

Response to Public Comments on Greenhouse Gas Reporting Program:

Information Collection Request for the Greenhouse Gas Reporting Program

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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 November 5, 2015 (80 FR 68534).

During the 60-day public comment period, the EPA received comment letters in response to the November 5, 2015 proposal. This document provides the EPA's responses to the significant public comments regarding these proposals. 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 and the document control number (DCN) assigned to the comment letter are provided. Where possible, the EPA separated comments on specific topics into their respective data categories. Within the data categories, similar comment excerpts from multiple commenters were combined into a group of comments with a single response.

The EPA's responses to comments are generally provided immediately following each comment. In some cases, the EPA provided responses to specific comments or groups of similar comments. 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-2012-0333.

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List of Commenters

Document Control Number	Commenter Name	Commenter Affiliation
EPA-HQ-OAR-2012-0333-0031	Anonymous	None
EPA-HQ-OAR-2012-0333-0032	David McCabe, Lesley Fleischman,	Clean Air Task Force
	Ann Weeks, and Darin Schroeder	
EPA-HQ-OAR-2012-0333-0033	Karin Ritter	American Petroleum
		Institute (API)

Acronyms and Abbreviations

API	American Petroleum Institute
ARB	Air Resource Board
BLM	Bureau of Land Management
BLS	Bureau of Labor and Statistics
BOEM	Bureau of Ocean Energy Management
CATF	Clean Air Task Force
CBI	confidential business information
CFR	Code of Federal Regulations
CO_2	carbon dioxide
DOE	Department of Energy
EIA	Energy Information Administration
EOR	enhanced oil recovery
EPA	U.S. Environmental Protection Agency
FLIGHT	Facility Level Information on Greenhouse Gases Tool
FR	Federal Register
GHG	greenhouse gas
GHGRP	Greenhouse Gas Reporting Program
ICR	Information Collection Request
LOE	level of effort
NASA	National Aeronautics and Space Administration
NOAA	National Oceanic and Atmospheric Administration
OMB	Office of Management and Budget
SECARB	Southeast Regional Carbon Sequestration Partnership
UIC	Underground Injection Control
UNFCCC	United Nations Framework Convention on Climate Change
U.S.	United States

1.0 General Overarching Comment

Commenter Name: Anonymous Commenter Affiliation: None Comment Number: EPA-HQ-OAR-2012-0333-0031 Page(s): 1

Comment 1: The budget estimate noted here seems extraordinarily high for this program, especially since that it appears to rely on the requirement that certain companies/organizations/facilities monitor and report levels of CO₂ emission. The number is perhaps inflated by the inclusion of the 'necessity' to '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.'

Given that the Greenhouse Gas Reporting Program has been authorized/emplaced since 2009, and given that CO₂ emissions have been a point of major public and commercial concern both in the U.S. and in Europe since at least 2009 (and memorably before that year), 'development' of collection and validation technologies and systems for processing and maintaining information should no longer be a 'necessity.' The nature of CO₂ has not changed. Perhaps output levels and sampling intervals have changed, but Commercial-Off-The-Shelf (COTS) products and systems are keeping up with these standards since corporations want to independently verify what government monitoring informs them they are putting into the air.

Requesting/recommending modification of this proposal/submission for renewal to no longer support 'development' and instead focus on acquisition, installation, and utilization of currently available COTS systems. If modification of the renewal is not possible, requesting/recommending re-evaluation of the program regulations in the future. Reinventing technology and systems using federal funding is unnecessary and potentially wasteful, and increases the burden on the agency that develops and installs the items in question.

Response 1: In estimating the cost for respondents to comply with the GHGRP in this ICR Renewal, EPA did not include any costs for developing new technologies that are not already commercially available. Respondents can comply with the GHGRP using existing COTS technologies. The commenter may have been confused by the description of "burden" in Section 6(g) of the Supporting Statement. The description originates from the definition of "burden" by OMB at 5 CFR 1320.3.

