



# **Response to Public Comments on Greenhouse Gas Reporting Program:**

**Information Collection Request for the Greenhouse Gas  
Reporting Program**

June 2019

**Response to Public Comments on  
Proposed Information Collection  
Request; Comment Request;  
Information Collection Request for the  
Greenhouse Gas Reporting Program**

**U. S. Environmental Protection Agency  
Office of Atmospheric Programs  
Climate Change Division  
Washington, D.C.**

## FOREWORD

This document provides the EPA's responses to public comments on the Information Collection Request for the Greenhouse Gas Reporting Program. The EPA published a Notice of Information Collection Request Renewal in the Federal Register on February 26, 2019 (84 FR 6143).

During the 60-day public comment period, the EPA received two comment letters in response to the February 26, 2019 notice. The EPA also consulted with nine actual respondents as required by the EPA ICR Handbook. One respondent provided comments as a result of the consultation. This document provides the EPA's responses to the comments received. The verbatim text of each comment extracted from the original comment letters is included in this document, arranged by subject. For each comment, the name and affiliation of the commenter are provided, as well as the document control number (DCN) assigned to the comment letter, as appropriate.

The EPA's responses to comments are provided immediately following each comment. Copies of all comment letters submitted are available at the EPA Docket Center Public Reading Room or electronically through <http://www.regulations.gov> by searching Docket ID. No. EPA-HQ-OAR-2019-0027.

The primary contact regarding questions or comments on this document is:

Rachel Schmeltz (202) 343-9124  
U.S. Environmental Protection Agency  
Office of Atmospheric Programs  
Climate Change Division  
Mail Code 6207-A  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

For technical information, contact the Greenhouse Gas Reporting Rule Help Desk at:  
<http://www.epa.gov/ghgreporting/contactus.html>.

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## **List of Commenters**

Document Control Number	Commenter Name	Commenter Affiliation
EPA-HQ-OAR-2019-0027-0005	Pamela A. Lacey	American Gas Association
EPA-HQ-OAR-2019-0027-0004	Sandra Y. Snyder	Clean Air Task Force
EPA-HQ-OAR-2019-0027-0006	Amy Van Kolken Banister	Waste Management

## Acronyms and Abbreviations

ADR	alternate designated representative
AGA	American Gas Association
DR	designated representative
DOT	Department of Transportation
e-GGRT	Electronic Greenhouse Gas Reporting Tool
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gas
GHGi	Inventory of U.S. Greenhouse Gas Emissions and Sinks
GHGRP	Greenhouse Gas Reporting Program
GRI	Gas Research Institute
GTI	Gas Technology Institute
HHV	higher heating value
ICR	Information Collection Request
INGAA	Interstate Natural Gas Association of America
LNG	Liquified Natural Gas
M&Rs	metering and regulating stations
MSW	municipal solid waste
OMB	Office of Management and Budget
O&M	operation and management
PE	polyethylene
QA/QC	quality assurance/quality control
scfh	standard cubic feet per hour
T-Ds	transmission-to-distribution pressure regulating stations
U.S.	United States
WSU	Washington State University
XML	eXtensible Markup Language





## 1.0 General Overarching Comment

**Commenter Name:** Pamela A. Lacey

**Commenter Affiliation:** American Gas Association

**Comment Number:** EPA-HQ-OAR-2019-0027-0005

**Page(s):** 5

### Comment 1:

The American Gas Association (AGA) submits these comments to EPA to support EPA's Information Collection Request (ICR) for the Greenhouse Gas Reporting Program (GHGRP). AGA members report emissions from their natural gas operations under 40 C.F.R. Part 98, Subpart W of the GHGRP, and to the extent the data requested can be calculated using updated emission factors and activity factors, they find the burdens of the information collection are reasonable and yield data that has practical utility for estimating methane emissions from natural gas distribution, transmission compression, underground storage and Liquefied Natural Gas (LNG) facilities.

Overall, Subpart W provides a credible, transparent platform for evaluating emissions from our members' operations, and for that reason, AGA strongly supports the continuation of the program.

