

# Mandatory Greenhouse Gas Reporting Rule: EPA's Response to Public Comments

Volume No.: 12

Subpart A: Applicability and Reporting Schedule

## Subpart A: Applicability and Reporting Schedule

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

#### FOREWORD

This document provides EPA's responses to public comments on EPA's Proposed Mandatory Greenhouse Gas Reporting Rule. EPA published a Notice of Proposed Rulemaking in the Federal Register on April 10, 2009 (74 FR 16448). EPA received comments on this proposed rule via mail, e-mail, facsimile, and at two public hearings held in Washington, DC and Sacramento, California in April 2009. Copies of all comments submitted are available at the EPA Docket Center Public Reading Room. Comments letters and transcripts of the public hearings are also available electronically through <u>http://www.regulations.gov</u> by searching Docket ID *EPA-HQ-OAR-2008-0508*.

Due to the size and scope of this rulemaking, EPA prepared this document in multiple volumes, with each volume focusing on a different broad subject area of the rule. This volume of the document provides EPA's responses to significant public comments received for Subpart A: Applicability and Reporting Schedule.

Each volume provides the verbatim text of comments extracted from the original letter or public hearing transcript. For each comment, the name and affiliation of the commenter, the document control number (DCN) assigned to the comment letter, and the number of the comment excerpt is provided. In some cases the same comment excerpt was submitted by two or more commenters either by submittal of a form letter prepared by an organization or by the commenter incorporating by reference the comments in another comment letter. Rather than repeat these comment excerpts for each commenter, EPA has listed the comment excerpt only once and provided a list of all the commenters who submitted the same form letter or otherwise incorporated the comments by reference in table(s) at the end of each volume (as appropriate).

EPA's responses to comments are generally provided immediately following each comment excerpt. However, in instances where several commenters raised similar or related issues, EPA has grouped these comments together and provided a single response after the first comment excerpt in the group and referenced this response in the other comment excerpts. In some cases, EPA provided responses to specific comments or groups of similar comments in the preamble to the final rulemaking. Rather than repeating those responses in this document, EPA has referenced the preamble.

While every effort was made to include significant comments related to Subpart A: Applicability and Reporting Schedule in this volume, some comments inevitably overlap multiple subject areas. For comments that overlapped two or more subject areas, EPA assigned the comment to a single subject category based on an assessment of the principle subject of the comment. For this reason, EPA encourages the public to read the other volumes of this document with subject areas that may be relevant to Subpart A: Applicability and Reporting Schedule. The primary contacts regarding questions or comments on this document are:

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#### 1. APPLICABILITY DETERMINATION

#### **Commenter Name:** Keith Adams **Commenter Affiliation:** Air Products and Chemicals, Inc. **Document Control Number:** EPA-HQ-OAR-2008-0508-1142.1 **Comment Excerpt Number:** 2

**Comment:** Air Products supports reliance on actual emissions to determine reporting applicability, not "potential to emit" levels. The assessment of actual emissions for this determination should utilize simplified calculation methods that provide sufficient accuracy for an applicability determination.

**Response:** See the response on actual versus potential emissions in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions . For a response to general comments on how to determine applicability with the rule, please see the preamble sections II. I and P for the discussion on determining applicability. EPA agrees that simplified calculation methods would be helpful, and we are developing outreach materials and tools to help facilities determine applicability as suggested by this commenter. This is also discussed in the preamble section determining applicability.

#### **Commenter Name:** Caroline Choi **Commenter Affiliation:** Progress Energy **Document Control Number:** EPA-HQ-OAR-2008-0508-0439.1 **Comment Excerpt Number:** 6

**Comment:** Because EPA's proposal for determining applicability relies on the methodologies specified for reporting under the rule, the Company is concerned that facilities could be required to perform new monitoring under the rule in 2010 simply to determine (and document) whether the rule applies. With respect to general combustion sources affected by Subpart C, Progress Energy concludes that the provisions in proposed §98.33(b)(6) would prevent a unit from being required to install Tier 4 monitoring equipment simply to determine applicability. Proposed §98.33(b)(6) allows use of Tier 3 monitoring to report for 2010 if Tier 4 would be applicable but the specified monitoring systems are not installed by January 1, 2010. However, even Tier 3 monitoring could require some monitoring (e.g., monthly carbon analysis or fuel flow metering) that is not already being performed. The Company requests that EPA state in the rule that if required equipment is not already being collected, analyzed, or installed, the unit may use the methodology in the next lower tier to estimate emissions for applicability purposes.

**Response:** For response to general comments on how to determine applicability with the rule, please see the preamble discussion on determining applicability. For response to comments on applicability determination related to stationary combustion units, please see the preamble and response in Volume 15: Subpart C: General Stationary Fuel Combustion Sources. Applicability of the rule is based on the calculation procedures provided in the applicable subparts, which is why 98.2(b) requires that facilities use those procedures to determine applicability. The requirements of the rule, however, including 98.2(b), only apply to facilities above the applicable thresholds, thus facilities that are unlikely to exceed the thresholds may decide to use other reasonable methods to determine applicability. However, we encourage facilities, especially those most likely to exceed the thresholds, to use the methods in the rule because they are the

regulatory test for applicability. If these procedures demonstrate that the facility would exceed the thresholds, good faith estimates based on other methods would not relieve the facility of the requirement to report under the rule. For the final rule, we estimated that approximately 30,000 facilities would estimate emissions using these methods and that approximately 10,100 of these facilities would be subject to the rule.

EPA took efforts to minimize the burden for facilities making applicability determinations. Thus, although facilities would calculate their emissions by using the equations provided in each applicable subpart, they would use the best data available from their company records. For example, for parameters needed for the equations, facilities could use the production goals from the company's business projections, company records, process knowledge, engineering judgment, and vendor data (e.g., vendor information could be used to determine the carbon content of feedstocks, using the highest likely carbon content of those feedstocks.)

EPA expects that for most facilities estimating emissions in this manner, their emissions are likely to be significantly above or below the 25,000 tons/year threshold, such that most facilities can determine their applicability to the rule solely using the best data available from their company, as described.

For those few facilities that follow the calculation procedures discussed above and find that their estimated emissions are near the 25,000 tons/year threshold, the company will have to make the decision of whether or not to install monitoring equipment to estimate emissions during the reporting year. EPA anticipates that relatively few facilities covered under the final rule would face this decision. EPA expects that the majority of facilities that face uncertainty over applicability are facilities that have combustion units only. For this reason, EPA has provided at 98.2(b)(2) simplified calculation procedures for determining applicability for facilities with only combustion sources. These facilities may first determine applicability based on the aggregate combustion capacity threshold of 30 MMBtu/hour, as provided in 98.2(a)(3)(ii). Such facilities with combustion units that have an aggregate maximum rated heat input capacity of less than 30 mmBtu/hour are automatically not covered under the rule, as EPA expects that emissions of CO<sub>2</sub>e will be less than 25,000 tons/year. Facilities with combustion units that have an aggregate maximum rated heat input capacity of greater than or equal to 30 mmBtu/hour must calculate facility emissions to determine applicability since they may still emit 25,000 tons/year of CO<sub>2</sub>e, depending on the fuel burned. These facilities may choose any of the four calculation methods provided in subpart C, the simplest method requiring only fuel use, a default emission factor for the fuel used, and the higher heating value of the fuel used. Of these three parameters, only fuel use must be monitored, and most facilities already monitor it.

The language in the rule regarding the four calculation methods at 98.2(b)(2) has been clarified to specify that applicability for a combustion unit of any size can be determined by using any of the four methods in subpart C. Thus, the rule allows the owner or operator to use the best available methods to provide the data inputs to the calculation equations that are required to determine applicability. If a determination is made that the rule does not apply, then the owner or operator must be able to demonstrate, if audited, that emissions would be less than 25,000 tons/year CO<sub>2</sub>e if the required input data were collected by following the full monitoring methods required by the rule. If a credible demonstration cannot be made, then the owner or operator must either conduct additional efforts to better assess applicability or comply with the rule. Additionally, EPA agrees that additional guidance to facilities would be useful, and plans to provide additional guidance to assist facilities in all source categories to determine applicability. For combustion sources, EPA plans to provide tables that will specify the combustion capacities for each fuel type that correlate with emission of 25,000 tons/year of  $CO_2e$ . These tables also will provide the annual fuel assumption for each fuel type that equates to 25,000 tons/year of  $CO_2e$ . For non-combustion sources, EPA plans to provide tables that will specify the production capacities or production levels that correlate with emission of 25,000 tons/year of  $CO_2e$ . The capacity and production data provided in these tables will be based on worst-case assumptions, but will allow facilities, to quickly and easily determine if they need to develop more precise estimates or plan to monitor process parameters in 2010. This guidance will also assist many small facilities to determine if the rule might apply.

#### Commenter Name: J. Southerland Commenter Affiliation: None Document Control Number: EPA-HQ-OAR-2008-0508-0165 Comment Excerpt Number: 21

**Comment:** Biogenic fuel emissions must be included in threshold determinations for reasons previously discussed. The atmosphere can not distinguish one molecule's source from another and that atmospheric concentration is what is needed to be reduced. As long as that atmospheric concentration is growing, the removal and sequestration factors are not sufficiently effective to depend upon them to be adequate to remove the emissions and restore equilibrium.

**Response:** See response on biomass emissions in Volume 1: Selection of Source Categories to Report and Level of Reporting.

#### Commenter Name: See Table 10 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0635 Comment Excerpt Number: 25

**Comment:** The proposed rule converts emissions of all GHGs into  $CO_2$  equivalents by using a 'global warming potential' ('GWP') for each gas, "a metric that incorporates both the heattrapping ability and atmospheric lifetime of each GHG" relative to  $CO_2.161$  The IPCC regularly publishes GWP figures in its assessment reports. EPA opted to use GWPs from the IPCC's 1996 Second Assessment Report, rather than more modern figures, because reporting under the United Nations Framework Convention on Climate Change presently uses those values.162 EPA should periodically reconsider this choice. Indeed, if Congress passes GHG monitoring and control legislation this year, EPA may be required to adopt new GWPs, and to reconsider them periodically. Updated IPCC GWP figures have changed since the Second Assessment Report, as EPA recently explained in its Inventory of U.S. Greenhouse Gases Emissions and Sinks.

Because improved calculations of  $CO_2$ 's radioactive forcing properties have lowered that figure, GWPs of other gases relative to  $CO_2$  have increased. Other changes, including more accurate measures of properties of other gases, have "resulted in further increases or decreases in particular GWP values." Finally, IPCC has newly calculated GWPs for some halocarbons. The upshot is that the 1996-era GWPs are becoming increasingly out of date. Impacts of updated GWPs on at least some sectors can be substantial; using the updated GWPs increased estimates of waste sector methane emissions, for instance, by roughly 18%. [footnote: 163 See U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2007 (Apr. 15, 2009), Annex 6 at A-301 – A-306 (Ex. 21).; See id. at A-302.; See id.; See id. Id.] But while these differences may be less significant in national inventory and trend estimates, they matter considerably in the reporting system, where source- and sector-specific emissions will drive any emissions reductions system. A carbon market, for instance, would care a great deal to discover that emissions for one sector, if calculated with more robust GWPs, would jump by 18%. EPA should therefore take these differences into careful account, either by using the most recent GWP values now, or, at the least, by periodically reconsidering the GWPs it uses. EPA may soon be required to make that change. The American Clean Energy and Security Act of 2009, currently under discussion, recognizes the GWP problem, and therefore mandates the use of the most up-to-date GWPs from the IPCC's 2007 Fourth Assessment Report. The bill also provides for regular GWP reviews, directing EPA "not less than every 5 years" to "review and, if appropriate, revise" the GWPs used in its monitoring protocols. [footnote: See H.R. 2454, Sec. 311, adding Clean Air Act Sec.712(b)(1)-(2). 169 See id. at Sec. 712(c)(1)(A).]

EPA should, in sum, bring the reporting rule into line with the most recent scientific data. EPA should frequently review sector-specific protocols, as well as the rule itself. As time passes, new technologies will become available, suggesting new monitoring possibilities, and EPA will also gather experience in administering the rule, including in the flaws of existing methods. It should design the rule to take advantage of these developments. EPA should plan both for periodic reviews and to steadily collect information on its protocols. EPA could do so by adding a clause to the 'content of the annual report' section of the rule to add a requirement to report any material problems the facility encountered trying to follow its reporting protocol, along with suggestions for improvement. Providing for a formal collection system will draw in a wider array of comments and create a formal system for collecting them for review. The UK Environment Agency builds such protocol reviews directly into emissions reporting. Private verifiers, which are used in that system, are asked to submit recommendations for "improvements to the Monitoring Methodology" as part of their verification reports. footnote: see ETS 6 Annual Report on Proposed Improvements to the Monitoring Methodology Addressing Recommendations, Non-Conformities, and Misstatements Reported by the Verifier, available at: http://www.environment-agency.gov.uk/static/documents/Business/280508\_1297878.xls]. have "an accuracy and precision of one percent of full scale or better); 98.204(d)(2) (accuracy and precision requirements for magnesium production cover gas measurements).] This form can be used to track both facility-specific methodological errors and recommendations on the protocol itself. EPA should consider using a similar form. Having collected this data, EPA should regularly conduct industry-specific reviews. We suggest that the rule require such reviews on a rolling basis, with each protocol being reviewed no less frequently than every five years, and more frequently if serious problems are being reported. EPA's protocol reviews should focus strongly upon further quantifying and reducing uncertainty and bias in its reporting protocols. To be sure, EPA has already taken commendable steps to reduce uncertainty: EPA regularly selected monitoring methods to reduce uncertainty while holding down monitoring costs.

To realize these estimates in practice, EPA provides detailed quality control requirements, based upon international measurement techniques. Facilities are regularly required to measure quantities within tightly-defined ranges and to ensure that their equipment is operating within certain specifications. And, in addition to providing calibration and quality control protocols, the proposed rule often requires facilities to "document the procedures used to ensure the accuracy of the estimates" they provide. Even well-regarded methods may produce underestimates or unusual uncertainty in practice. [footnote: See, e.g., Letter from Dr. Ray Weiss to the California Air Resources Board (Nov. 7, 2008) (expressing substantial concerns over uncertainty in emissions inventories) (Ex. 22).]