2.0 Support for GHGRP ICR

Commenter Name: David McCabe, Lesley Fleischman, Ann Weeks, and Darin Schroeder **Commenter Affiliation:** Clean Air Task Force **Comment Number:** EPA-HQ-OAR-2012-0333-0032 **Page(s):** 1-2

Comment 1: We appreciate the opportunity to provide these comments on the Proposed Information Collection Request Renewal for the Greenhouse Gas Reporting Program (GHGRP) on behalf of the Clean Air Task Force. We strongly support renewal of the information collection request (ICR) which underpins the Agency's Greenhouse Gas Reporting Program, is amply justified by the Agency and for all the reasons we describe below.

Sections 114 and 208 of the Clean Air Act provide the authority for the ICR, and EPA's use of the collected data to support the development of Greenhouse Gas regulations and policies is squarely within the purposes of those sections. See 42 U.S.C. §§ 7414(a), 7542(a). This ICR and the GHGRP which it enables, provides a standard, comparable data source that provides essential information about the sources of harmful emissions of the greenhouse gases (GHGs) that drive climate change. As EPA describes in the Supporting Statement Part A for the Information Request, in 2007, Congress directed EPA to enact regulations "to require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy of the United States," using the Agency's existing Clean Air Act authority.

The resulting data set offers policymakers, the public and businesses invaluable and necessary information for use in improving understanding, developing internal controls and regulations to limit these emissions, and offers accountability to the public. In particular, the GHGRP has been important in supporting the President's Climate Action Plan. The final Carbon Pollution standards and the final Clean Power Plan both rely on information under subpart D that EPA has collected from the power industry, and to the extent that geologic sequestration of carbon dioxide is used by sources to satisfy either of those rules, section RR provides information on the fate of the carbon dioxide transferred to enhanced oil recovery or sequestration facilities. In the oil and gas industry, information about methane releases similarly has enabled the creation of proposed methane regulations. Together these two industries are the largest US greenhouse gas emitters.

The ICR supplements and complements other efforts to quantify GHG emissions – which by themselves are not sufficient to support federal policymaking or enable companies to benchmark their efforts using a standardized data set. The ICR does not duplicate efforts – indeed as the examples EPA provides in the Supplemental Statement Part A note, often existing efforts are aimed at other goals and do not provide sufficient information to be helpful to nationwide efforts to understand the generation and fate of greenhouse gas emissions. Additionally, various agencies of the Federal government have committed significant resources to further improve understanding of these emissions.

EPA's standardized data collection under this ICR also enables the transition to the international reporting requirements under the United Nations Framework Convention on Climate Change (UNFCCC).

The need for this standardized Greenhouse Gas ICR was further clarified in December when the Parties to the UNFCCC, including the United States, unanimously agreed to the Paris Agreement committing the Parties to work to establish a transparent framework to "to provide a clear understanding of climate change action in the light of the objective of the [UNFCCC], including clarity and tracking of progress towards achieving Parties' individual nationally determined contributions [i.e., the emissions targets for each nation] under [the Paris Agreement]."¹ This framework is intended to enhance previous activity under the UNFCCC to quantify emissions.²

EPA requires the retention of records associated with the information collected under this ICR, for 5 years, for facilities using the Agency's e-GGRT software called IVT. We continue to support this, because as the Agency continues to work with this program it will need to be able to adequately audit and verify the data collection, and that process requires a sufficient amount of past data for meaningful comparisons to be made.

In summary, the ICR is justified and its extension is necessary not only to improve understanding about US anthropogenic greenhouse gas emissions sources and fates, but also to support informed policymaking, and allow businesses to benchmark their own progress at GHG control within their industries.

Response 1: The EPA thanks the commenter for their support.

¹ UNFCCC, *Adoption of the Paris Agreement*, at 28 ¶5, U.N. Doc. FCCC/CP/2015/L.9/Rev.1 (Dec. 12, 2015), available at http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf.

² Id. at 28 ¶3.