However, we also request that the agency commence a rulemaking to improve Subpart W. In particular, Subpart W could be improved: (1) by replacing the requirement for annual leak surveys, especially those for low-emitting facilities – such as natural gas transmission-to-distribution pressure regulating stations (T-Ds) and LNG facilities -- with emission factors based on the robust data collected over several years of Subpart W reports on these facilities; and (2) by replacing out-of-date default emission factors (e.g. for plastic distribution pipe) with more accurate updated emission factors based on recent scientific studies. Both changes would provide data that has more practical utility for EPA. The first requested change would also reduce the burden of collecting data that has little to no practical utility at this point.

#### 1. Replace Unnecessary Leak Surveys with Emission Factors Based on New Robust Data

Companies in the natural gas industry have conducted annual Subpart W leak surveys of equipment since 2011, and now have a robust set of data that could be used to establish updated emission factors. While natural gas operators will of course continue to perform leak detection and repair to ensure safety - as required pursuant to Department of Transportation (DOT) pipeline safety regulations and related state requirements - there is no value or benefit in performing duplicative surveys using different timing and criteria for Subpart W. The surveys were originally required because EPA lacked data on certain emission sources. The costly Subpart W surveys can now be replaced with a simple arithmetic calculation using company-specific emission factors based on the data each company has collected to date. An emission factor approach for calculating GHG emissions is common for many sources in Subpart W, as well as other industries that report under the Part 98 reporting program.

This change should be made especially to eliminate burdensome Subpart W annual methane surveys for facilities that have now been shown to have very low methane emissions,

such as T-D stations and LNG facilities. Over the past seven years of Subpart W reporting, our member natural gas local distribution companies have conducted very detailed Subpart W surveys of T-D stations, but these surveys have shown the T-Ds have only an extremely small number of very small leaks that the companies typically address during routine pipeline safety inspections. The cost of such a Subpart W survey performed by an outside contractor with specialized equipment can equal around \$25,000 to \$30,000 and takes several days to coordinate and provide company escorts. This might be worthwhile if it yielded significant data, but in fact, in our members' experience, less than 1 percent of their reportable methane emissions from natural gas distribution operations come from the T-D survey data, whereas 99 percent to 99.9 percent of their reported methane emissions are calculated simply and in a relatively short time using emission factors and activity data. There is no reason to continue conducting costly and detailed Subpart W annual surveys of low-emitting T-Ds.

Modern LNG facilities similarly have very low methane emissions. In this year's GHG Inventory issued on April 11, 2019, EPA used the data reported over on multiple years of annual Subpart W leak survey data to update its estimate of methane emissions from LNG peak shaving "storage facilities" and LNG import/export terminals. The new Subpart W data showed that there LNG facilities emitted 86 percent less methane than EPA previously estimated using older data from measurements taken at facilities with different equipment and procedures in the early 1990s. EPA should conduct a rulemaking to revise Subpart W to allow reporters to calculate methane emissions from LNG facilities using emission factors that are based on the new, robust LNG facility data that EPA has already used for purposes of the annual GHG Inventory. This would reduce reporting burdens while still providing useful emissions data.

In order to provide an opportunity to demonstrate better than average performance and rework option, to conduct a new leak survey to update their company-specific emission factor in order to establish a new company-specific emission factor. It would also be helpful to allow an optional leak survey of metering and regulating stations (M&Rs) to identify those that have a leak rate well below the current default emission factor. For example, EPA currently assumes that all below grade M&Rs leak at 1.3 standard cubic feet per hour (scfh) per station. For a company with 100 such stations, the current Subpart W calculation would assume that these 100 M&Rs emit about 19 metric tons of methane, and the company would have no method to demonstrate lower emissions (other than to remove the below grade M&Rs from the system). It should be possible to conduct a leak survey at the company's option to reduce the population count/ activity factor to remove M&Rs that are not leaking. These changes would allow companies the option to demonstrate their continuing progress.

## 2. EPA Should Improve the Accuracy and Practical Utility of Subpart W Reported Emissions Information by Updating Emission Factors to Reflect Current Practices and Recent Data

To improve the accuracy of Subpart W data, EPA should conduct a rulemaking to update Subpart W default emission factors promptly when new, reliable scientific data becomes available. Subpart W should use the same updated emission factors for natural gas distribution pipe as are already adopted for use for the annual EPA Inventory, based on the peer-reviewed study by Dr. Brian Lamb at Washington State University (WSU) published in the Journal of Environmental Science & Technology (March 2015).