The IPCC also emphasizes that uncertainty should be calculated "for both [emissions at] the national level and trend estimate, as well as for the component parts [of an inventory] such as emissions factors, activity data and other estimation parameters for each category,"[footnote: Frey, et al., supra n. 91, at 3.6.] and that "it is good practice to apply [quality control] procedures to uncertainty estimation to confirm that calculations are correct and data and calculations are well documented."[footnote: 176 Wilfried Winiwarter et al., Quality Assurance/Quality Control and Verification, in Volume I: General Guidance and Reporting, 2006 IPCC Guidelines at 6.16.]

Congress may also legislate in this direction. The American Clean Energy and Security Act of 2009 may require EPA to regularly evaluate its monitoring system, including determining its ability to accurately quantify emissions and emissions reductions. EPA may also have to "identify key gaps in measurement, reporting, and verification capabilities and make recommendations to improve the accuracy and reliability of those capabilities."[footnote: 177 See H.R. 2454, Sec. 311, adding Clean Air Act Sec.705(d); See id. at Sec. 705(f)(2).] EPA must, in short work to consistently improve data resolution. In particular, EPA should publicly report calculated uncertainty figures for each protocol (including both accuracy and precision estimates), and update these figures based on new data.

As EPA conducts its protocol reviews, it should make developing these metrics a key priority. Within a few years of the rule's operation, each tier of each protocol should be linked with datasupported uncertainty estimates, taking both accuracy and precision into account. And EPA should not simply calculate uncertainty. It should use uncertainty estimates to drive improvements in its protocols. First, EPA should systematically revise its protocols to reduce the uncertainty it identifies. Second, because some methods may simply have inherently higher uncertainty (as, for instance, various estimation methods are less accurate and precise than CEMS), EPA should appropriately adjust emissions estimated using those protocols. If, for instance, emissions for a given process estimated using calculations come with an uncertainty of  $\pm 20\%$ , EPA should require them to be reported at the upper end of that range. Such conservative estimates, which assume high emissions values unless proven otherwise, appropriately account for uncertainty and ensure that the reporting system does not underestimate real emissions.

They also, of course, give facilities using methods with greater uncertainty a strong incentive to move up monitoring tiers. Because uncertainty, in short, can undermine the reporting system, EPA should carefully and continuously measure it and then use those measurements to improve protocols and give facilities incentives to improve their own practices. As one method of checking the accuracy of reporting protocols – and, particularly for those protocols without CEMS or other form of direct measurement – we recommend that EPA establish pilot projects to check the protocols against direct emissions measurements. EPA could select a representative sample of facilities in such categories and enter into agreements to measure their emissions directly, comparing the results against measured emissions. These sorts of projects would generate data which could be used to improve estimation protocols, could be used to test innovative direct measurement technology, and would also help EPA assess the accuracy of reporting across sectors with such pilot projects. As part of its protocol reviews, EPA should begin to develop ways to compare 'bottom-up' emissions estimates from facilities directly with 'top-down' measured atmospheric concentrations. As the IPCC explains, "[a]n ideal condition for verification is the use of fully independent data as a basis for comparison. Measurements of

atmospheric concentrations potentially provide such datasets and recent scientific advances allow using such data as a basis for emission modeling." [footnote: Id. at 6.21 -6.22.] 'Top-down' comparisons are increasingly based upon 'inverse modeling.' Atmospheric scientists have long experience in modeling the spread of pollution plumes through the atmosphere. Inverse modelers reverse these methods, using data on a gas's spread through the atmosphere to infer its concentration at its source. [footnote: See, e.g., Ray Weiss, Presentation Quantifying Greenhouse Gas Emissions from Atmospheric Measurements (2009) (Ex. 23).]

Inversion models can be used for all GHGs, including carbon dioxide, but are particularly useful for fluorinated GHGs and for methane. The fluorinated gases are particularly amenable to measurement with this technique because they have essentially no natural sources and so are easily-linked to anthropogenic emissions. Methane is also fairly easy to resolve with this technique, and is usefully measured in this way because national inventory estimates tend to be particularly uncertain, due in large part to poorly-measured fugitive emissions and emissions from landfills and manure storage sites. [footnote: See Winiwarter et al., supra n.176, at 6.21 -6.22.; See id.] Indeed, inversion modeling of methane has already produced useful results. A 2005 inverse modeling study of European methane emissions found that national methane emissions for the three largest European emitters, Germany, France, and the UK, were between 30-50% higher than those nations had estimated with bottom-up methods. [footnote" P. Bergamaschi et al., Inverse modeling of national and European CH<sub>4</sub> emissions using the atmospheric zoom model TM5, 5 Atmos. Chem. Phys. 2,341, 2,455-56 (Ex. 24).] When Germany adjusted its monitoring methodology to better account for manure-related emissions, its estimated numbers moved much closer to those generated by the inversion measurements. As modelers continue to refine the resolution of these methods, they will become increasingly useful for verifying inventory results. EPA should, therefore, support further work on direct atmospheric measurement and integrate inversion modeling studies into its regular reviews of reporting rule protocols.

**Response:** See response on global warming potential values in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

Regarding GHG emission estimation methods, EPA plans as part of the emissions verification program to routinely assess methods used to monitor emissions and process data that are needed to estimate GHG emissions. We envision the use of on-site audits to assess the viability of methods as well as other communications with reporters to identify, assess, and resolve reporting problems. As calculation protocols evolve and improve, we may revise the rule from time to time as needed to improve the accuracy and precision of methods. However, it is inappropriate to commit as part of this rulemaking to a specific program and schedule for formal re-assessment of the GHG reporting methods. Nor is it appropriate by rulemaking to commit EPA to a research program to assess and develop methods. While we agree with the commenter about the need for continuous improvement, future revisions to the GHG reporting rule, if necessary, will be guided by available science and the specific uses of the data for different source categories in future GHG emission control programs.

**Commenter Name:** Donald R. Schregardus **Commenter Affiliation:** Department of the Navy, Department of Defense (DoD) **Document Control Number:** EPA-HQ-OAR-2008-0508-0381.1 **Comment Excerpt Number:** 9 **Comment:** With a strict reading of the applicability section of the rule at §§ 98.2(a)(2) and (3) as well as the source category definitions for Subparts C (General Stationary Fuel Combustion Sources) and Subpart D (Electricity Generation), a facility may make the assumption that electricity generating units fall under both source categories, leading to double counting and reporting of GHG emissions. In the applicability § 98.2(a)(2), EPA sets its second category for applicability as, "Any facility that emits 25,000 metric tons  $CO_2e$  or more per year in combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate, and all source categories that are listed in this paragraph (a)(2) and that are located at the facility in any calendar year starting in 2010."

Electricity Generation is category (i) in the listed categories. In reading the definitions of the source categories at Subpart C (General Stationary Fuel Combustion Sources) and Subpart D (Electricity Generation), there is overlap for stationary combustion units that generate electricity but are not covered by the Acid Rain Program. In Subpart C, at § 98.30(a), "Stationary fuel combustion sources are devices that combust solid, liquid, or gaseous fuel, generally for the purposes of producing electricity, generating steam, or providing useful heat or energy for industrial, commercial, or institutional use, or reducing the volume of waste by removing combustible matter." But then in Subpart D, at § 98.40(a), "The electricity generation source category comprises all facilities with one or more electricity generating units, including electricity generating units that are subject to the requirements of the Acid Rain Program." Based on these definitions, a small, non-emergency electric generator that is not part of the Acid Rain Program is covered by both subparts. Further, in § 98.43, EPA defers to Subpart C, § 98.33 for the GHG calculation methodologies to be used for electricity generating units not covered by the Acid Rain Program. § 98.33 reinforces this point, "The owner or operator shall use the methodologies in this section to calculate the GHG emissions from stationary fuel combustion sources, except for electricity generating units that are subject to the Acid Rain Program."

Similarly, in § 98.2(a)(3), EPA intends to cover facilities that are subject to the reporting rule because of their stationary fuel combustion unit emissions that total over 25,000 metric tons of  $CO_2e$ . However, a strict interpretation of the definition for "stationary fuel combustion sources" suggests that this category includes non-emergency electric generators that are not subject to the Acid Rain Program. Referring to the preamble for clarity suggests that Subpart D is intended to cover only "facilities with EGUs that are in the ARP, and are subject to the  $CO_2$  emissions reporting requirements of Section 821 of the CAA Amendments of 1990." (74 FR 16486)

Though we believe it is not EPA's intention for GHG emissions from any particular stationary combustion unit to be counted twice in either determining applicability with the rule or in GHG reporting under § 98.2(a)(2) or (3), the wording used in the two subparts can lead to confusion and double counting. It is recommended that Subpart D be revised to specify that it covers Electricity Generating Units subject to the Acid Rain Program. All other EGU (except for emergency units, as already exempted) would be subject to Subpart C. By revising the source category definition, and associated sections in each subpart, the applicability as well as the reporting requirements will be clearer. Applicability under § 98.2(a)(1) is clear for electricity generation because the current wording would pull in the Subpart D EGU (those under the Acid Rain Program) and groupings of other EGU (those covered by subpart C) that emit over 25,000 tons per year of  $CO_2e$ .

The following sections should read as: § 98.40 Definition of the source category. (a) The electricity generation source category comprises all facilities with one or more electricity generating units, that are subject to the requirements of the Acid Rain Program. § 98.43

Calculating GHG emissions. (a) For each electricity generating unit subject to the requirements of the Acid Rain Program, the owner or operator shall continue to monitor and report  $CO_2$  mass emissions as required under §§ 75.13 and 75.64 of this chapter.  $CO_2$  emissions for the purposes of the GHG emissions reports required under §§ 98.3 and 98.36 shall be calculated as follows: (1) The owner or operator shall convert the cumulative annual  $CO_2$  mass emissions reported in the fourth quarter electronic data report required under § 75.64 of this chapter from units of short tons to metric tons. To convert tons to metric tons, divide by 1.1023. (2) The annual  $CH_4$  and  $N_2O$  mass emissions shall be calculated using the methods specified in § 98.33 for stationary fuel combustion units. §§ 98.44-48 would require comparable edits to what is recommended here for § 98.40 and § 98.43.

**Response:** See preamble discussion on the definition of source category for Electricity Generation. Also, see the response to comments on EGUs in Volume 15: Subpart C: General Stationary Fuel Combustion Sources and Volume 16: Subpart D: Electricity Generation.

Commenter Name: Carl Johnson Commenter Affiliation: Southern Pressure Treaters' Association (SPTA) Document Control Number: EPA-HQ-OAR-2008-0508-0312.1 Comment Excerpt Number: 1

**Comment:** Due to the following points, SPTA believes it is imperative that EPA clarify in the final rule that emissions from the combustion of biomass are not to be included when calculating if a facility exceeds the 25,000 metric tons  $CO_2$  reporting threshold nor in the actual reporting of GHG emissions: 1. Most SPTA members use wood by-products generated in the manufacturing process as fuel for wood fired boilers. 2. These wood by-products, a.k.a. cellulosic biomass, is a carbon-neutral energy source since the atmospheric carbon originally removed by the tree, is returned to the atmosphere either through natural degradation or combustion. 3. The combustion of said wood by-products produces less GHG than would be generated by the land filling of such by-products. The naturally occurring anaerobic degradation that occurs in landfills would generate methane gas which is 20 times stronger than  $CO_2$ . We respectively request that the final rule state clearly that emissions from the combustion of wood, or other forms of cellulosic biomass, are not to be included when calculating if a facility exceeds the 25,000 metric ton  $CO_2$  reporting threshold nor are they to be included when actually reporting GHG emissions.

**Response:** Under the final rule, biogenic  $CO_2$  emissions are not included in the threshold determination, but emissions of  $CH_4$  and  $N_2O$  from combustion of biogenic fuel are included in the threshold. Note further that the final rule requires reporting of any  $CO_2$  emissions from biomass combustion from facilities that otherwise meet the applicability thresholds. For more information on this issue, see response on biomass emissions in Volume 1: Selection of Source Categories to Report and Level of Reporting.

Commenter Name: Leslie Sue Ritts Commenter Affiliation: National Environmental Development Association Document Control Number: EPA-HQ-OAR-2008-0508-0504.1 Comment Excerpt Number: 8

**Comment:** EPA solicits comment on page 16,469 of the Notice regarding whether reporting should be based on "actual" or "potential" or "allowable" emissions, a topic that plagues

determining applicability with many CAA programs. NEDA/CAP submits that it is imperative that the Agency leave no ambiguity in this rule regarding what emissions are to be reported. EPA should firmly state in the applicability provision of Part 98 that reporting obligations are triggered on the basis of "actual emissions" and that annual reporting requirements also are always based on "actual emissions." First, actual emissions are easier to calculate, particularly on the basis of fuel usage records. Second and more important, actual emissions reflect the contribution of carbon to climate conditions, which is the issue that EPA and the U.S. government are trying to evaluate by requiring emissions reporting. Using potential or allowable emissions based on reporting. Moreover, using "potential" or "permit allowable" as the basis of reporting will skew future efforts to regulate GHGs. Lastly, if sources were to have to report emissions based on the potential of a facility to emit carbon, such reporting would skew U.S. efforts to represent to other nations the contribution (and reductions) of carbon that our country will be striving to attain under new EPA, DOE or other regulatory programs and/or new federal legislation.

**Response:** See the response on actual versus potential emissions in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions

**Commenter Name:** Chris Hornback **Commenter Affiliation:** National Association of Clean Water Agencies (NACWA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0566.1 **Comment Excerpt Number:** 7

**Comment:** NACWA understands that if a facility has a maximum rated heat input capacity greater than 30mmBtu/hr, then it must calculate its greenhouse gas emissions to determine if the facility exceeds the threshold. Based on NACWA's review, there is no information on the documentation such a facility would have to maintain if it determines that the facility does not exceed the 25,000 mt CO<sub>2</sub>e threshold after completing the calculations. Since the reporting rule is being developed using EPA's Clean Air Act authority, the rule will be an "applicable requirement" under future Title V operating permits. In order to sustain "reasonable inquiry" into the facility's compliance with the GHG reporting requirement or the facility's claim of exemption based on not crossing the 25000 metric ton threshold, it may become necessary to document an annual estimate with most of the same detail and rigor required to support actual reporting.