3.0 Subpart RR Costs

Commenter Name: David McCabe, Lesley Fleischman, Ann Weeks, and Darin Schroeder Commenter Affiliation: Clean Air Task Force Comment Number: EPA-HQ-OAR-2012-0333-0032 Page(s): 8

Comment 1: CATF strongly supports the proposed renewal request for portions of the ICR supporting EPA's Carbon Pollution Rule and Clean Power Plan governing carbon dioxide emissions from new and existing fossil-fueled power plants and combustion turbines. EPA collects greenhouse gas (carbon dioxide emissions) data from power plants under subpart D, from suppliers of carbon dioxide for industrial use under subpart PP, and under RR from those intending to sequester carbon underground (either in saline sequestration sites, or via enhanced oil recovery activities), and UU for those who sequester carbon dioxide as an incidental matter when they use carbon dioxide in enhanced oil and gas recovery activities.

The final Carbon Pollution Rule, 80 Fed. Reg. 64,510 (Oct. 23, 2015), promulgated under Clean Air Act section 111(b), 42 U.S.C. §7411(b), expressly anticipates that new fossil fueled power plants can and will rely on capturing carbon dioxide and sending it to geologic sequestration from atmospheric release, in saline or EOR activity. Reporting the fate of that carbon dioxide, which occurs under the GHGRP supported by this ICR request, is an essential element in tracking the success of the Carbon Pollution Rule. Similarly, carbon capture and sequestration activities can form the basis by which states and affected sources meet the standards included in the EPA's final Clean Power Plan, 80 Fed. Reg. 64,662 (Oct. 23, 2015), promulgated under Clean Air Act section 111(d), 42 U.S.C. §7411(d). As such, this ICR renewal request directly advances the purposes of section 114 of the Clean Air Act under which it is authorized, namely "[f]or the purpose of ... assisting in the development of ...any implementation plan under ...section 7411(d), ... any standard of performance under section 7411...[and/or] of determining whether any person is in violation of any such standard or any requirement of such plan...." 42 U.S.C. § 7414(a). This data collection activity does not duplicate any other effort to track the airside fate of injected carbon dioxide, and supplements and complements the information collected under the Underground Injection Program's monitoring and reporting requirements.

EPA has revised its earlier estimates of the costs associated with the RR reporting requirements for sequestration activities (either in saline or EOR activities), which the Agency now reports are higher than the initial estimates. It must be noted, however, that EPA relies on cost data from "first-of-a-kind" monitoring activities, in the report entitled "Analysis of the Costs Associated with Subpart RR (Geologic Sequestration of Carbon Dioxide) Reporting Under the EPA Greenhouse Gas Reporting Program," accompanying the proposed ICR renewal request. These costs are associated with the monitoring of two SECARB research projects, and otherwise are based on modeling assessments accompanying EPA's UIC Class VI rule, and some DOE modeling. Because they are based on "first-of-a-kind" projects, or modeling, these costs are likely very conservative. Costs will come down as those who develop projects become familiar with the technologies and processes needed to collect the data necessary to track the air-side fate of injected carbon dioxide.

Response 2: The EPA thanks the commenter for their support. The commenter mentions that the Subpart RR cost estimates are based on "first-of-a-kind" projects and are therefore likely to be conservative. The EPA acknowledges that the cost estimates are based on, among other sources, the costs incurred as part of Department of Energy Regional Carbon Sequestration Partnership projects, and that costs may decline in the future as more geologic sequestration projects are implemented. However, the commenter did not provide additional data that could be used to estimate the extent of these potential cost reductions. Therefore, EPA is maintaining the basis of its cost estimates.

4.0 Subpart W Comments

4.1 Reference to Previously Submitted Comments

Commenter Name: Karen Ritter Commenter Affiliation: American Petroleum Institute Comment Number: EPA-HQ-OAR-2012-0333-0031 Page(s): 1

Comment 1: The American Petroleum Institute (API) appreciates the opportunity to offer comments to the U.S. Environmental Protection Agency (EPA) on this information collection request (ICR) that would enable the agency to continue to collect data for the mandatory Greenhouse Gas Reporting Program (GHGRP) after May 31, 2016.