It is inaccurate and misleading to continue overestimating natural gas emissions by using methane emission factors developed in a study conducted more than 20 years ago that evaluated a much smaller data set and reflected emissions from equipment and practices that have changed and improved dramatically since the Gas Research Institute (GRI) study for EPA was published in 1992. For example, one AGA member 5company is replacing protected steel pipe, which has a default emission factor of 0.35scf/mi/hr with new plastic pipe and must use the erroneous default plastic pipe emission factor of 1.13 scf/mi/hr in reporting GHG emissions. In this case, the member must report higher than actual emissions due to using the old plastic emission factor.

A similar problem occurs when a company replaces vintage plastic pipe with modern high or medium density polyethylene (PE) “plastic” pipe. Currently there is only one emission factor for all plastic pipe, so there is no way for the company to demonstrate the emissions reduction achieved by replacing vintage plastic with modern PE distribution pipe. The Gas Technology Institute (GTI) is concluding a study with funding from the Department of Energy (DOE) that will provide updated emission factors for vintage plastic distribution pipe. The data from that study should be used to update Subpart W default emission factors as soon as possible to provide a different emission factor for vintage plastic pipe compared to emission factor for modern PE plastic pipe based on the Lamb 2015 study that is now used in EPA’s GHG Inventory.

Further robust data is expected to be available soon from a series of other studies co-funded by industry and DOE. The Subpart W default emission factors should be updated as that new data becomes available and can be vetted by EPA.

AGA appreciates the opportunity to comment. If you have any questions, please contact me.

**Response 1:** EPA thanks the commenter on their input on Subpart W.

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## 2.0 Support for GHGRP ICR

**Commenter Name:** Sandra Y. Snyder

**Commenter Affiliation:** Interstate Natural Gas Association of America

**Comment Number:** EPA-HQ-OAR-2019-0027-0004

**Page(s):** 1-2

**Comment 1:** The Interstate Natural Gas Association of America (“INGAA”) respectfully submits these comments in response to the U.S. Environmental Protection Agency’s (“EPA’s”) request for comments on the Information Collection Request (“ICR”) submitted to the Office of Management and Budget (“OMB”) regarding EPA’s Greenhouse Gas Reporting Program (“GHGRP”). EPA published this notice in the Federal Register on February 26, 2019 (84 Fed. Reg. 6,143).

INGAA is comprised of 27 members, representing the vast majority of the U.S. interstate natural gas transmission pipeline companies. INGAA's members operate nearly 200,000 miles of pipelines. INGAA's members have reported data under EPA's GHGRP since 2010.

EPA has requested comment on "whether the proposed collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility" and feedback to "minimize the burden" of collecting the required information. 84 Fed. Reg. at 6,143. This annual reporting obligation requires INGAA member companies to track and compile thousands of data elements such as operating data, equipment inventories, annual leak surveys and measurements, blowdowns, population component counts, and emission estimates. Collecting this data enables EPA to have a better estimate of the GHG emissions across the country.

At the end of March 2019, the INGAA member companies completed their ninth consecutive year of GHG reporting for their affected onshore transmission compressor stations and underground natural gas storage facilities. EPA has started using some of this data within the last 2-3 years to update the Inventory of U.S. Greenhouse Gas Emissions and Sinks ("US GHGi") for the transmission and storage sector of the natural gas value chain. This has helped refine and improve the US GHGi for certain emission source categories such as blowdowns at transmission compressor stations and along transmission pipelines. 1 Given that a lot of data has been collected over the last nine years under this program, EPA should consider more broadly using the thousands of multi-year equipment leak surveys 1 Some states have also recently begun to also use the data reported under the GHGRP to improve their own statewide inventories. INGAA Comments on GHGRP ICR Docket ID No. EPA-HQ-OAR-2019-0027 April 29, 2019 2 and direct measurements collected from compressor fugitive leak sources (e.g., reciprocating compressor rod packing seals, centrifugal compressor wet seals, blowdown valves, and unit isolation valves) to improve the US GHGi for this sector. INGAA also recommends that EPA revise the GHG reporting requirements for some of the subparts including, but not limited to, the Petroleum and Natural Gas Systems under Subpart W of 40 C.F.R. 98 ("Subpart W"). Specifically, INGAA recommends that EPA update and streamline Subpart W by incorporating the thousands of measured data points collected over the last 9 years and using that data to develop emission factors that would reduce the measurement and data collection burden on the INGAA member companies.