**Response:** See preamble section II. P for a response to the recordkeeping provisions required for applicability determinations. See response to comment document for legal issues (Volume 9) and Preamble II.S for a discussion on whether the reporting rule requirements are title V applicable requirements.

Commenter Name: David Finnegan Commenter Affiliation: Edison Electric Institute Document Control Number: EPA-HQ-OAR-2008-0508-0212.1k Comment Excerpt Number: 1 **Comment:** While the Proposed Rule keys into Part 75 of the Acid Rain Program, it does so at a facility level, apparently, because the rules attempted economy-wide coverage relative to other sectors. However, the definition of the term is overly broad when compared to the Section 821 Acid Rain reporting provisions. It can be construed to encompass many stationary buildings that do not appear to be covered under the Acid Rain Program, such as administrative and storage buildings and a wide range of mobile sources, any emission of which the utilities cannot control, partly because of the -- and this is all partly because of the word "source" in the definition of facility. We question why EPA needs to switch to this facility approach for electric utilities when we have a long working and effective history of reporting greenhouse gases from affected utility units under the current law, particularly when Congress gave EPA specific discretion to follow the current law for this sector. We respectfully urge EPA to reconsider carefully the definition of "facility" as used within this rulemaking relating to electric utilities. Doing so can only help to alleviate any potential confusion in this rulemaking as it progresses. We raise this issue with the definition because, as Mr. Eric Holdsworth of the EEI said earlier in his comments on behalf of EEI, EEI is supportive of the 25,000-ton threshold that EPA has proposed for inclusion of source as being comparable to the 25-megawatt threshold under Section 821 in the Acid Rain reporting. We would not want EPA's basic approach to draw inadvertently de minimis emissions due to confusion caused by the definition that could be misinterpreted.

**Response:** The definition of facility in subpart A of the rule applies to all source categories, including electric utilities. As such, a facility that is subject to the rule and that contains electric generating units would report GHG emissions from all source categories for which emission estimation methods are provided in the final rule. The commenter is correct that Congressional appropriation language gave the Administrator the discretion "to use existing reporting requirements for electric generating units." As discussed in the Legal Issues RTC (Vol 9), we are relying on sections 114 and 208 of the CAA for this rule. . This Congressional language simply specifies that the authority for collecting data for the mandatory reporting rule is section 821 of the Clean Air Act. The appropriations language, while referencing section 821 of the 1990 CAA Amendments, does not direct EPA to follow any specific reporting procedures for electric utility units or any other source categories. Nevertheless, the final rule builds on the Part 75 acid rain reporting requirements for electric utilities to reduce reporting costs and avoid redundant monitoring or reporting. The rule allows facilities that are subject to the ARP to submit their fourth quarter CO<sub>2</sub> monitoring results to EPA; the only additional requirement is to convert units of measurement from tons to metric tons. For reporting methane and N<sub>2</sub>O, the facilities would calculate emissions using a default emission factor and monitored heat input, which currently is measured by Part 75 sources. Therefore, the GHG reporting rule is fully compatible with Part 75 reporting and imposes no monitoring confusion. The rule does not necessarily require reporting of all GHG emissions from a facility, only those sources for which methods are provided in the rule, for example, emissions from mobile sources, such as, vehicle fleets do not have a method and therefore are not reported under this rule. The rule requires reporting only for any co-located industrial process that would be reported if the process existed at any other facility that is covered by the reporting rule (e.g., non-generating combustion units, aluminum manufacturing, paper manufacturing).

Commenter Name: Sarah B. King Commenter Affiliation: DuPont Company Document Control Number: EPA-HQ-OAR-2008-0508-0604.1 Comment Excerpt Number: 13 **Comment:** The Agency should recognize the reality that many sites include multiple independent entities. For example, it is common for large, multi-operation sites to include units that have been divested to one or more other companies. In many such cases, agreements have been put in place such that entities at a site provide one or more energy related services (e.g., on-site generated or purchased electricity, steam, heat transfer fluid) to other entities at the site. Only the entity utilizing the energy has any control over the energy use and resulting emissions. In such cases, it would give an inaccurate picture to assign all greenhouse gas emissions from those services on the site to the company providing the services. Rather, the GHG emissions should be assigned to the company using the energy at a site, and that portion netted out for the company responsible for delivering the service.

**Response:** This reporting rule applies at the facility level. Under the definition of "facility" in the rule, a facility would be required to report emissions only from equipment that they own or operate. Therefore, for example, if a facility purchases energy from a separately-owned enterprise that they do not own or operate and that is physically located within the same facility boundary, then the facility would be considered as two separate facilities. The rule applicability and reporting requirements would be applied separately to each facility. However, if any person shares any level of control over both enterprises, then the two enterprises would be considered to be a single facility. EPA has determined that indirect emissions (e.g., from the use of electricity, heat, or steam) will not be reported under this rule. See page 16473 of the preamble to the proposed rule (74 FR 16488, April 10, 2009.). The owner or operator of the emitting equipment is solely responsible for reporting emissions under this rule irregardless of any contractual service agreements in place.

#### **Commenter Name:** Filipa Rio **Commenter Affiliation:** Alliance of Automobile Manufacturers (Alliance) **Document Control Number:** EPA-HQ-OAR-2008-0508-0630.1 **Comment Excerpt Number:** 22

**Comment:** EPA attempted to simplify a facility's assessment of rule applicability for stationary fuel combustion sources by defining an emissions equivalency to a particular maximum rated heat input capacity. EPA is proposing that facilities with an aggregate maximum heat input capacity less than 30 mmBtu/hr from stationary combustion units be automatically exempt from the proposed rule. According to a July 7, 2008 memorandum from Leif Hockstad (see Docket ID No. EPA-HQ-OAR-2008-0508-0049), the 30 mmBtu/hr threshold is based on operating full time for a year (i.e., 8,760 hours) based on the exclusive usage of coal. While this threshold will be helpful to many smaller fuel combustion sources, it still requires an assessment for many other potential reporters as the threshold is too low for sources that combust inherently cleaner fuels such as natural gas. Most facilities of this size do not combust coal, and therefore would be required, under the lower threshold, to conduct a more detailed assessment. For example, a facility that combusts only natural gas could possess a maximum heat input capacity of 53.8 mmBtu/hr or less in order to be exempt from the proposed rule (based upon a  $25,000 \text{ t CO}_2\text{e}$ threshold). The Alliance supports this form of exemption, but recommends providing additional capacity thresholds within the proposed rule based on the exclusive or combined use of other common fuels such as natural gas and fuel oil. Providing a table of maximum rated heat input capacity thresholds by fuel type would simplify the assessment for a larger number of facilities without much effort. An example of the type of table EPA should provide is located at Table 5-1 in Section 5.1 of EPA's "Technical Support Document for Reporting Thresholds: Proposed Rule for Mandatory Reporting of Greenhouse Gases.

**Response:** The final rule retains the 30 mmBtu/hour heat input threshold and does not provide additional capacity thresholds by fuel type. The commenter is correct that this threshold is based on worse case assumptions for fuel use and operations hours, and may not reflect typical operating scenarios. The purpose of the capacity threshold, however, is to provide a simple method in the rule to exempt facilities with small stationary fuel combustion sources. The 30 mmBtu/hour heat input threshold accomplishes this goal and is estimated to exempt thousands of facilities from the rule regardless of the fuel burned or the number of operating hours. Because the 30 mmBtu/hour does not exempt all facilities that emit less than 25,000 tons/year of  $CO_2$ , some facilities with combustion capacity greater than 30 mmBtu/hour will have to calculate emissions to assess rule applicability. See the preamble discussion on determining applicability. EPA is intending to develop several applicability tools that can assist facilities in determining whether they exceed the threshold and would be required to report, please see the preamble for more information.

#### Commenter Name: Chris Hornback Commenter Affiliation: National Association of Clean Water Agencies (NACWA) Document Control Number: EPA-HQ-OAR-2008-0508-0566.1 Comment Excerpt Number: 6

**Comment:** Clearer instructions should be provided indicating when a facility is required to calculate its emissions for comparison against the threshold. The process of calculating a facility's emissions is not trivial and many clean water agencies have multiple facilities that would require separate calculation. 1. Specifically, in Subpart A, General Provisions, additional clarity is needed to differentiate between two of the three applicability paragraphs, 98.2(a)(2) and (a)(3). NACWA understands from conversations with EPA that if a POTW does not have a maximum rated heat input capacity greater than 30mmBtu/hr, than it does not have to calculate its emissions to compare against the threshold. This is not clear from the regulatory text or the preamble. 2. It is unclear which applicability paragraph would apply for a POTW that may be generating a small amount of electricity using biogas. This would seem to fall under 98.2(a)(2) and the electricity generation source category, no matter what quantity of electricity is being produced (98.2 (a)(3)(i) excludes any facility with a source category listed in (a)(1) or (a)(2)). We understand this to mean that the 30mmBtu/hr heat input capacity threshold would not be relevant in this case and the facility would have to calculate its emissions regardless of its heat input capacity.

**Response:** We did not intend for electricity generating sources like a POTW to be excluded from qualifying for the 30 mmBtu exclusion specified under 40 CFR 98.2(a)(3)(ii) or the abbreviated emission report specified under 40 CFR 98.3(d)(3) (if otherwise qualified). The final rule has been revised. See the response to comment EPA-HQ-OAR-2008-0508-0381.1, excerpt 9.

#### Commenter Name: Jennifer McGraw Commenter Affiliation: Center for Neighborhood Technology (CNT) Document Control Number: EPA-HQ-OAR-2008-0508-0723.1 Comment Excerpt Number: 7

**Comment:** CNT recommends that EPA harmonize the required set of Global Warming Potentials (GWPs) for reporting with the requirements of other reporting programs. Different

programs requiring different sets of GWPs is one of the many examples of unnecessary burdens on reporters caused by methodological differences rather than real emissions differences. CNT notes that the proposed American Clean Energy and Security Act of 2009 (H.R. 2454) references GWPs from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report while the Proposed Reporting Requirement uses GWPs from the IPCC Second Assessment Report. CNT recognizes that reporting requirements under the United Nations Framework Convention on Climate Change drive the EPA's use of the Second Assessment Report values. We also recognize that the Proposed Reporting Rule would require reporters to submit emissions data as both quantity of gas emitted and CO<sub>2</sub>e, but we are concerned that if other regulations require different sets of GWPs reporters will have to convert their greenhouse gas values and produce multiple reports.

**Response:** See response on global warming potential values in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

Commenter Name: Pamela F. Faggert Commenter Affiliation: Dominion Document Control Number: EPA-HQ-OAR-2008-0508-1741 Comment Excerpt Number: 9

**Comment:** It is unclear whether EPA intends for the initial determination of whether a facility triggers reporting requirements to be restricted only to emissions from the particular source category for which a facility type is actually listed in a given source category (or given rulemaking subpart) or whether a facility must include emissions from any activity at the facility for which a GHG calculation methodology is included in any subpart of the rulemaking. For example, if a stationary source combustion facility, not specifically listed in any Subpart category, has estimated stationary source combustion emissions under 25,000 tonnes CO<sub>2</sub>-e using methods in subpart C, must other less emitting activities associated with other Subpart methods also be included in the total facility emission estimate? Other Subparts may include Subpart W (vents or tanks) or Subpart 0 (air conditioning systems). If the total emissions of combustion and other Subparts exceed 25,000 tonnes, is reporting required? EPA should provide more prescriptive direction in this regard.

**Response:** If the facility contains any of the source categories listed in 98.2(a)(1) in any calendar year starting in 2010, the facility is required to report emissions from all source categories at the facility for which calculation methodologies are provided in any subpart of the final rule. If the facility does not contain any of the source categories listed in 98.2(a)(1), then the facility is required to determine whether it emits 25,000 metric tons of CO<sub>2</sub>e or more in combined emissions from stationary fuel combustion, miscellaneous carbonate use, and the source categories listed in 98.2(a)(2) in any calendar year starting in 2010. If so, the facility is required to report emissions from all source categories at the facility for which calculation methodologies are provided in any subpart of the final rule. If the facility does not contain any of the source categories in 98.2(a)(1) or 98.2(a)(2), then the facility is required to determine if the facility emits 25,000 metric tons of CO<sub>2</sub>e or more from all stationary combustion units in any calendar year starting in 2010. If so, the facility is required under 98.2(a)(3) to report emissions from stationary fuel combustion devices only. If GHGs are emitted only from stationery fuel combustion units at a facility, section 98.2(a)(3)(ii) provides an exemption if the aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is less than 30 mmBtu/hr.

The commenter misinterpreted the rule. The example presented cannot occur. Calculation methods are provided only for source categories that are listed in the rule. GHG emissions from any other sources are not included in determining applicability.

#### Commenter Name: Robert D. Bessette Commenter Affiliation: Council of Industrial Boiler Owners (CIBO) Document Control Number: EPA-HQ-OAR-2008-0508-0513.1 Comment Excerpt Number: 10

**Comment:** A facility or supplier not meeting the threshold must reevaluate applicability whenever there is any change to the facility or supplier that could cause the facility or supplier to meet the applicability requirements, including but not limited to process modifications, increases in operation hours, increases in production, changes in fuel or raw material use, addition of equipment, and facility expansion. §98.3(b)(3) requires reporting starting with the first month of the change. This reevaluation apparently does not allow for de minimis changes to occur without reevaluation, thus setting up facilities and suppliers with an ever-continuing reevaluation process. The start of reporting presumes every change will trigger reporting when data might not be available to indicate they have gone over the reporting threshold until after the fact. To rationalize effort with benefit, this reevaluation requirement should be qualified to be triggered by significant changes (level to be defined) relative to prior emission rates or relative to the prior emissions level versus threshold. Perhaps for facilities with < 10,000 MTCO<sub>2</sub>e /yr, no checking should be done and for those above 10,000 MTCO<sub>2</sub>e/year, re-evaluation should be done if a project increases emissions by 5,000 MTCO<sub>2</sub>e or some other suitable threshold. Alternatively, facilities could re-evaluate annually. This would greatly simplify the reporting re-evaluation process as changes are made at a facility. These changes are required in order to reduce the burden on both reporters and regulatory authorities.