API represents over 625 oil and natural gas companies, leaders of a technology-driven industry that supplies most of America's energy, supports more than 9.8 million jobs and 8 percent of the U.S. economy, and, since 2000, has invested nearly \$2 trillion in U.S. capital projects to advance all forms of energy, including alternatives. API has an extensive record related to GHG emissions estimation and reporting, and has participated extensively throughout the process of developing the reporting rules applicable to its members' pertinent industry sectors, all the while attempting to balance the quality of the data collected while reducing unnecessary burdens on the reporting entities.

At this time API has elected not to collect updated additional information from its members, based on their facilities' experience with reporting under the GHGRP, as a means for comparison to EPA's burden estimates for GHG reporting. Rather our comments reiterate our previous comments of August 10, 2012 (attached hereto on page 3) and are summarized as follows:

First, API requested that EPA implement a GHGRP that would provide for less frequent reporting following the five year anniversary of annual reporting under the GHGRP based upon the burden of ongoing annual reporting and upon the lack of material change in annual emissions in the oil and gas industry.

Second, API requested that EPA focus on the most significant emission sources instead of focusing on overly-frequent reporting of minor sources whose emissions are unlikely to change and perhaps should be excluded.

Third, API continues to emphasize the importance of continuing to implement a flexible policy for the ongoing use of Best Available Monitoring Methods (BAMM) in order to facilitate the reporting of high quality data while accommodating real-world operation, practices and burdens on industry.

Response 1: The attachment is a copy of the comments submitted by API on August 10, 2012, in reference to EPA's previous GHGRP ICR Renewal Request (EPA ICR No. 2300.10). EPA is incorporating its response to those comments (see document number EPA-HQ-OAR-2012-0333-

0015 in Docket EPA-HQ-OAR-2012-0333). In addition, EPA provides an updated rationale for annual reporting in section 3(d) of the Supporting Statement to this ICR Renewal.

4.2 Support for Subpart W Analyses

Commenter Name: David McCabe, Lesley Fleischman, Ann Weeks, and Darin Schroeder **Commenter Affiliation:** Clean Air Task Force **Comment Number:** EPA-HQ-OAR-2012-0333-0032 **Page(s):** 2-7

Comment 2: The data collected about greenhouse gas emissions from petroleum and natural gas systems under Subpart W have proved essential. These data have helped guide policy decisions at the EPA, at other federal agencies, and at the state level. The data also provides a direct measurement of the impact of these policies. The importance of Subpart W data will only grow in the future as the Administration seeks to show that it is on track to meeting its goal of reducing methane emissions by 40-45% by 2025. Subpart W data has been cited in academic papers and communities seeking to understand the large greenhouse gas sources in their neighborhoods have used it. For all of these reasons the ICR should be renewed.

Time series data is critical. EPA has collected four or five years of data (depending on the industry). From this data, we are just now beginning to see illuminating and actionable patterns. Time series data is much more informative than a single year snapshot, because it allows us to see whether emissions are trending up or down for a given emissions source. Emissions for some sources have proven to vary considerably year-to-year, as shown in Figure 1.³ It is therefore important that EPA continue to collect data annually in order to extend this dataset so that trends and insights from the dataset can continue to be discerned.

Given the variability in some sources, it would be inappropriate to reduce the frequency of data collection from prior ICRs (such as from annual to every second or every third year) – trends would take more time to emerge. It is also possible that the year-to-year variability in some sources does not solely reflect real changes in emissions, but rather reflects a lack of reliable knowledge by some reporters of important parameters used to calculate emissions from those sources. If the reporting frequency were reduced from annual to less than annual, these reporters would most likely take a correspondingly longer time to arrive at accurate values for these important parameters.

