combustion devices under 40 CFR part 98, subpart C. For industrial waste landfills, facilities must report the annual CH₄ generation and CH₄ emissions from the industrial waste landfill as well as the annual CH₄ recovered (for landfills with gas collection and destruction systems). Operators of anaerobic processes used to treat industrial wastewater and industrial wastewater treatment sludge must report the following: 1) the amount of CH₄ generated, recovered, and emitted from treatment of industrial wastewater using anaerobic lagoons or anaerobic reactors; 2) the amount of CH₄ recovered and emitted from anaerobic sludge digesters; and 3) the amount of CH₄ destroyed by and emitted from biogas collection systems and destruction devices.

The primary tasks that reporting program respondents will perform include:

1. Developing appropriate monitoring plans for each affected source and each affected unit at a source, as applicable;
2. Operation and maintenance activities associated with the monitoring, including QA 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 are required to purchase the necessary monitoring hardware and purchase the electronic data reporting software (or software upgrades) if they have not done so for another reporting program.

Reports are 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 (2060-0629) 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 will include monitoring and verification of emission reports, database and software maintenance, communication and outreach, and program evaluation.

5(b) Collection Methodology and Management

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

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

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

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

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

5(c) Small Entity Flexibility

EPA took several steps to minimize the impacts on small entities. The Agency met several times with industry trade associations to discuss the reporting options considered and their possible impacts on small entities. For example, EPA took steps to spare small mines and manufacturers from unnecessary burden by requiring reporting only from those coal mines for which methane (CH₄) emissions from the ventilation system are sampled quarterly by the Mine Safety and Health Administration (MSHA). MSHA conducts quarterly testing of CH₄ concentration and flow at mines emitting more than 100,000 cubic feet of CH₄ per day. This threshold was selected because subjecting underground mine operators to a new emissions-based threshold would be unnecessarily burdensome and perhaps confusing, since these mines are already subject to MSHA regulations. In addition, EPA chose to limit the reporting requirements for industrial waste landfills to facilities whose total landfill design capacity is greater than or equal to 300,000 metric tons.

5(d) Collection Schedule

Facilities that must comply with this supplemental rule are required to submit GHG emission reports annually. Facilities with existing magnesium production, underground coal mines, industrial waste landfills, and industrial wastewater treatment must begin monitoring GHG emissions on January 1, 2011, in accordance with the methods specified in subparts T, FF, TT, and II. Facilities must report the GHG emissions and associated verification data required under each of these subparts by March 31, 2012. Existing facilities are not required to collect or report the data required under subparts T, FF, TT, and II in 2011 for the reporting year 2010.

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 rule averages 65,958 hours per year and the cost to respondents of the information collection averages \$5,713,238 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 65,958 hours per year over the three years covered by this information collection. Exhibit 6.1 presents aggregate burden by sector; 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 \$5.7 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.

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

| | Annual Average - 3 year ICR Period |
|--|------------------------------------|
|--|------------------------------------|

^[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.

| | | | | | | | | |
|----------------------------|------------|---------------|--------------|---------------|----------------|--------------|----------------|----------------|
| T - Magnesium Production | 1 | Varies | 33 | 2,053 | \$114 | \$0 | \$2 | \$116 |
| II - Industrial Wastewater | 358 | Varies | 58 | 2,960 | \$161 | \$284 | \$1,017 | \$1,462 |
| TT - Industrial Landfills | 200 | Varies | 200 | 15,198 | \$820 | \$11 | \$88 | \$919 |
| FF - Underground Mines | 114 | Varies | 1,677 | 45,747 | \$2,540 | \$220 | \$456 | \$3,217 |
| TOTAL | 683 | Varies | 2,268 | 65,958 | \$3,635 | \$515 | \$1,563 | \$5,713 |

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.

EPA activities associated with Subparts T, FF, TT, and II 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 will devote up to 2 full time equivalents (FTEs), or 4,160 hours to these activities. EPA will incur incremental costs for Subparts T, FF, TT, and II of approximately \$344 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.

Exhibit 6.2 Annual Agency Burden and Cost

| Information Collection Activity | Annual Responses | Total Annual Burden | Labor Cost (\$K) | Non-Labor Cost (\$K) | Total Annual Cost (\$K) |
|---------------------------------|------------------|---------------------|------------------|----------------------|-------------------------|
| Subparts T, FF, TT, and II | 1 | 4,160 | \$209 | \$135 | \$344 |

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

The number of respondents in each sector that must perform the required activities under this information collection is presented in Exhibit 6.1. The required activities depend on whether the 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 | 683 | | From Exhibit 6.1 |
| Total Annual Responses | 2,268 | | From Exhibit 6.1 |
| Number of Responses per Respondent | 3.3 | = | $\frac{2,268}{683}$ Total annual responses from above ÷ Total respondents from above |
| Total Respondent Hours | 65,958 | | From Exhibit 6.1 |
| Hours per Response | 29.08 | = | $\frac{65,958}{2,268}$ Total annual hours from above ÷ Total responses from above |
| Annual O&M and Capital Cost | \$2,078,156 | | From Exhibit 6.1 |
| Total Respondent Cost (labor + non) | \$5,713,238 | | From Exhibit 6.1 |
| Total Hours (Respondents and agency) | 70,118 | = | $65,958 + 4,160$ Total respondent hours from above + Total EPA hours |
| Total Cost (Respondents plus Agency) | \$6,056,820 | = | $\$5,713,238 + \$343,582$ Total respondent cost from above + Total EPA cost |

6(f) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 29 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.