**Response:** The purpose of this provision of the rule is to emphasize that determining applicability is not a one-time event, but that a facility or supplier has an ongoing obligation to reassess applicability over time as significant changes to operations occur. The commenter is reading into this provision a level of burden that is not required. The rule does not require a reassessment for every change that occurs, only those that "...could cause the facility or supplier to...." trigger the rule. The obligation is for the owner or operation to be cognizant of the effect that a process change will have on GHG emissions and to estimate emissions if the changes are likely to be significant enough to trigger the rule. A preliminary assessment can be done using the equations in the rule and available company data and best engineering judgment as needed. If these preliminary estimates show that emissions might exceed the threshold, then the company would need to begin collecting emissions data in accordance with the rule to establish if the reporting threshold actually is exceeded. There is no requirement in the rule to retain records or report these assessments, although documenting company decisions regarding applicability may be in the company's best interest in case of future audits. Thus, the rule already contains the suggested requirement that reevaluation is required only for significant changes. Additionally, facilities will not need additional time to determine applicability or implement any required monitoring and recordkeeping for reporting because, during the planning stages for making the process change, the owners or operators of such facilities would have had ample time to consider if the rule applies and to make necessary arrangements for monitoring GHG.

#### **Commenter Name:** Traylor Champion **Commenter Affiliation:** Georgia-Pacific, LLC (GP) **Document Control Number:** EPA-HQ-OAR-2008-0508-0380.1 **Comment Excerpt Number:** 25

**Comment:** All portable and emergency engines should be exempted from the reporting requirements regardless of their inclusion in an air permit. Several states do not require these units to be included in an air permit and the current distinction would lead to an increased burden of reporting for many insignificant emission units.

**Response:** Regarding portable engines, the rule provides an exemption under 40 CFR 98.30. A definition of "emergency equipment" has been added to subpart A, and we have determined that this exemption, along with the 25,000 tons  $CO_2e$ /year threshold are adequate for excluding insignificant stationary fuel combustion units from coverage under the rule. Refer to responses in Volume 15: Subpart C: General Stationary Fuel Combustion Sources and Volume 16: Subpart D: Electricity Generation for more information.

**Commenter Name:** J. Michael Kennedy **Commenter Affiliation:** Florida Electric Power Coordinating Group **Document Control Number:** EPA-HQ-OAR-2008-0508-0473.1 **Comment Excerpt Number:** 4

**Comment:** We support EPA's proposal not to require reporting by facilities that determine based on 2010 data that they do not meet the applicability requirements of the rule. For new facilities or those that become subject as a result of a change, we understand that the facility would report for the first year only actual annual emissions for the new or changed unit exceeded the threshold. With respect to applicability determinations, owners and operators are to determine applicability of this rule to their facilities by estimating 2010 actual emissions with data collected in 2010 using the methodology that would apply to that facility under the proposed rule. Proposed \$ 98.2(b)(2), for example, states that stationary combustion units may use "any appropriate method" specified in § 98.33(a) to calculate annual emissions for applicability purposes. If by "appropriate," EPA means something other than the methodology that would apply if the unit was covered under the rule, EPA should make that clear. Facilities that determine they are subject to the rule would report annual emissions by the deadline and those that determine they are not subject would not report. For subsequent years, existing facilities would only be required to re-evaluate applicability if there is a change to the facility (e.g., process modification, increase in hours or production, change in fuel or raw material, addition of equipment) that could cause applicability to change. New or modified facilities must evaluate emissions in their first year of operation or change to determine applicability. However, because EPA's proposal for determining applicability relies on the methodologies specified for reporting under the rule, the FCG is concerned that facilities could be required to perform new monitoring under the rule in 2010 simply to determine (and document) whether the rule applies. With respect to general combustion sources affected by Subpart C, FCG concludes that the provisions in proposed § 98.33(b)(6) would prevent a unit from being required to install Tier 4 monitoring equipment simply to determine applicability. Proposed § 98.33(h)(6) allows use of Tier 3 monitoring to report for 2010 if Tier 4 would be applicable but the specified monitoring systems are not installed by January 1, 2010. However, even Tier 3 monitoring could require some monitoring (e.g., monthly carbon analysis or fuel flow metering) that is not already being performed. The FCG requests that EPA state in the rule that if required equipment is not already

being collected, analyzed, or installed, the unit may use the methodology in the next lower tier to estimate emissions for applicability purposes.

**Response:** The commenter seems confused about how the rule works. Regarding the issue of whether monitoring will be required to determine applicability, as well as simplified calculation tools and other guidance, see the response to comment EPA-HQ-OAR-2008-0508-0439.1, excerpt 6. Because applicability of the rule is and will be based on estimating emissions as specific in each subpart, sources that use other methods risk miscalculating their emissions and applicability. Most facilities will be able to clearly determine if they are subject to the rule using these simplified methods. Those facilities whose emission estimates show CO<sub>2</sub>e emissions to be near the 25,000 tons/year threshold may choose to monitor emissions in 2010 to determine applicability. This same approach will apply to new or changed facilities. The rule does not require use of CEMS to determine applicability. EPA agrees with the commenter that the proposed rule was unclear in section 98.2(b)(2) where it specified that "any appropriate method" in section 98.33(a) could be used for emissions from combustion units for the purposes of determining applicability. EPA's intention is to allow facilities to use any of the four tier methods specified under 40 CFR 98.33(a). The rule has been revised to clarify this point.

Commenter Name: Richard A. Leopold Commenter Affiliation: State of Iowa Department of Natural Resources Document Control Number: EPA-HQ-OAR-2008-0508-0336.1 Comment Excerpt Number: 4

**Comment:** Iowa does not have any automobile manufacturing facilities, but at least thirteen facilities manufacture tractors, lawn mowers, snowmobiles, personal watercraft, motorcycles, and other types of nonroad diesel engines used for construction and agriculture. The Department requests clarification on the reporting levels for these facilities. As manufacturers of mobile sources, the facilities appear to be required to do corporate level reporting, but many of the facilities also have stationary combustion GHG emissions greater than or equal to 25,000 mtCO<sub>2</sub>e, which would make them subject to the unit level reporting requirements of 40 CFR \$98.32.

**Response:** While it is not possible to provide a definitive response on the basis of the information provided in the comment, depending on individual circumstances, a facility could be subject to reporting both as a supplier of mobile source equipment and as a direct emitter. A facility that is subject to existing reporting requirements for motor vehicle and engine manufacturers would have to begin reporting GHG data as part of their reporting. If that facility uses stationary fuel combustion equipment in their production processes and that equipment emits  $25,000 \text{ mtCO}_2\text{e}$  or more per year, then the facility would have to report GHG emissions from fuel combustion under 40 CFR 98.

Commenter Name: Steven J. Rowlan Commenter Affiliation: Nucor Corporation (Nucor) Document Control Number: EPA-HQ-OAR-2008-0508-0605.1 Comment Excerpt Number: 21

**Comment:** Section 98.2(a)(1)(i)is ambiguous as to whether the 25,000 tons must result only from the electricity generating units or from all units present. In addition, how are co-generation

facilities going to be covered? These may have electric units that are relatively small, but the underlying industrial process emits greater than 25,000 tons. Such cogeneration units should be covered under categories (a)(2) or (a)(3) and not (a)(1).

**Response:** In response to several comments on this issue, the provisions for electricity generation have been clarified and simplified in the rule. See the discussion in the preamble for the electricity generation subpart.

Commenter Name: Steven J. Rowlan Commenter Affiliation: Nucor Corporation (Nucor) Document Control Number: EPA-HQ-OAR-2008-0508-0605.1 Comment Excerpt Number: 22

**Comment:** In 98.2(a)(1)(viii), does this mean an electric utility system or any person with electrical equipment that exceeds 17,820 lbs of  $SF_6$  or PFCs? The definition does not clear up this ambiguity.

**Response:** At this time EPA is not going final with the  $SF_6$  from electrical equipment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Steven J. Rowlan Commenter Affiliation: Nucor Corporation (Nucor) Document Control Number: EPA-HQ-OAR-2008-0508-0605.1 Comment Excerpt Number: 23

**Comment:** In 98.2(g), there is no justification for a once-in, always-in policy for an emissions reporting rule. EPA has adopted a high threshold for reporting. This builds substantial error into the system initially. EPA has further decided to exclude substantial portions of the GHG inventory of the United States from sources such as farms, communities, and mobile sources except through petroleum and fuels tracking. This introduces additional, substantial error. Furthermore, because GHGs are a global phenomenon, there are no "hot spot" issues that would justify more intensive tracking. Even assuming a facility operating at 24,999 tons/year to stay just below the threshold, this would amount to only 6.5x10-5 percent of the global, and 0.004 percent of the U.S. inventory, which is insignificant. Having chosen to exclude farming and other sources accounting for 53.1 percent of the U.S. inventory, EPA cannot argue that tracking changes at sources below the 25,000 ton threshold is critical to its statutory mandate. Further, "future needs" do not justify tracking this information. The program may be revised to account for those needs when they arise.

**Response:** For the response on the "once in, always in" provision in the proposed rule, see the preamble for the response on reporting frequency and provisions to cease reporting.

**Commenter Name:** J. P. Cativiela **Commenter Affiliation:** Dairy Cares **Document Control Number:** EPA-HQ-OAR-2008-0508-1014.1 **Comment Excerpt Number:** 6 Comment: The proposed rule requires that monitoring be conducted to measure inputs for the calculation methodology in order to make an applicability determination (i.e., a determination of whether a facility has to report GHG emissions under the proposed rule). As a result, facilities may be subject to a financial burden arising from costs associated with monitoring, even in cases where the facility is not subject to the proposed rule. EPA is seeking comment on whether to implement an alternative method to determine applicability, such as a screening tool. a. We recommend that EPA develop and implement a screening tool that uses published default values for total volatile solids (TVS) and percent of nitrogen present in the manure (Nmanure) (i.e., as opposed to monitoring) to make an initial applicability determination. Default values can be found in the 2006 IPCC Guidelines. If the screening tool indicates that a facility is close to the reporting threshold, then more refined calculations based on monitoring data can be required. Using default values will save costs for those facilities that are close to but below the reporting threshold. b. Additionally, we suggest that EPA provide a public comment period or a similar public process to accept input before implementing this screening tool. c. We suggest that EPA provide an estimate of the potential cost to farmers who would be required to perform monitoring but subsequently are not subject to the proposed rule. We anticipate that such an analysis will show that the cost related to developing and implementing this screening tool will be less than the monitoring costs for farmers who are not subject to the proposed rule.

**Response:** Regarding the issue of whether monitoring will be required to determine applicability, as well as simplified calculation tools and other guidance, see the response to comment EPA-HQ-OAR-2008-0508-0439.1, excerpt 6. Regarding the request that any simplified calculation tools be subject to public comment before they are used, we have determined that it is not necessary to have a formal public comment process and would in fact be counter-productive. We want these tools to be available when the final rule is promulgated, and a public comment process would delay their availability and thus create uncertainty among potentially affected facilities. Further, EPA has the requisite experience to develop a workable tool and an open door process that provides a means for stakeholders to provide feedback and suggestions on the tools and guidance provided. Finally, the tools are meant to provide assistance to source, but are not a requirement of the rule.

#### Commenter Name: See Table 8 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0412.1 Comment Excerpt Number: 6

**Comment:** EPA must provide simplified calculations (rather than imposing a potential-to-emit standard) to determine applicability under the rule. These calculations are necessary to alleviate the burden of requiring sources to undergo extensive monitoring at each and every facility to determine whether the threshold will be exceeded, thereby triggering applicability. GPA additionally supports using simplified calculation methods to determine fugitive emissions.

**Response:** See the response to EPA-HQ-OAQ-2008-0508-1014.1, excerpt 6. We are not imposing a potential to emit standard, but rather encouraging facilities to accurately estimate their actual emissions when determining applicability. Regarding the comment about fugitive emissions, at this time EPA is not going final with the subpart W. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

#### Commenter Name: Charlie Burd and Nicholas DeMarco Commenter Affiliation: Independent Oil and Gas Association of West Virginia (IOGA-WV) and West Virginia and Natural Gas Association (WVONGA) Document Control Number: EPA-HQ-OAR-2008-0508-0516.1 Comment Excerpt Number: 7

**Comment:** The WV Associations are concerned that the initial applicability determination requirements are overly and unnecessarily onerous. In order to initially determine whether a facility exceeds the threshold for emissions reporting, the proposed rule appears to require an estimation of that facility's emissions using the methodology that would apply to any activity for which a calculation or estimation method is prescribed in the rule. Therefore, facilities could be required to perform extensive new monitoring under the rule in 2010 simply to determine whether the rule applies to them. This of particular concern to the oil and natural gas industry since the proposed rule requires direct measurement of a facility's fugitive emissions using the methods prescribed in Subpart W in order to initially determine whether a given natural gas facility exceeds the threshold for emissions reporting. In its discussion of the implementation schedule for the rule, EPA assumes that many reporting entities already have GHG monitoring capability due to the requirements of other air quality programs. This assumption is not valid for oil and natural gas systems, which have never been subject to extensive direct measurement of fugitive emissions as called for in the proposed Subpart W provisions. Unlike other industrial sectors, oil and natural gas facilities do not have already-installed mechanisms for monitoring and measuring fugitive emissions as called for in the proposed rule. For these facilities, the Subpart W requirements and the task of determining the applicability of the rule to existing facilities represents a significant departure from current practice and will require considerable time and resources. The lack of a screening mechanism undermines the administrative and cost benefits EPA is seeking to achieve by selecting a reporting threshold of 25,000 tons CO<sub>2</sub> equivalent per year. For these reasons, we endorse INGAA's recommendation that EPA consider a capacity-based threshold or "simplified emission calculation tools" that would allow natural gas transmission compression facility operators to easily determine whether the Subpart W reporting requirements apply. Rather than requiring all facilities to undergo the costly process of conducting leak detection of fugitive emissions, the use of a threshold based on capacity or unit size or the use of existing emission factors would simplify the applicability determination to minimize the burden of proving that a facility is below the 25,000 tons of CO<sub>2</sub> per year threshold. These initial applicability determination methodologies can be separate from methodologies used for actual reporting, and the applicability assessment could be reevaluated periodically (every 5 years, for example).