As to the electronic reporting requirements, INGAA members appreciate EPA's collaboration and willingness to make improvements to its online reporting system, known as the Electronic Greenhouse Gas Reporting Tool ("e-GGRT"). In an effort to continue to improve the reporting process, INGAA urges EPA to keep collaborating and working with reporting entities to streamline the electronic reporting process. INGAA's recommendations include the following:

- Reduce the number of steps required to get a facility registered in the system and streamline the process of assigning Designated Representatives ("DRs"), Alternate Designated Representatives ("ADRs") and Agents. Overall, the e-GGRT process can be confusing and time-consuming. While INGAA believes that data security is important, the number of steps involved in the process can inadvertently cause delays during the reporting process. Users need to establish an e-GGRT account, accept the invitation code, and remember to change their passwords every 3 months (but cannot use any of the last 10 passwords), but should not have to additionally answer security questions to submit reports. Furthermore, DRs and ADRs often have

responsibility for several facilities across organizations. If e-GGRT had a more consolidated approach, batches of facilities that have the same DR, ADR, and Agents could be assigned simultaneously to these people rather than by individual facility.

- Develop a consistent schema for XML data upload. The final XML schema is typically different from the draft schema that EPA releases for a given reporting year. When the final schema is different, reporting entities need to update their systems to conform with the final schema. Given that there is a short and limited window available to upload data, reporting entities must create manual patches to address the changes between the draft and final schemas. But, if the format of the XML schema were stable, reporting entities would be more willing to invest the time and resources to develop more sophisticated and systematic data entry tools. Such tools would minimize the risk of input errors and reduce the reporting burden by making the data uploading process more efficient.

- Improve the data entry spreadsheet for Subpart W. EPA currently provides a blank data entry spreadsheet for Subpart W each reporting year. EPA should provide a means to either save data online (as in Subpart C) or allow users to download the spreadsheet with the data populated from the prior year so that it can be updated, as appropriate. Reentering each source into the blank spreadsheet each year and updating all of the inputs is very inefficient. INGAA recommends that EPA look at various state reporting tools such as ERIC in Louisiana because they provide these types of helpful efficiencies.

- Make entering data into e-GGRT more efficient by avoiding repetitive steps. For example, in Subpart C, INGAA recommends that e-GGRT be modified to allow a user to indicate INGAA Comments on GHGRP ICR Docket ID No. EPA-HQ-OAR-2019-0027 April 29, 2019 3 that all units in the configuration use natural gas, rather than requiring the user to select natural gas individually for each unit.

- Extend the e-GGRT reporting window to provide more than 45 days by opening the portal earlier. Extending the reporting period for a given year would ensure that users have adequate time to input or upload data and conduct quality control/review data. Providing additional time to report will likely reduce the potential for reporting errors.

If EPA proposes revisions to the GHGRP and Subpart W in the near future, INGAA can provide more details about its suggested methods to improve e-GGRT.

Although there is room for improvement and streamlining in the GHGRP, as noted above, INGAA remains supportive of the program and encourages OMB to approve EPA's ICR request so that companies who participate in the program will continue to have the opportunity to transparently report their greenhouse gas emissions. INGAA appreciates your consideration of these comments and we welcome additional dialogue.

**Response 1:** The EPA thanks the commenter for their support and feedback on the reporting process.

### 3.0 Subpart HH

**Commenter Name:** Amy Van Kolken Banister

**Commenter Affiliation:** Waste Management

**Comment Number:** EPA-HQ-OAR-2019-0027-0006

**Page(s):** 2

**Comment 1:** Waste Management reviewed the draft ICR renewal support documents for the GHGRP per your request for comments. We have several comments for EPA consideration on the Supporting Statement for 2019 Renewal and Appendix H pertaining to Subparts C and HH.

1. General Comment on Appendix H Supporting Statement Cost Appendix (May 2019 DRAFT): Each subpart discussion includes labor and O&M cost tables with the same generic Table ID numbers (e.g., Table 2a, Table 3b). Although the Table titles are unique, the Table ID numbers are not unique so when referring to or referencing multiple tables for different subpart discussions, it can get confusing (case in point below). We suggest EPA add unique Table Identification numbers that coincide with the Subpart discussions. For example, Table HH-2a for Subpart HH reference.
2. Specific Comments on Appendix H Supporting Statement Cost Appendix (May 2019 DRAFT) and Supporting Statement for 2019 Renewal (May 2019 DRAFT):

Waste Management prepares and submits annual reports for over 200 MSW landfill facilities. We also own/operate over 70 landfill gas to energy beneficial use projects which are “on-site”/co-located with a reporting WM owned/operated MSW Landfill. Therefore, we are required to calculate and report emissions from these beneficial use projects. WM uses Subpart C Tier 2 methodology to estimate emissions which are included in our MSW Landfill facility reports.