The GHGRP has become more informative over time. In the most recent release of GHGRP data in October 2015, some activity data, which had previously been deferred from reporting, was finally made available to the public. This activity data is an important complement to the emissions data that had previously been released, allowing the public to gain a better understanding of emissions sources in the oil and gas industry. These data will address weaknesses in activity data for certain sources in the US GHG Inventory; several recent peer-

³ See Document EPA-HQ-OAR-2012-0333-0031 for more information.

reviewed studies have reported that uncertainly in activity data is a significant contributor to overall uncertainty in emissions from the oil and gas industries.⁴

In addition, some critically important data has not yet been collected, but will be soon. Companies are now required to collect API numbers associated with onshore oil and gas production facilities as part of the GHGRP, and they will need to report these data (for year 2016) in 2017. This will allow us to correlate Subpart W emissions data with production data. On the same timeline, companies will have to report to Subpart W emissions from gathering and boosting systems, transmission pipeline blowdowns, and hydraulically fractured oil well completions. Recent studies have suggested that emissions from these segments may be significant. Data on these sources will provide a more complete picture of oil and gas industry emissions and will help guide future policy.

These planned improvements make the ICR renewal even more important for EPA and other policymakers, and to improve the public's understanding of emissions, particularly from the natural gas gathering industry.

Data from the GHGRP has improved the accuracy of the U.S. Greenhouse Gas Inventory Report. As EPA notes in the supporting statement, the GHGRP and the GHG Inventory complement each other, though they have different methodologies and serve different purposes. Nevertheless, EPA has used data collected as part of the GHGRP to improve the emissions estimated by the U.S. GHG Inventory. For example, the GHG Inventory now uses GHGRP data on emissions from refineries and hydraulic fracturing completions and workovers at natural gas wells.⁵ And, there are opportunities for the GHGRP data to be used even more extensively to complement the GHG Inventory, such as improving the estimate of emissions from completions and workovers at oil wells and splitting up pneumatic controller vent emissions among high bleed, intermittent bleed, and low bleed controllers.

Notably, activity data such as the number of emitting sources (such as counts of particular equipment) are often a source of significant uncertainty in estimates of emissions from the oil and gas industry.⁶ Estimates of nationwide activity counts based on the quantity of equipment at the relatively small number of sites sampled by bottom-up sampling studies have significant uncertainty. In contrast, real equipment counts from all facilities above the emissions threshold, nationwide, are collected through the GHGRP, leading to significantly more accurate activity data than available from bottom-up studies that sample a few dozen sites, at most. Renewing the ICR will therefore significantly improve the activity data in the US GHG Inventory while helping policymakers to assess the seriousness of nationwide methane pollution from individual classes of equipment.

⁴ Brandt, A.R., et al., (2014), "Methane Leaks from North American Natural Gas Systems," Science, 343, at 733-735, available at http://www.novim.org/images/pdf/ScienceMethane.02.14.14.pdf; Marchese, AJ., et al. (2015), "Methane Emissions from United States Natural Gas Gathering and Processing," Environ. Science Tech., 49, at 10,718–10,727, available at http://pubs.acs.org/doi/abs/10.1021/acs.est.5b02275.

⁵ While we support using GHGRP data to improve the US GHG Inventory, as EPA has done in some cases, we believe (and have previously urged EPA to consider) that data from the GHGRP should be scaled to reflect the fact that many smaller facilities do not report their emissions to the GHGRP.

⁶ See Brandt (2014) and Marchese (2015), supra note 5.

GHGRP data has already been an important information resource for policy-makers. The EPA recently proposed methane emissions standards for new and modified sources in the oil and natural gas sector, and Subpart W data helped inform its policy decisions. In the lead up to its proposal, the EPA released five White Papers on potentially significant emissions sources in the industry. In each of these white papers, published in April 2014, the EPA cited Subpart W data as a primary source of information about emissions: compressors,⁷ oil well completions,⁸ pneumatic devices,⁹ fugitive emissions,¹⁰ and liquids unloading.¹¹ And, in its August 2015 proposal and supporting technical documents, the EPA again relied extensively on data from the GHGRP to justify and support its proposed policy:

- Emissions reduction potential from hydraulically fractured oil wells,¹²
- fugitive emissions from well sites,¹³
- emissions from high- and low-bleed pneumatic controllers,¹⁴
- emissions from chemical injection pumps,¹⁵ and
- emissions from compressors in the transmission and storage segments.¹⁶

GHGRP data has been particularly valuable in assessing methane emissions due to the waste of natural gas resources on lands administered by the Bureau of Land Management (BLM). An analysis of Subpart W data suggests that methane emissions on federal lands are disproportionately high compared to methane emissions on private land. CATF examined these disproportionate emissions in our May 2014 comments to BLM¹⁷ and in the supplemental comments that we submitted in May 2015.¹⁸ Methane emissions associated with the waste of natural gas are disproportionately large from four high-producing Western U.S. oil and gas

¹⁰ EPA, (2014), Oil and Natural Gas Sector Leaks, at 16-17, available at:

CATF_WELC_etal_Comments_for_BLM.pdf.

⁷ U.S. EPA Office of Air Quality Planning and Standards (EPA), (2014), Oil and Natural Gas Sector Compressors, at 15-18, available at: http://www3.epa.gov/airquality/oilandgas/2014papers/20140415compressors.pdf.

⁸ EPA, (2014), Oil and Natural Gas Sector Hydraulically Fractured Oil Well Completions and Associated Gas during Ongoing Production, at 21-22, available at:

http://www3.epa.gov/airquality/oilandgas/2014papers/20140415completions.pdf.

⁹ EPA, (2014), Oil and Natural Gas Sector Pneumatic Devices, at 18-20, available at: http://www3.epa.gov/airquality/oilandgas/2014papers/20140415pneumatic.pdf.

http://www3.epa.gov/airquality/oilandgas/2014papers/20140415leaks.pdf.

¹¹ EPA, (2014), Oil and Natural Gas Sector Liquids Unloading Processes, at 5-6, available at:

http://www3.epa.gov/airquality/oilandgas/2014papers/20140415liquids.pdf.

¹² EPA, Oil and Natural Gas Sector: Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution, Background Technical Support Document, at 18, EPA-HQ-OAR-2015-0216-0101 (hereafter TSD 2015), available at: http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2015-0216-0101.

¹³ TSD 2015 at 55.

¹⁴ TSD 2015 at 133-4.

¹⁵ TSD 2015 at 148.

¹⁶ TSD 2015 at 181.

¹⁷ Western Environmental Law Center, Clean Air Task Force, et al. (2014), Comments Submitted To Inform Modernization Of The U.S. Bureau of Land Management's 34-Year-Old Rules, at 31-33 and Exhibit 3, available at: http://www.catf.us/resources/filings/BLM_Oil_and_Gas_Regulations/20140530-

¹⁸ Clean Air Task Force, (2015), Supplemental Comments to May 30, 2014 Comments Submitted to Inform Modernization of the U.S. Bureau of Land Management's 34-Year-Old Rules, available at

http://www.catf.us/resources/filings/BLM_Oil_and_Gas_Regulations/20150626-

CATF%20 Supplement%20 to%20 May%2030%20 BLM%20 Comments.pdf.

basins—Green River, Piceance, San Juan, and Uintah. The majority of oil and gas production in these basins is from Federal lands, mineral estate, or Indian Trust Land overseen by BLM—at least 63 percent of oil and 79 percent of gas. These four basins accounted for 30 percent of all the methane emissions reported to the GHGRP from nationwide onshore oil and gas production, while only producing 13 percent of U.S. onshore natural gas and 2 percent of U.S. onshore oil. Such analysis of disproportionate emissions on federal land would not have been possible without the data reported to the GHGRP.