**Response:** Regarding the need for EPA to simplify section 98.2 for the purposes of determining applicability, see the response to EPA-HQ-OAR-2008-0508-0439.1, excerpt 6. Regarding the comments about the oil and gas industry, at this time EPA is not going final with the proposed subpart W. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Bob Dinneen **Commenter Affiliation:** Renewable Fuels Association (RFA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0494.1 **Comment Excerpt Number:** 7 **Comment:** In order to determine whether the threshold has been exceeded, the applicability determination under the Proposed Rule requires a large number of facilities to calculate their emissions under the rule in order to determine if they must report. 74 Fed. Reg. at 16,469. Under the proposal, then facilities will have to make the calculations during the year just to determine that they may not exceed the threshold. This imposes a large burden on facilities, who will likely not be able to determine if the rule is applicable to them prior to commencement of the rule's compliance period. While RFA supports EPA's presumption regarding stationary source combustion units that have a maximum rated heat input capacity of less than 30 mmBtu/hr,17 EPA should provide a simplified means by which all facilities can determine applicability of the Proposed Rule prior to commencement of the compliance period, such as allowing facilities to provide their own estimates to EPA based on the prior year's operations. [Footnote: EPA's assumption is based on a facility operating full time, and thus a presumption may be supportable for a higher rated capacity based on fewer operating hours.]

Response: See the response to EPA-HQ-OAR-2008-0508-0439.1, excerpt 6.

**Commenter Name:** Kim Dang **Commenter Affiliation:** Kinder Morgan Energy Partners, L.P. **Document Control Number:** EPA-HQ-OAR-2008-0508-0370.1 **Comment Excerpt Number:** 15

**Comment:** Kinder Morgan maintains that natural gas transmission systems represent particularly appropriate candidates for a capacity-based threshold or "simplified emission calculation tool" that would allow natural gas facility operators to easily determine whether Subpart W's reporting requirements apply. Recognizing that EPA has requested comment on the need for such tools,22 Kinder Morgan offers several suggested methods for determining whether the reporting threshold has been met. However, if EPA were to accept INGAA's alternative measurement methodology (described below and endorsed by Kinder Morgan), a capacity threshold or simplified emission calculation tool would not be required. 1) Volume Balance Approach. Under this approach, if a facility has adequate instrumentation, the amount of gas leaving the facility or combusted for energy would be subtracted from the amount of gas entering the facility. The difference would be assumed to have been lost to the atmosphere, and would serve as an estimate of fugitive emissions for purposes of determining if the reporting threshold has been met. A "margin of safety" could be incorporated to account for measurement inaccuracy. This approach could be used by facilities with sufficient measurement equipment as determined by a Professional Engineer. 2) Existing Emission Estimation Techniques. Under this approach, the most current emission factors available, either from the 1992 GRI study or EPA's existing project to update these emission factors, would be applied to the facility to estimate fugitive emissions for purposes of determining if the facility met the 25,000 ton CO<sub>2</sub>-e threshold. Again, a margin of safety could be incorporated here to protect against the possibility of a "false negative" reporting determination. 3) Subpart W Engineering Estimates for Vented Emissions, and Existing- Emission Factors to Estimate Other Fugitive Emissions. This approach would essentially be an "abbreviated" Subpart W measurement – the Subpart W engineering estimation methods would be applied to vented sources, and the remaining fugitive sources would be determined using the most current emission factors available to determine whether the reporting threshold had been met. The advantage is that engineering estimates and emission factors are more practicable than direct measurement, and the engineering estimates would only need to be used on a limited number of vented sources. However, this method would be more burdensome

than a "pure" emission factor approach or a volume balance. 4) Capacity, Size, or Component Count Threshold. EPA could develop a "rule of thumb" to be applied to compressor stations below a certain level of gas throughput, a certain physical size, or certain component count (or any combination of these factors) that would be deemed to have emissions below the 25,000 ton  $CO_2$ -e threshold (similar to the heat input rate of 30 mmBTU/hr that serves as a cutoff for stationary combustion units). This method would be clear and straightforward. 5) "Best Available Data". This approach would allow reporting entities to use their own internal estimates, models, or measurement data to estimate emissions for the purpose of determining whether reporting is triggered. 6) Self-Determination. The Proposed Rule could simply not provide a method for determining whether reporting has been triggered, allowing each firm to use its sound scientific or engineering judgment and judge for itself how much risk of erroneous non-reporting to shoulder.

**Response:** At this time, EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Paul R. Pike Commenter Affiliation: Ameren Corporation Document Control Number: EPA-HQ-OAR-2008-0508-0487.1 Comment Excerpt Number: 17

**Comment:** EPA should simplify the applicability determination to minimize the burden of proving that a facility is below the 25,000 tons of  $CO_2$  per year threshold. Rather than requiring all facilities to undergo the costly process of conducting leak detection of fugitive emissions, EPA should allow potential reporters to count only combustion emissions within each facility to determine if the facility exceeds the reporting threshold. If so, then the facility would proceed to measure or estimate both combustion and fugitive emissions in accordance with the rule to develop the annual emissions report. This approach would still include the vast majority of emissions from natural gas facilities – such as natural gas compressor stations, or underground storage facilities to determine whether their emissions exceed the 25,000 tpy reporting threshold. At a minimum, if any fugitives do count toward the reporting threshold, EPA should clarify that the company could make use of internal knowledge to determine whether facilities could be ruled out as far below the threshold, and EPA should clarify that the leak detection required under Subpart W for reporting purposes is not also required for the initial determination whether a facility's emissions exceed the 25,000 tpy threshold that triggers the reporting requirements — including leak detection - under Subpart W.

**Response:** At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Robert N. Steinwurtzel Commenter Affiliation: Bingham McCutchen LLP on behalf of Association of Battery Recyclers (ABR) Document Control Number: EPA-HQ-OAR-2008-0508-0660.1 Comment Excerpt Number: 11 **Comment:** The Proposed Rule at §98.2(a)(2) requires the submittal of GHG emission reports from any Lead Production facility that emits a total of 25,000 mtCO<sub>2</sub>e or more per year from combined sources at the facility. 74 Fed. Reg. at 16,612. If this threshold is exceeded in a calendar year, the facility must report emissions in accordance with all monitoring, recordkeeping and quality assurance requirements set forth in the Proposed Rule. Id. On page 16,469 of the Proposed Rule, EPA acknowledges that such applicability based on actual emissions will result in a burden on a large number of facilities needing to calculate their emissions under the rule in order to determine if they must report. Id. at 16,469. To minimize that burden, the Proposed Rule allows facilities with only stationary combustion sources that have an aggregate maximum rated heat input capacity of less than 30 MMBtu/hour to presume that emissions are below the threshold and therefore not have to report. However, because Lead Production facilities are listed as source categories in the Proposed Rule at \$98.2(a)(2), presumptive relief of this burden is not available, even though EPA's threshold analysis indicates that nearly half of the facilities in the Lead Production category will not have to report. The Proposed Rule's applicability based on actual emissions places a burden far greater than simply calculating emissions on a large number of facilities within listed source categories. These facilities will be unable to determine if the rule is applicable to them prior to commencement of the rule's compliance period. For example, while emissions reports for a calendar year are not due until March 31 of the following year, actions to meet the monitoring, recordkeeping and quality assurance requirements for generating data with which to calculate emissions must be in place prior to the beginning of the reporting year. To assure compliance in the event that emissions calculations at the end of a year indicate reporting is required, all facilities within a listed source category will have to comply with the requirements of the rule throughout the reporting year. This places an unreasonable and undue burden on those facilities that, after complying with the rule requirements, may determine at the end of a reporting year that those requirements did not actually apply. Furthermore, this burden would continue year after year, because actual emission levels may change from year to year. EPA must provide a means by which all facilities can determine applicability of the Proposed Rule prior to commencement of the compliance period. As was done for facilities with only combustion sources, a capacity-based approach to determining applicability of the Proposed Rule would provide a reasonable alternative. In the Reporting Threshold TSD, EPA discusses its analysis of capacity-based thresholds and the determination that such thresholds are not appropriate due to unavailable and equivalent information. ABR notes that EPA analyzed the potential use of capacity-based thresholds in several source categories, but did not evaluate Lead Production in this manner. Even though EPA states that capacity and corresponding emissions data is unavailable, its entire threshold analysis for Lead Production is based on emissions estimates determined from production capacity information. If EPA can rely on capacity-based emissions estimates for the analysis to determine thresholds, then a capacity-based approach to determine the applicability of those thresholds should also be developed and included in the rule.

**Response:** Regarding the need for EPA to minimize the burden of applicability determination under section 98.2, see the response to EPA-HQ-OAR-2008-0508-0439.1, excerpt 6. With regard to the potential use of capacity-based thresholds, threshold analysis was done to determine the number of facilities likely to be captured under alternative thresholds. While not a precise analysis, not all facilities in the lead production source category would emit more than 25,000 metric tons  $CO_2e$  per year and therefore a threshold was developed. However, EPA concluded that the technical data available could not support a credible and equitable production threshold. For a response to the many comments received on simplified calculation tools and guidance, see the preamble discussion on determining applicability.

#### **Commenter Name:** Juanita M. Bursley **Commenter Affiliation:** GrafTech International Holdings Inc. Company (GrafTech) **Document Control Number:** EPA-HQ-OAR-2008-0508-0686.1 **Comment Excerpt Number:** 8

**Comment:** GrafTech is very concerned that, as proposed, the GHG reporting rule will virtually require every commercial and industrial facility to collect fuel usage data and perform relatively complex calculations, and in some cases modeling, in strict accordance with the prescribed emissions estimating procedures, just to determine if they are subject to this rule. In many cases, the owner or operator will just be documenting that the estimated GHG emissions from the facility do not exceed the reporting threshold. To support its applicability assessment and document its decision, each facility will also have to meet the recordkeeping requirements even if it determines it is below the reporting threshold. Therefore, this rule will be nearly as burdensome on facilities that do not have to report, as on those that must report. Therefore, GrafTech believes that EPA should provide more simple source category thresholds to determine applicability, like the 30 mmBtu/hr. aggregate maximum rated heat input capacity for stationary fuel combustion units, even if conservative, to reduce the burden on the majority of facilities making applicability determinations without having to conduct all the emissions calculations and keep records of all the supporting data.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0566.1, excerpt 7.

#### Commenter Name: Juanita M. Bursley Commenter Affiliation: GrafTech International Holdings Inc. Company (GrafTech) Document Control Number: EPA-HQ-OAR-2008-0508-0686.1 Comment Excerpt Number: 36

**Comment:** GrafTech is very concerned that, as proposed, the GHG reporting rule will virtually require every industrial facility to collect data and perform relatively complex calculations in strict accordance with the prescribed emissions estimating procedures, just to determine if they are subject to this rule. Therefore, this rule will be nearly as burdensome on facilities that do not have to report, as on those that must report. This subpart is an excellent example of that problem. Any owner or operator of an industrial facility that has a wastewater treatment system included in EPA's definition will have to provide the required monitoring equipment (if not currently installed on existing equipment), monitor flow and collect samples of the influent to that system at a minimum once per month frequency, meet QA/QC requirements and perform the prescribed analyses in order to calculate estimated CH<sub>4</sub> emissions from that treatment system, regardless of the volume or organic load of its wastewater. EPA has clearly recognized and stated in its TSD and preamble that industries that generate high volumes of wastewater and that also have a high organic load have the potential to produce significant CH<sub>4</sub> emissions from wastewater treatment systems. Therefore, to reduce the burden on industrial facilities with low volume treatment systems and/or low organic loading in their process wastewater, GrafTech believes that EPA should provide simple, yet sufficiently conservative, source category thresholds for volume and/or organic loading of industrial wastewater, to define the applicability for this subpart, similar to the 30 mmBtu/hr. aggregate maximum rated heat input capacity for stationary fuel combustion units. This will allow simple applicability determinations at each industrial facility without requiring an owner or operator to install new monitoring equipment, routinely collect and analyze samples, meet OA/OC requirements, conduct emissions calculations, and keep

records of all the supporting data to support its determination that the facility is below the reporting threshold.

**Response:** Regarding the need for EPA to simplify section 98.2 for the purposes of determining applicability, see the response to EPA-HQ-OAR-2008-0508-0439.1, excerpt 6. Regarding the comment about wastewater treatment systems, at this time EPA is not going final with the wastewater treatment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Wesley L. McNealy Commenter Affiliation: Pepco Holdings, Inc. (PHI) Document Control Number: EPA-HQ-OAR-2008-0508-0547.1 Comment Excerpt Number: 24

**Comment:** PHI stresses that EPA should simplify the applicability determination to minimize the burden of proving that a facility is below the 25,000 tons of  $CO_2e$  per year threshold. Rather than requiring all facilities to undergo the costly process of conducting leak detection of fugitive emissions, some threshold of associated combustion emissions should be considered.

**Response:** Regarding the need for EPA to simplify section 98.2 for the purposes of determining applicability, see the response to EPA-HQ-OAR-2008-0508-0439.1, excerpt 6. Regarding the comment about leak detection of fugitive emissions, at this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Patrick J. Nugent Commenter Affiliation: Texas Pipeline Association (TPA) Document Control Number: EPA-HQ-OAR-2008-0508-0460.1 Comment Excerpt Number: 8

**Comment:** The rules should be revised to address the issue of rule applicability determinations. The rule should address the issue of how facilities that are close to but possibly below the 25,000 metric ton/year threshold are to determine rule applicability — short of simply bearing the cost and burden of complying with all aspects of the rule, including onerous direct measurement requirements, only to find out that this was not necessary because the facility turns out to he below the threshold. The proposed rule attempts to address this issue through a proposal whereby any facility having an aggregate maximum rated heat input capacity of stationary fuel combustion units less than 30 MMBtu/hr may presume that its emissions are below the threshold. TPA supports this concept and recommends that the level for combustion units should not be lower than the 30 MMBtu/hr figure. Similarly, TPA urges EPA to establish default values for fugitives based on throughput or the capacity of a gas processing plant that could be used for screening purposes to determine a facility's initial applicability of reporting requirements. If default values were available to industry, the site could perform a quick and inexpensive calculation to determine if it is below the reporting threshold, if the site is near or just above the threshold, that site could then make a decision on whether it should conduct a more site specific

analysis of the level of its GHG emissions. This kind of threshold determination would greatly reduce costs and administrative burdens to the natural gas industry in complying with these rules.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0547.1, excerpt 24.