The labor and O&M cost estimates for preparing GHG reports for MSW landfills (Subparts A, C and HH are applicable) are generally in line with proposed sector costs for MSW Landfills with and without gas collection systems that report under Subpart HH (See Tables 2a and 2b; 3a and 3b in Appendix H, pages 153-155 of 183). These costs are also generally in line with MSW Landfills that must also report emissions for small combustion units using Subpart C Tier 1 methodology.

However, EPA underestimates the labor and O&M costs for MSW Landfill facilities with on-site landfill gas to energy projects. In reviewing the Supporting Statement for 2019 Renewal, it appears the EPA aggregated Subpart C labor and O&M costs with Subpart HH cost estimates because:

*“...combustion costs were so intertwined with process emissions costs that they could not be separated. For those subparts, as well as for subpart W discussed above, the costs of monitoring and reporting combustion emissions continue to be accounted for and presented in the subpart-specific rows along with process emissions.”* (See Page 27 of 30)

This may be true for methane routed to flares and off-site beneficial use projects owned/operated by third party developers; however, it is not the case for on-site projects. We can and do separately report engines and turbines under Subpart C because we are required to do so by the rule.

The proposed aggregated Subpart C and HH costs presented in Tables 2a-2b and 3a-3b of Appendix H (pages 153-155 of 183) are not consistent with WM's costs for 70+ MSW Landfills that also report emissions from LFG to energy projects. We calculate emissions from beneficial use engines and turbines using Tier 2 methodology for estimating emissions under Subpart C (use of Higher Heating Value (HHV) data/analysis). We calculate HHV on quarterly basis.

In Appendix H, EPA estimates the Subpart C costs for using Tier 2 methodology are \$4372. This includes general costs for all Subpart C sites plus additional labor and O&M costs for sites using Tier 2 methodology (see Tables 2a and 2c; 3a and 3b, pages 16-24 of 183).

The costs EPA estimates for Subpart HH underestimate the total cost for our data collection, analysis, QA/QC and recordkeeping because they fail to take into consideration costs for conducting Tier 2 methodology on multiple devices. EPA estimates aggregated labor and O&M costs to meet Subpart HH and Subpart C reporting requirements are \$6774 for sites with gas collection (subsequent year costs) whereas EPA estimates Subpart C labor and O&M costs alone using Tier 2 methodology with at least one additional subpart are \$4372 – a difference of \$2400. The costs to meet Subpart HH reporting obligations alone are significantly more than the \$2400 cost difference. For example, EPA estimates labor and O&M costs for a Subpart HH site with no gas collection are \$4175 per site, significantly above the \$2400 cost differential.

Waste Management completes monitoring, data analysis and review, QA/QC, recordkeeping and reporting in-house for all of its reporting facilities. We estimate our internal labor and O&M costs are approximately \$9500 for a MSW Landfill facility with gas collection, at least one flare, beneficial use project using Subpart C Tier 2 methodology and at least one small combustion unit using Subpart C Tier 1 methodology.

Therefore, we recommend EPA consider revising its cost estimates for MSW Landfills with gas collection and on-site beneficial use projects (with engines and/or turbines). Labor and O&M costs for sites that report on-site small combustion and beneficial use project engines and/or turbines under Subpart C should not be aggregated with Subpart HH costs.

**Response 2:** The EPA thanks the commenter for their support and the information provided on costs incurred by Waste Management facilities to fulfill the reporting requirements of the GHGRP. The suggested formatting changes have been made to the tables in Appendix H. In addition, the commenter highlighted an error in the text of the Supporting Statement where it was stated that for Subpart HH “...*combustion costs were so intertwined with process emissions costs that they could not be separated*”. This is not correct. Combustion costs have been separated from process emissions costs for subpart HH and several of the other subparts that were listed. Corrections have been made to the text accordingly.