The California Air Resources Board (ARB) is working on Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities. It released a draft policy proposal in April 2015. As part of our comments on this draft proposal, we cited California specific data from the GHGRP on emissions of methane from leaks,¹⁹ intermittent-bleed pneumatic controllers,²⁰ and liquids unloading.²¹

The GHGRP allows us to track emissions reduction progress. The Administration has set an ambitious goal of reducing methane emissions 40-45% from 2012 levels by 2025. This methane target, in turn, is one part of the Administration's broader target of reducing GHG emissions by 26-28% below 2005 levels by 2025. Together with the GHG Inventory, the GHGRP will allow us to track progress toward meeting these goals. The GHG Inventory gives a macro-level picture of overall nationwide emissions, while the GHGRP data provides a granular picture of the emissions reductions made by specific sources.

The GHGRP allows us to track impacts of regulations. For example, the EPA's 2012 New Source Performance Standards for VOCs from the Oil and Gas Industry required that emissions by controlled from hydraulically fractured gas wells. According to Subpart W data, gas well completion emissions have declined from 265,261 metric tons methane in 2011 to 45,431 metric tons methane in 2014.²² This data shows that emissions from this source are dropped quite a bit – but significant emissions remain, despite the 2012 rules. Since the bulk of these emissions are from venting of natural gas from these wells during completion, the GHGRP data suggests that EPA should further investigate this source to ensure that operators are complying with the 2012 rules.

The GHGRP will allow us to track voluntary corporate activities. The Natural Gas STAR Methane Challenge Program, which was proposed by EPA in July 2015, seeks to encourage companies to take voluntary steps to reduce methane emissions from their operations. In both the Best Management Practice and One Future Commitment Options, the Methane Challenge Program relies on Subpart W reporting and additional supplemental reporting to track a company's progress toward meeting its voluntary commitment. If the Administration is to use this voluntary program as a means of meeting its 40-45% reduction target, it needs a robust platform for companies and the EPA to report and track emissions. Data from the GHGRP platform, with some small additions, allows for such tracking.

¹⁹ Sierra Club, et al. (2015) Comments on ARB's draft regulation for methane pollution from the oil and gas sectors, at 3 (hereafter ARB 2015), available at: http://www.arb.ca.gov/cc/oil-gas/meetings/SierraClub_et_al_5-15-15.pdf.

²⁰ ARB 2015, at 7-8.

²¹ ARB 2015, at 12.

²² U.S. EPA, GHGRP, Petroleum and Natural Gas Systems, W_SOURCE_SUMMARY, available at http://www.epa.gov/enviro/facts/ghg/customized.html.

The FLIGHT tool is a useful resource for communities. This tool presents GHGRP data in a userfriendly manner, and it allows interested parties to examine large sources of GHG emissions by type and location. One example of this occurred after scientists at NASA and NOAA detected a methane "hot spot" in New Mexico. In an attempt to pinpoint the source of these methane emissions, the Western Environmental Law Center noted: "According to EPA's Greenhouse Gas Reporting Program, in which oil and gas companies self-report their emissions, the [oil and gas] industry accounts for almost 90 percent of methane emissions in the Four Corners."²³

The GHGRP has been cited widely in the academic literature. Numerous studies that seek to measure and quantify methane emissions from the oil and gas industry have been released in the past few years. In many cases, researchers have extensively used emissions and activity data from the GHGRP. Appendix 1²⁴ contains a sample list of peer-reviewed papers that cite the GHGRP.

GHGRP can help investors understand the growing risks related to climate change. There is growing concern amongst investors about the rising risk to their investments from climate change. A survey conducted by CERES found that almost 70% of asset management view climate change as a material risk. Such risks include potential regulatory changes to reduce emissions, impacts of assets from a changing climate, and reputational harm to companies/industries from perceived bad actors. Methane is a potent and growing form of carbon risk, and investors will increasingly need robust and relevant information to help them assess company performance and manage risk. The GHGRP, with its abundant data, can help them do this. By making this data readily available to investors (and the public), the GHGRP influence firms and motivate them to take action to reduce emissions.

Response 2: The EPA thanks the commenter for their support.