#### Commenter Name: Lauren E. Freeman Commenter Affiliation: Hunton & Williams LLP Document Control Number: EPA-HQ-OAR-2008-0508-0493.1 Comment Excerpt Number: 6

**Comment:** Because EPA's proposal for determining applicability relies on the methodologies specified for reporting under the rule, UARG is concerned that facilities could be required to perform new monitoring under the rule in 2010 simply to determine (and document) whether the rule applies. With respect to general combustion sources affected by Subpart C, UARG assumes that the provisions in proposed § 98.33(b)(6) would prevent a unit from being required to install Tier 4 monitoring equipment simply to determine applicability. Proposed § 98.33(b)(6) allows use of Tier 3 monitoring to report for 2010 if Tier 4 would be applicable but the specified monitoring systems are not installed by January 1, 2010. However, even Tier 3 monitoring could require some monitoring (e.g., monthly carbon analysis or fuel flow metering) that is not already being performed. As a result, EPA should revise the rule to allow use of the methodology in the next lower Tier to estimate emissions for applicability purposes whenever the otherwise applicable methodology would require new equipment, data collection, or analysis. Requiring sources to engage in new ongoing monitoring under the rule simply to determine if the rule applies is not warranted when there are simpler approaches available.

Response: See the response to EPA-HQ-OAR-2008-0508-0439.1, excerpt 6.

#### **Commenter Name:** James McNew **Commenter Affiliation:** Outdoor Power Equipment Institute (OPEI) **Document Control Number:** EPA-HQ-OAR-2008-0508-1036.1 **Comment Excerpt Number:** 5

**Comment:** EPA rightfully established some basic guidelines in determining if a process would trigger a reporting requirement. However, the accumulative effect of many processes that EPA would require to determine if a facility meets or exceeds the 25,000 metric tons of CO<sub>2</sub>e creates a burden for every facility, whether they meet the reporting trigger or not, in order to determine accurately their reporting responsibility. Further, it would seem that record keeping would be required, whether a facility meets or does not meet the reporting threshold. How would EPA determine if a facility is in violation or compliance without a complete calculation of all eligible processes measured and included? What requirement would be imposed upon a company to defend the facility calculation for the determination of threshold and reporting? There are many questions on how EPA would treat facilities who determine that they are below the thresholds for reporting. For the purpose of this rulemaking, EPA should establish reporting triggers for all processes and not rely upon a cumulative calculus that is unclear and burdensome. Additionally, there is a requirement for performing the calculus every year of the program to determine if eligibility for reporting has changed, re. non-reporters becoming eligible. This added burden of performing the calculation along with the need for record keeping, assuming record keeping would be required, places a yearly burden upon every facility regardless of size or reporting

status. Now the cost of this program goes beyond the facilities that must report to every facility for the determination of the reporting threshold. Has EPA included in the cost determination for this rulemaking the economic impact of the on-going reporting determination of eligibility that this rule would require?

**Response:** The commenter is not correct in concluding that the rule imposes significant ongoing costs on facilities that are not subject to the rule. EPA has re-examined the costs of applicability determination and has estimated that the total cost of the determination activity would be approximately \$870 per facility. These costs would be for a one-time fuel sampling and are based on the costs for monthly fuel sampling outlined in the Final Regulatory Impact Analysis, section 4.3. EPA also solicited comment and gathered information on alternative means of determination for certain source categories that could further reduce these costs. Under normal operating conditions, these costs are likely to be well-below one percent of total facility revenue. Regarding the comment that applicability determination under the rule is complex, see the response to comment EPA-HQ-OAR-2008-0508-439.1, excerpt 6. Regarding the issues of whether facilities are required under the rule to keep records of their applicability determination calculations and the requirement for facilities under the 25,000 tons/year threshold to redetermine applicability each year, see the response to comment EPA-HQ-OAR-2008-0508-0566.1, excerpt 7. EPA's cost estimates reflect a reasonable assessment of the burden required to determine applicability including assessment of the impact of future facility modifications.

#### **Commenter Name:** Jennifer Reed-Harry **Commenter Affiliation:** PennAg Industries Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0948.1 **Comment Excerpt Number:** 5

**Comment:** We strongly support the creation of tables, charts or some form of a screening tool that could be used by industry and farmers to quickly assess if their operation falls within the GHG reporting thresholds.

Response: See the response to EPA-HQ-OAR-2008-0508-0439.1, excerpt 6.

#### **Commenter Name:** Kyle Pitsor **Commenter Affiliation:** National Electrical Manufacturers Association (NEMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0621.1 **Comment Excerpt Number:** 4

**Comment:** The NEMA Carbon/Manufactured Graphite EHS Committee is very concerned that, as proposed, the GHG reporting rule will virtually require every commercial and industrial facility to collect fuel usage data and perform relatively complex calculations, and in some cases modeling, in strict accordance with the prescribed emissions estimating procedures, just to determine if they are subject to this rule. In many cases, the owner or operator will just be documenting that the estimated GHG emissions from the facility do not exceed the reporting threshold. To support its applicability assessment and document its decision, each facility will also have to meet the recordkeeping requirements even if it determines it is below the reporting threshold. Therefore, this rule will be nearly as burdensome on facilities that do not have to report, as on those that must report. Therefore, the NEMA Carbon/Manufactured Graphite EHS Committee believes that EPA should provide more simple source category thresholds to

determine applicability, like the 30 mmBtu/hr. aggregate maximum rated heat input capacity for stationary fuel combustion units, even if conservative, to reduce the burden on the majority of facilities making applicability determinations without having to conduct all the emissions calculations and keep records of all the supporting data.

**Response:** Regarding the comment that applicability determination under the rule is complex, see the response to comment EPA-HQ-OAR-2008-0508-439.1, excerpt 6. Regarding the issues of whether facilities are required under the rule to keep records of their applicability determination calculations, see the response to comment EPA-HQ-OAR-2008-0508-0566.1, excerpt 7.

**Commenter Name:** Gary F. Lindgren **Commenter Affiliation:** Calumet Specialty Products Partner, L.P. **Document Control Number:** EPA-HQ-OAR-2008-0508-0626.1 **Comment Excerpt Number:** 5

**Comment:** EPA needs to eliminate requirements for certain sectors (e.g., petroleum refineries) to report GHG emissions regardless of whether the reporting threshold was exceeded. This policy is illogical on its face, and results in disproportionate burdens on small business and small facilities. Such facilities should only be required to determine whether they exceeded the GHG reporting threshold. This is the approach used in other regulatory programs administered by EPA.

**Response:** See response on thresholds in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions. In the case of the 17 source categories listed in section 98.2(a)(1), our analysis indicated that all existing facilities within these source categories emit more than 25,000 metric tons of  $CO_2e$  per year or that only a few facilities emit marginally below this level. These source categories include large manufacturing operations such as petroleum refineries and cement production. Thus, requiring all facilities within these source categories to report (rather than requiring them to determine if they exceed the 25,000 tons/year threshold) simplifies the applicability determination for these facilities.

Commenter Name: Steven M. Pirner Commenter Affiliation: South Dakota Department of Environment and Natural Resources (SD DENR) Document Control Number: EPA-HQ-OAR-2008-0508-0576 Comment Excerpt Number: 7

**Comment:** EPA requests comments on the need for developing simplified emissions calculation tools for certain source categories to assist potential reporters in determining applicability. Simplified emission calculation tools, especially for small businesses, is essential in reducing the burden on these businesses of trying to determine if this rule is applicable to them. SD DENR recommends these tools be developed prior to the year that  $CO_2e$  emissions must be reported. For example, the Proposed Rule identifies 2010 as the first year  $CO_2e$  emissions must be reported. Therefore the tools should be in place by the end of 2009. If EPA extends that date to 2011, as SD DENR proposes, then the tools should be in place by the end of 2010.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0439.1, excerpt 6.

#### **Commenter Name:** Angela Burckhalter **Commenter Affiliation:** Oklahoma Independent Petroleum Association (OIPA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0386.1 **Comment Excerpt Number:** 5

**Comment:** We appreciate EPA's attempt to identify who is required to submit GHG reports and its attempts to reduce the burdens based on industry sectors; however, we think the information presented in Section 98.2 is confusing and unnecessarily complicated. We suggest EPA use tables, charts, diagrams, or other similar formats that would clearly outline who is subject to the rule. In addition, EPA requests comments on the need to develop simplified emission calculations tools to assist in determining applicability. This would be very helpful as long as each calculation contains the parameters for the different types of fuels being used in combustion sources and addresses different industry sectors. We request EPA simplify this section so that small businesses such as independent oil and gas producers can easily determine if they are subject to the rule and are required to submit GHG emission reports.

**Response:** Regarding the need for EPA to clarify and simplify section 98.2 for the purposes of determining applicability, see the response to comment EPA-HQ-OAR-2008-0508-0439.1, excerpt 6. Regarding the comment about oil and gas producers, at this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** William D. Schrand **Commenter Affiliation:** Southwest Gas Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0417.1 **Comment Excerpt Number:** 4

**Comment:** EPA should simplify the applicability determination to minimize the burden of proving that a facility is below the 25,000 tons of  $CO_2$  per year threshold. Rather than requiring all facilities to undergo the costly process of conducting leak detection of fugitive emissions, EPA should allow potential reporters to count only combustion emissions within each facility to determine if the facility exceeds the reporting threshold. If a facility exceeds the 25,000 tpy threshold of combustion emissions, then the facility would proceed to measure or estimate both combustion and fugitive emissions in accordance with the rule to develop the annual emissions report. This would be an easier, less costly approach, but would still include the vast majority of emissions from natural gas facilities – such as natural gas compressor stations, LNG storage facilities or underground storage facilities.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0547.1, excerpt 24.

Commenter Name: J. Fennimore Commenter Affiliation: None Document Control Number: EPA-HQ-OAR-2008-0508-0164 Comment Excerpt Number: 1 **Comment:** After reading the proposed rule I found it necessary to write a very short article for people in the power plant field as a quick explanation of how to decide if the rule applies to them. I did this by looking at boiler horsepower, efficiency and fuel used. I think that the enclosed table would be very beneficial to anyone making the reporting decision [See submittal for data table provided by the commenter showing the amount of fuel burned to produce 25,000 metric tons  $CO_2e$ ]. You may wish to consider incorporating this into your rule.

**Response:** EPA appreciates the input. Following publication of the final rule, we plan to provide guidance similar to the submitted article to assist facilities in determining applicability to the rule.

#### Commenter Name: Scott Manley Commenter Affiliation: Wisconsin Manufacturers & Commerce (WMC) Document Control Number: EPA-HQ-OAR-2008-0508-0728.1 Comment Excerpt Number: 2

**Comment:** The proposed rule appropriately contemplates an exemption from reporting requirements for facilities with aggregate maximum rated heat input capacity of stationary combustion units of 30 million BTU per hour (mmBTU/hr) or less. While this is a reasonable exemption threshold for combustion units firing coal, the rule should contemplate additional exemptions for combustion units firing less carbon intense fuels, such as natural gas or propane. Specifically, a similar exemption should be available to natural gas units with a maximum heat input capacity of 53 mmBTU/hr, based upon a Department of Energy (DOE) emission factor of 117.08 pounds of CO<sub>2</sub> per mmBTU. Furthermore, an exemption should be available for units firing propane with a maximum heat input capacity of 45 mmBTU/hr based upon a DOE emission factor of 139.179 pounds of CO<sub>2</sub> per mmBTU. The suggested exemption thresholds noted above are based upon a reporting threshold of 25,000 t CO<sub>2</sub>e as proposed in the rule. However, WMC believes the reporting threshold should be increased to 100,000 t CO<sub>2</sub>e. Correspondingly, the reporting exemptions for aggregate maximum rated heat input capacity for units firing coal, natural gas and propane should be increased to 120 mmBTU/hr, 212 mmBTU/hr and 180 mmBTU/hr respectively if the reporting threshold is increased in the final rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

Commenter Name: Eric Christensen Commenter Affiliation: WSP Environment & Energy Document Control Number: EPA-HQ-OAR-2008-0508-0275 Comment Excerpt Number: 1

**Comment:** This comment is in regards to the indicator in the stationary combustion section of the MRR. I believe that the indicator of total heat capacity of 30 MMBtu/hour will give "false positives" for many facilities that don't actually need to report. I see two problems with the indicator: It assumes that coal is the fuel and it assumes year-round operation at full capacity. Under those assumptions, you do get 25,000 tCO<sub>2</sub>/yr: 30 MMBtu/hr \* 8760 hr/yr \* 0.095 tCO<sub>2</sub>/MMBtu for coal = 25,000 tCO<sub>2</sub>/yr However, on-site coal combustion is rare at the large majority of facilities. Most will consume primarily natural gas and fuel oil. Secondly, it is rare

for equipment to operate at full capacity 24 hours a day. I recommend a more reasonable assumption of full-load hours operated per year be determined. I then recommend calculating three different thresholds, one for coal, one for fuel oil, one for natural gas. If the assumption were 4380 full-load hours per year (this is arbitrary, some research should go into determining this number), the indicators would be (approximately): Coal indicator =  $(25,000 \text{ tCO}_2/\text{yr}) / (4380 \text{ hr/yr}) / 0.095 \text{ tCO}_2/\text{MMBtu} = 60 \text{ MMBtu/hr heat input capacity Fuel oil indicator = } (25,000 \text{ tCO}_2/\text{yr}) / (4380 \text{ hr/yr}) / 0.076 \text{ tCO}_2/\text{MMBtu} = 75 \text{ MMBtu/hr heat input capacity Natural gas indicator = } (25,000 \text{ tCO}_2/\text{yr}) / (4380 \text{ hr/yr}) / 0.053 \text{ tCO}_2/\text{MMBtu} = 105 \text{ MMBtu/hr heat input capacity The explanation in the text would be that if a facility has coal-fired equipment with a heat input of 60 MMBtu/hr, or fuel oil-fired equipment with a heat input of 75 MMBtu/hr, or natural gas-fired equipment with a heat input of 105 MMBtu/hr, or some combination of these, they would likely exceed the 25,000 tor threshold.$ 

Response: See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

#### Commenter Name: David Fairfield Commenter Affiliation: National Grain and Feed Association (NGFA) Document Control Number: EPA-HQ-OAR-2008-0508-0463.1 Comment Excerpt Number: 11

**Comment:** The NGFA supports the concept of establishing a reporting exemption threshold based upon the aggregate maximum rated heat input capacity of stationary fuel combustion units located at the facility. However, we do not believe it is appropriate for EPA to establish this threshold using the fossil fuel that produces the worst-case scenario for facility emissions. Instead, we believe that such a reporting exemption threshold should be based on the specific type(s) of fuel(s) combusted at the facility. The vast majority of facilities involved in grain handling, feed milling, or grain processing combust natural gas, propane or distillate fuel oil within stationary combustion units. Based upon EPA-provided emission data and assuming 8,760 hours of combustion per year, the following table [see table in DCN:EPA-HQ-OAR-2008-0508-0463.1] indicates by common fuel type the aggregate maximum rated heat input capacity of stationary combustion units that would need to be present at a facility in order to reach the proposed 25,000 metric tons CO<sub>2</sub>e reporting requirement, as well as the 100,000 metric ton CO<sub>2</sub>e reporting requirement supported by the NGFA. Further, EPA's assumption used to establish its proposed heat input exemption threshold that stationary combustion units at facilities will operate at 100 percent of maximum rated input capacity for 24 hours per day each day of the year is incorrect. Stationary combustion units at facilities involved in grain handling, feed milling and grain processing do not operate continuously at this all-out level each day of the year. Instead, the operational level of many stationary combustion units at such facilities is seasonal in nature, with the amount of fuel combusted significantly varying though out the year. The NGFA strongly recommends that EPA revise its proposed aggregate maximum rated heat input capacities of stationary fuel combustion units for which the agency will exclude facilities from the need to calculate their emission levels to determine whether they are required to report under the proposed regulation. We believe that EPA's approach in establishing appropriate aggregate maximum rated heat input capacity thresholds should be flexible and reflect facility operations. Such an approach should consider the actual fossil fuel(s) combusted at the facility and the actual hours of facility operation.

**Response:** See response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

#### Commenter Name: Kathleen M. Sgamma Commenter Affiliation: Independent Petroleum Association of Mountain States (IPAMS) Document Control Number: EPA-HQ-OAR-2008-0508-0521.1 Comment Excerpt Number: 12

**Comment:** IPAMS supports EPA's proposal to provide an exemption for facilities whose stationary fuel combustion sources have an aggregate maximum rated heat input capacity that is less than 30 MMBtu/hr.

**Response:** EPA agrees with the commenter that the rule should provide an exemption for maximum heat input capacity below 30 MMBtu/hr to facilities having only stationary combustion sources.

**Commenter Name:** Paul Glader **Commenter Affiliation:** Hecla Mining Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0579.1 **Comment Excerpt Number:** 6

**Comment:** In addition to the exemption for stationary fuel combustion units that have a maximum aggregate heat input capacity of 30 million British thermal units per hour (mmBtu/hr), EPA should consider establishing exemptions for certain portable and stationary emissions units as well as other small sources (e.g., small wastewater treatment facilities and landfills at mining operation, etc.), using approaches similar to those adopted by some states during the permitting process for criteria pollutants. EPA should develop a list of insignificant activities will streamline the process and allow industry to focus on significant stationary sources.

**Response:** With respect to portable equipment and emergency engines, see the response to comment EPA-HQ-OAR-2008-0508-0380.1, excerpt 25. For a discussion on de minimis emissions, refer to Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

Commenter Name: Chris Hornback Commenter Affiliation: National Association of Clean Water Agencies (NACWA) Document Control Number: EPA-HQ-OAR-2008-0508-0566.1 Comment Excerpt Number: 8

**Comment:** NACWA believes that EPA should consider using a quantity of fossil fuel consumed as the threshold for deciding what facilities need to calculate their emissions. The 30 mmBtu/hr requirement to estimate is apparently based on a type of "potential to emit" assumption that all stationary combustion equipment uses fuel which contributes substantial CO<sub>2</sub>e emissions. Many wastewater treatment plants, especially those with sewage sludge incinerators, will have a fairly large heat capacity, but few are likely to exceed the reporting threshold due in large part to the use of biogas and heat released during combustion of biomass to minimize the use of auxiliary fossil fuels. Use of a fossil fuel quantity burned threshold rather than heat capacity would minimize the burden for the facilities EPA intended not to include in the reporting rule.

**Response:** EPA plans to issue implementation guidance on rule applicability that will distinguish among fuel types. See the preamble discussion on determining applicability.

Commenter Name: See Table 8 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0412.1 Comment Excerpt Number: 22

**Comment:** GPA supports EPA's proposal to provide an exemption to facilities whose stationary fuel combustion sources have an aggregate maximum rated heat input capacity that is less than 30 MMBtu/hr, although this number is very conservative and should be raised to 40 MMBtu/hr.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

Commenter Name: Myron Hafele Commenter Affiliation: Kohler Co. Document Control Number: EPA-HQ-OAR-2008-0508-0761.1 Comment Excerpt Number: 2

**Comment:** §98.2(a)(3)(ii) provides that facilities do not have to report under this rule if the "aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 mmBtu/hr or less." Kohler Co. appreciates EPA's effort to provide this simplified option to screen out low emitting facilities, but feel additional thresholds should be included for sources combusting only natural gas (NG) or propane. It is our understanding that the 30 mmBtu/hr threshold is based on the combustion of the highest CO<sub>2</sub> emitting fuels. The Energy Information Administration of the U.S. Department of Energy provides on its website, htto://www.eia.doe.gov/oiaf/1605/coefficients.html, that the emission coefficient for NG is 117.080 lbs. (0.05311 metric tons) of CO<sub>2</sub>/mmBtu and for propane 139.178 lbs. (0.06313 metric tons) of CO<sub>2</sub>/mmBtu. Therefore, the NG and propane equivalents to 25,000 metric Tons (mt) of CO<sub>2</sub> are 53.7 mmBtu/hr and 45.2 mmBtu/hr respectively. Since many sources combust only natural gas (NG) or propane we request that applicability screening threshold of 53.7 mmBtu/hr for sources combusting only NG and of 45.2 mmBtu/hr for sources combusting only propane or only propane and NG.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

### **Commenter Name:** Theresa Pfeifer **Commenter Affiliation:** Metro Wastewater Reclamation District **Document Control Number:** EPA-HQ-OAR-2008-0508-0574.1 **Comment Excerpt Number:** 3

**Comment:** Please clarify when a facility is required to calculate its emissions for comparison against the threshold. Specifically, in Subpart A, General Provisions, additional clarity is needed to differentiate between two of the three applicability paragraphs, 98.2(a)(2) and (a)(3). Based on NACWA's understanding of conversations with EPA, if the aggregate maximum rated heat input capacity of the stationary fuel combustion units at a POTW is less than 30mmBtu/hr, then the

POTW does not have to calculate its emissions to compare against the threshold. This is not abundantly clear from the regulatory text or the preamble. Also, what documentation must be maintained if a facility determines it does not exceed the 25,000 metric ton  $CO_2e$  threshold after completing the calculations?

**Response:** For an explanation of how the 3-step applicability determination works, with respect to paragraphs (a)(1), (a)(2), and (a)(3) of 40 CFR 98.2, see the response to comment EPA-HQ-OAR-2008-0508-1741, excerpt 9. Regarding the issue of whether facilities are required under the rule to keep records of their applicability determination calculations, see the response to comment EPA-HQ-OAR-2008-0508-0508-0506-1, excerpt 7.

Commenter Name: Jerry Call Commenter Affiliation: American Foundry Society (AFS) Document Control Number: EPA-HQ-OAR-2008-0508-0356.2 Comment Excerpt Number: 15

**Comment:** It appears the 30 mmBtu/hour threshold was established by assuming that coal is the fuel with year-round operation at full capacity. However, on-site coal combustion is rare at many foundries (with most facilities consuming natural gas and others, less frequently, consuming fuel oil). Accordingly, EPA should consider a more appropriate threshold for metal casting facilities.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

Commenter Name: Steven M. Pirner Commenter Affiliation: South Dakota Department of Environment and Natural Resources (SD DENR) Document Control Number: EPA-HQ-OAR-2008-0508-0576 Comment Excerpt Number: 5

**Comment:** EPA is seeking comments on (1) whether the presumption for maximum rated heat input capacity of 30 MMBtus per hour is appropriate; (2) whether a different (lower or higher) MMBtus per hour capacity presumption should be set and (3) whether other capacity threshold should be developed for different types of facilities. The Proposed Rule governs a subset of GHG emitting entities, which according to EPA accounts for 85-90% of total U.S. GHG emissions. For the rule to trigger reporting requirements, a facility must fall into one of four source categories. The broadest source category consists of facilities that contain "stationary fuel combustion sources." According to the Proposed Rule, these sources are devices that combust solid, liquid, or gaseous fuel, generally or for the purposes of producing electricity, generating steam, or providing useful heat or energy for industrial, commercial, or industrial use, or reducing the volume of waste by removing combustible matter. Stationary fuel combustion sources include, but are not limited to, boilers, combustion turbines, engines, incinerators, and process heaters. In accordance with the Proposed Rule, section 98.2(a)(3), facilities in this category need to report GHG emissions when the stationary fuel combustion units at a facility have an aggregate heat input capacity of 30 MMBtus per hour or greater and emit 25,000 metric tons of carbon dioxide equivalent ( $CO_2e$ ) per year or more. But in order to determine whether it must report, a facility with a stationary fuel combustion source must first calculate or monitor its emissions. This accomplishment may not be as difficult for a large corporation; but would be a tremendous burden to smaller facilities that do not have adequate resources to accurately compile the data

and determine if they exceed the 25,000 tons of  $CO_2e$  per year reporting threshold. Therefore, the SD DENR recommends that the stationary fuel combustion unit size threshold be raised to 45 MMBtus per hour. SD DENR based this threshold on the reality that these smaller units operate on an intermittent basis and most small stationary fuel combustion unit's burn natural gas as its primary fuel with diesel fuel as a backup that is rarely used. Using carbon dioxide emission factors from EPA's AP-42 document for natural gas (120,000 pounds per MMcf) and diesel (22,300 pounds per 1,000 gallons) and assuming natural gas (heat input = 1,020 Btu's per cubic foot) and diesel (heat input – 140,000 Btu's per gallon) is used 75% and 25% of the time, respectively, the reporting threshold for smaller facilities would be 45 MMBtus per hour or greater. If EPA prefers to establish a separate threshold for natural gas and diesel fired stationary fuel combustion units, using the same assumptions but operating all the time with natural gas and diesel results in a 50 and 35 MMBtus per hour threshold, respectively. The higher threshold(s) will lessen the burden on small businesses and farmers and still assure EPA that they are receiving data from facilities that emit 25,000 tons of  $CO_2e$  per year or more.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

**Commenter Name:** Keith Epperson **Commenter Affiliation:** American Feed Industry Association (AFIA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0399.1 **Comment Excerpt Number:** 8

**Comment:** For facilities not included within a designated source category, EPA proposes to exclude those facilities with an aggregate maximum rated heat input capacity of stationary fuel combustion units of less than 30 mmBtu per hour. EPA states that this proposed exemption will minimize the need for such facilities to calculate their emission levels to determine whether they are required to report under the proposed regulation. EPA further states that the 30 mmBtu per hour exemption threshold was determined through agency calculations that demonstrated a facility with stationary combustion units that have a maximum rated heat input capacity of less than 30 mmBtu per hour and operating 8,760 hours per year with all types of fossil fuel would not exceed emissions of 25,000 metric tons CO<sub>2</sub>e per year. We support the concept of establishing a reporting exemption threshold based upon the aggregate maximum rated heat input capacity of stationary fuel combustion units located at the facility. However, we do not believe it is appropriate for EPA to establish this threshold using the fossil fuel that produces the worstcase scenario for facility emissions. Instead, we believe that such a reporting exemption threshold should be based on the specific type(s) of fuel(s) combusted at the facility. The vast majority of facilities involved in grain handling, feed milling, or grain processing combust natural gas, propane or distillate fuel oil within stationary combustion units. Based upon EPAprovided emission data and assuming 8,760 hours of combustion per year, the following table indicates the aggregate maximum rated heat input capacity of stationary combustion units that would need to be present at a facility in order to reach the proposed 25,000 metric tons CO<sub>2</sub>e reporting requirement by common fuel type. [see DCN:EPA-HQ-OAR-2008-0508-0399.1 for table showing the Aggregate Maximum Rated Heat Input Capacity required for Stationary Combustion Units burning natural gas, propane, or distillate fuel oil to reach 25,000 Metric Tons CO<sub>2</sub>e per year.]

Further, EPA's assumption used to establish its proposed heat input exemption threshold that stationary combustion units at facilities will operate at maximum rated input capacity for 24 hours per day each day of the year is incorrect. Few, if any, facilities involved in grain handling,

feed milling and grain processing will operate at this level. Instead, the operation level of many stationary combustion units at such facilities is seasonal in nature, with the level of fuel combusted significantly varying though out the year dependent on a number of variables, including ambient temperature, wind velocity and actual time the facility is operated. An example would be a large aquafeed customer using the same assumptions would produce 30,355 TPY CO<sub>2</sub>e, when using an hourly BTU firing rate to estimate annual emissions. There are plants operating at under 60% capacity due to seasonality of aquatic species production. Warmwater fish, such as catfish, have lowered intake of feed in cold seasons, as the species is poikilothermic. Taking the revised assumption into account this plant would yield an estimated emission rate of 20,237 TPY CO<sub>2</sub>e. In this case, the processor would be required to report under the proposed guideline, but would not report if actual production schedule was taken into account, as the levels of CO<sub>2</sub>e would be lower than EPA's suggested limit of 25,000. A more accurate assessment would be to base estimated emission relative to actual fuel volume provided by a facility's utility provider.