4.3 Burden Estimates Related to Subpart W Are Not Complete

Commenter Name: Karen Ritter **Commenter Affiliation:** American Petroleum Institute **Comment Number:** EPA-HQ-OAR-2012-0333-0031 **Page(s):** 2

Comment 1: Additionally, the final 2014 GHGRP amendments for onshore production (November 2014 Final Rule: EPA-HQ-OAR-2011-0512) would lead to an increased reporting burden that is not fully accounted for in EPA's burden estimates. The increased reporting burden

²³ Singer, Tom (April 12, 2015), "Oil and gas industry must cut dangerous methane releases," Albuquerque Journal, available at: http://www.abqjournal.com/568090/opinion/oil-and-gas-industry-must-cut-dangerous-methanereleases.html.

²⁴ See Document EPA-HQ-OAR-2012-0333-0031 for more information.

is due to requiring expanded reporting of new data elements that include: the quantity of gas produced at wells (which is already reported to the Energy Information Administration, EIA), the number of producing wells acquired, the number of producing wells divested, the number of wells completed, and the number of wells permanently taken out of service. Moreover, for offshore platforms, EPA added reporting requirements for both the total annual quantity of gas handled, as well as the total annual quantity of oil and condensate handled in the calendar year, including production volumes and volumes transferred via pipeline from another location. Requiring reporting of these additional items for both onshore and offshore production will impose a significant burden on reporters with no improvement or change in the quality of emissions data reported.

In past comments, API noted that EPA has other avenues to acquire the needed information such as commercial data systems DI-Desktop or the EIA's information for onshore production, or the monthly reports to Bureau of Ocean Energy Management (BOEM) at the well level, for offshore production.

In summary, API members have expended substantial resources complying with EPA's GHG reporting program and believe that now might be an opportune time for EPA to consider how to reduce this substantial burden on reporters. API is ready to continue discussions of these recommendations with the EPA.

Response 1: These comments have already been addressed in a previous Response to Public Comment document (see document number EPA-HQ-OAR-2011-0512-0102 in Docket EPA-HQ-OAR-2011-0512). The EPA incorporates those responses in their entirety and repeats certain responses below.

For comments related to "expanded reporting of new reporting elements" for the onshore production segment, please see the comment and response related to excerpt 88 from comment letter EPA-HQ-OAR-2011-0512-0084-A2.

The commenter stated that "requiring reporting of the information [stated above] will impose a significant burden on reporters with no improvement or change in the quality of emissions data reported." The commenter also noted that "EPA has other avenues at its disposal to acquire the information - such as the commercial data systems such as DI-Desktop or the EIA's information."

In the response, the EPA "maintains the information listed by the commenters is needed to characterize and inform the EPA's verification of the data. We disagree with the commenters that the information would be overly burdensome to collect."

In particular, EPA assumes that respondents to the onshore production segment already track these data as part of normal business practices.

For comments related to "expanded reporting of new reporting elements" for the offshore production segment, please see the comments and responses related to excerpts 90, 135, 136, and 138 from comment letter EPA-HQ-OAR-2011-0512-0084-A2.

The commenter stated that the gathering of the data elements in §98.236(aa)(2) "overreaches EPA's authority" and that the data elements raise CBI concerns.

In the response, the EPA disagreed that the information referenced by the commenter "overreaches our authority to gather information. The EPA has determined that these data elements [in] §98.236(aa)(2) are useful and necessary for the verification of existing data and for characterizing the emissions from the industry segment."

As a result of the commenter's concern over potential release of CBI data, EPA changed the proposed data elements for offshore production so that the finalized data elements are "consistent with BOEM [Bureau of Ocean Energy Management] reporting requirements" which are publicly available and therefore cannot be deemed as CBI.

As such, as noted in footnote 5 of Appendix E to the Supporting Statement for ICR number 2300-17 in docket EPA-HQ-OAR-2011-0512-0333, the burden that is estimated in this ICR Renewal request for the Offshore Production industry segment is lower than for other subpart W segments because the activities to collect the data are already accounted for in the burden estimates for the BOEM requirements.