Existing plants can show natural gas, oil, or propane amounts purchased in recent years as a baseline to determine whether the plant will need to report in the future. AFIA recommends EPA revise its proposed aggregate maximum rated heat input capacities of stationary fuel combustion units for which the agency will exclude facilities from the need to calculate their emission levels to determine whether they are required to report under the proposed regulation. We believe that EPA's approach in establishing appropriate aggregate maximum rated heat input capacity thresholds should be flexible and reflect actual facility operations. Such an approach should consider the actual fossil fuel(s) combusted at the facility and the actual hours of facility operation.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

### **Commenter Name:** Leslie Sue Ritts **Commenter Affiliation:** National Environmental Development Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0504.1 **Comment Excerpt Number:** 2

**Comment:** At page 16469 of the Notice, EPA proposes that "...any facility that has an aggregate maximum rated heat input capacity of the stationary fuel combustion units less than 30 mmBtu/ hr may presume it has emissions below the threshold." NEDA/CAP appreciates the agency's effort to simplify a facility's applicability assessment for stationary fuel combustion sources by establishing an emissions equivalency to a certain maximum rated heat input capacity and supports EPA with regard to this exemption in the proposed rule. While this threshold exemption will be helpful, we urge EPA to apply the application of the concept to other types of units and processes. Under EPA's current proposal those sources that combust inherently clean fuels, such as natural gas, would be a prime example where a clarifying threshold limitation would be extremely helpful and reasonable, in lieu of a remarkably complex calculation. In most instances, however, for natural gas fired units, a threshold of 30 mmBtu/hr will most likely not be valuable because sources that combust only natural gas could typically possess a maximum rated heat input capacity of approximately 54 mmBtu/hr or less, based upon the proposed rule's 25,000 metric tons of CO<sub>2</sub>e threshold. Therefore, while NEDA/CAP supports the proposed exemption, we recommend that EPA provide additional capacity thresholds based upon the exclusive or combined use of other common fuels such as natural gas and fuel oil.

In Table 5-1 in Section 5.1 of the "Technical Support Document for Reporting Thresholds: Proposed Rule for Mandatory Reporting of Greenhouse Gases", provides a good example of the type of table that EPA could expand to provide additional clarity without sacrificing coverage of significant GHG emissions. If EPA were to provide a table listing the maximum rated heat input capacity thresholds by fuel type, it would simplify the burden of having to prepare detailed assessments for the larger facilities combusting these types of fuels.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

Commenter Name: See Table 7 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0679.1 Comment Excerpt Number: 27

**Comment:** In addition API suggests that 30 MMBtu/hr as the maximum capacity for exclusion for combustion only reporting is not appropriate. A better maximum rated heat capacity figure would be 40MMBtu/hr: This corresponds to a unit – or combination of units - that are fired at full load for 24 hours per day and 365 days per year, that would result in emissions of 18,600 to 26,700 tonnes of  $CO_2$  per year, assuming a range of fossil fuels of increasing density, from Natural Gas to Fuel Oil #4, respectively. If one takes into account that typical loads on most combustion devices are closer to 80%, than these emissions will actually be in the range of 14,900 to 21,400 metric tonnes of  $CO_2$  per year, respectively. Since EPA wants to base the rule applicability on actual emissions, and since the 40MMBtu/hr cutoff has precedence in other federal regulations, API would recommend that this level be selected for mandatory reporting for those facilities that are subject only to subpart C requirements.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

**Commenter Name:** Paul Glader **Commenter Affiliation:** Hecla Mining Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0579.1 **Comment Excerpt Number:** 13

**Comment:** By assuming an aggregate maximum rated heat input of 30 mmBtu/hr, EPA is assuming that stationary units operate on a continuous basis. Instead of using this threshold based on false assumptions, it would make more sense to set the threshold based on total Btu's actually input at a facility over the course of a year. A company should be required to report only if the total Btu's consumed is in excess of 2.628e11 Btu/year (30e6Btu/hr \* 8760 hr/yr). This would be more consistent with the reporting threshold of actual 25,000 CO<sub>2</sub>e emissions rather than "potential" emission as defined by the 30 mmBtu/hr.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

**Commenter Name:** Angela Burckhalter **Commenter Affiliation:** Oklahoma Independent Petroleum Association (OIPA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0386.1 **Comment Excerpt Number:** 6 **Comment:** In regards to Section 98.2(a)(3), EPA provides a maximum rated heat input capacity of 30 mmBtu/hr or greater for combustion units at a facility. At this threshold, EPA's calculations show that for natural gas, the  $CO_2$  emissions would be approximately 14,000 metric tons carbon dioxide equivalent (mtCO<sub>2</sub>e), no where near the 25,000 metric tons CO<sub>2</sub>e limit. Also, EPA's calculations show that for fuel combustion sources using natural gas, the aggregate threshold could be at least 50 mmBtu/hr. We request EPA distinguish the use of natural gas in the final rule and allow an aggregate of 50 mmBtu/hr for combustion units at all facilities using natural gas.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

Commenter Name: William C. Herz Commenter Affiliation: The Fertilizer Institute (TFI) Document Control Number: EPA-HQ-OAR-2008-0508-0952.1 Comment Excerpt Number: 61

**Comment:** The proposed 40 C.F.R. § 98.2(a)(3) appears to provide that facilities that do not fall into the other listed source categories, but which exceed the 25,000 metric ton CO<sub>2</sub>e annual emissions threshold, need only report emissions from stationary combustion sources if the facility has a capacity of at least 30 mmBtu/hr. However, proposed 40 C.F.R. § 98.2(a)(2) states that "[a]ny facility that emits 25,000 metric tons CO<sub>2</sub>e or more per year in combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate, and all source categories that are listed in this paragraph and that are located at the facility in any calendar year starting in 2010" must report GHG emissions. Thus, proposed 40 C.F.R. § 98.2(a)(2) appears to provide that all stationary fuel combustion units (even those with a maximum rated heat input capacity less than 30 mmBtu/hr) that emit more than 25,000 metric tons of CO2e per year would be required to report under the NPRM, even though such sources with a maximum rated heat input capacity of less than 30 mmBtu/hr appear exempt under proposed 40 C.F.R. § 98.2(a)(3). If 40 C.F.R. § 98.2(a)(2) would indeed apply to all stationary fuel combustion units (regardless of its maximum rated heat input capacity), such an interpretation would render the 30 mmBtu/hr requirement of no effect. EPA should clarify that stationary fuel combustion sources, with a maximum rated heat input capacity of less than 30 mmBtu/hr, are exempt from reporting under the NPRM. Without this capacity threshold, the sheer number of facilities that would have to set up tracking systems just to determine whether they have to report would be unnecessarily numerous and would unjustifiably impact small business with relatively low emissions. In the alternative, EPA should clarify that such sources are only exempt from the full reporting requirements under proposed 40 C.F.R. § 98.2(a)(3) for 2010 – which would mean all stationary fuel combustion sources exceeding the 25,000 threshold are required to report under the NPRM (but those with a capacity of less than 30 mmBtu/hr may submit an abbreviated emissions report under proposed 40 C.F.R. § 98.2(d)).

**Response:** The commenter has not interpreted the applicability provisions correctly. The 30 mmBtu/hr level exemption applies at the facility level and only to facilities whose sole GHG emission sources are stationary fuel combustion units. This provision is not intended as a exemption for individual units at a facility that otherwise is subject to the rule. For clarification about applicability determination, see the response to comment EPA-HQ-OAR-2008-0508-1741, excerpt 9. Any facility that is required to report emissions from only stationary combustion

devices under section 98.2(a)(3) may submit an abbreviated emissions report in 2010 as specified in 98.3(d)(3) of the final rule.

Commenter Name: Sarah E. Amick Commenter Affiliation: The Rubber Manufacturers Association (RMA) Document Control Number: EPA-HQ-OAR-2008-0508-0647.1 Comment Excerpt Number: 14

**Comment:** The proposed rule includes a presumption that a facility with a maximum rated heat input capacity of 30 million Btu/hr or less would not need to report. ( $\S98.2(a)(ii)$ ). EPA has requested comment regarding this reporting threshold. Assuming that many facilities that would fall under the threshold fire natural gas in stationary fuel combustion units, the threshold appears to be too low. It appears that the threshold may be based on the combustion of coal. Based on the assumption of natural gas combustion, a more appropriate threshold may be 53 mmBtu/hr. (See Table 2 below). RMA recommends that EPA consider a more realistic threshold in order to assist facilities, especially smaller facilities, readily evaluate the applicability of the rule. [see DCN:EPA-HQ-OAR-2008-0508-0647.1 for table calculating BTUs associated with emissions of 25,000 mt CO<sub>2</sub> for coal, NG, and fuel oil.]

Response: See response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

Commenter Name: Kyle Pitsor Commenter Affiliation: National Electrical Manufacturers Association (NEMA) Magnet Wire Section Document Control Number: EPA-HQ-OAR-2008-0508-0622.1 Comment Excerpt Number: 9

**Comment:** The committee is supportive of a presumptive aggregate BTU/hour rating below which reporting would not be required.

**Response:** EPA agrees with the commenter on the value of the aggregate BTU/hour rating exclusion.

Commenter Name: Michael Carlson Commenter Affiliation: MEC Environmental Consulting Document Control Number: EPA-HQ-OAR-2008-0508-0615 Comment Excerpt Number: 20

**Comment:** The proposed exemption from Subpart C for a facility with an aggregate maximum heat input capacity of less than 30 MMBTU/hr is helpful but few facilities will properly understand how to determine if they qualify for this exemption, especially if multiple fuel types are used. We recommend that the agency develop clear, and easily understandable guidance for this important exemption.

**Response:** EPA plans to issue implementation guidance on rule applicability that will distinguish among fuel types. See preamble discussion on determining applicability.

### Commenter Name: Juanita M. Bursley Commenter Affiliation: GrafTech International Holdings Inc. Company (GrafTech) Document Control Number: EPA-HQ-OAR-2008-0508-0686.1 Comment Excerpt Number: 19

**Comment:** GrafTech agrees with the rationale used and conclusions reached by EPA to exempt small facilities from having to estimate emissions to determine if the facility is subject to the reporting requirements of this subpart, if the facility's aggregated maximum rated heat input capacity is below the 30 mmBtu/hr. threshold. However, GrafTech believes EPA was too conservative in this approach in that it determined this exemption threshold based on its assessment of the maximum amount of GHG emissions likely from combustion units of that size that burn any fossil fuels (e.g. coal, oil or gas) and that operate continuously throughout the year. So, for example, if a facility only burned natural gas, having the lowest GHG emission factor, it could be above the 30 mmBtu/hr. aggregated maximum rated heat input capacity exemption threshold and still determine after estimating its emissions through the prescribed calculation process that it is not subject to this rule. In many cases, facilities burn only one fuel type, so that EPA could easily determine multiple exemption thresholds, one for each of the specific type of fuel burned. These tiered exemption thresholds could simplify a larger number of facility's determination of applicability, provided the facility only burned one type of fuel during the reporting year. If multiple fuels were burned for the aggregated units, either the more conservative 30 mmBtu/hr. threshold would be used or possibly the sum of the individual fuel exemption thresholds. As the aggregated maximum rated heat input capacities derived for each fuel type would be more accurate and less conservative, the rule would be less burdensome on the regulated community as more facilities would be able to easily determine on an annual basis if they are exempt from the reporting requirements.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

# **Commenter Name:** Kyle Pitsor **Commenter Affiliation:** National Electrical Manufacturers Association (NEMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0621.1 **Comment Excerpt Number:** 17

**Comment:** The NEMA Carbon/Manufactured Graphite EHS Committee also agrees with the rationale used and conclusions reached by EPA to exempt small facilities from having to estimate emissions to determine if the facility is subject to the reporting requirements of this subpart, if the facility's aggregated maximum rated heat input capacity is below the 30 mmBtu/hr. threshold. However, the NEMA Carbon/Manufactured Graphite EHS Committee believes EPA was too conservative in this approach in that it determined this exemption threshold based on its assessment of the maximum amount of GHG emissions likely from combustion units of that size that burn any fossil fuels (e.g. coal, oil or gas) and that operate continuously throughout the year. So, for example, if a facility only burned natural gas, having the lowest GHG emission factor, it could be above the 30 mmBtu/hr. aggregated maximum rated heat input capacity exemption threshold and still determine after estimating its emissions through the prescribed calculation process that it is not subject to this rule. In many cases, facilities burn only one fuel type, so that EPA could easily determine multiple exemption thresholds, one for each of the specific type of fuel burned. These tiered exemption thresholds could simplify a larger number of facility's determination of applicability, provided the facility only burned one

type of fuel during the reporting year. If multiple fuels were burned for the aggregated units, either the more conservative 30 mmBtu/hr. threshold would be used or possibly the sum of the individual fuel exemption thresholds. As the aggregated maximum rated heat input capacities derived for each fuel type would be more accurate and less conservative, the rule would be less burdensome on the regulated community as more facilities would be able to easily determine on an annual basis if they are exempt from the reporting requirements.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

**Commenter Name:** Benjamin Brandes **Commenter Affiliation:** National Mining Association (NMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0466.1 **Comment Excerpt Number:** 19

**Comment:** EPA has presumed that an aggregate maximum rated heat input of 30 mmBtu/hr is appropriate as a condition for reporting on the basis that a facility with that much capacity would therefore be a large emitter. NMA believes that this is not the proper form of the threshold because it assumes that these units are operated on a continuous basis (8760 hours). This assumption is inappropriate. Many stationary fuel combustion units are used only seasonally. It would make more sense to set the threshold based on total Btu's actually input at a facility over the course of a year. Just as EPA has decided, and appropriately so, to rely on actual emissions rather than potential emissions in terms of the 25,000 mtCO<sub>2</sub>e for the reporting threshold, relying on the "nameplate" heat input is similarly inappropriate. The better option is to rely on total Btu's consumed. Based on the proposed 30 mm Btu's/hr, assuming continuous operations, a facility which is not a source category but has stationary fuel combustion units should be required to report only if its total Btu's consumed is in excess of 2.628e11 Btu/year (30e6Btu/hr \* 8760 hr/yr).

Response: See the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

Commenter Name: Chris Hobson Commenter Affiliation: Southern Company Document Control Number: EPA-HQ-OAR-2008-0508-1645.2 Comment Excerpt Number: 13

**Comment:** Emissions from biomass should not be included in determining whether a facility meets the reporting threshold or reported at all.

**Response:** See the response on emissions from biomass when determining applicability in Volume 1: Selection of Source Categories to Report and Level of Reporting.

**Commenter Name:** Kris W. Flaig **Commenter Affiliation:** California Wastewater Climate Change Group (CWCCG) **Document Control Number:** EPA-HQ-OAR-2008-0508-1026.1 **Comment Excerpt Number:** 3 **Comment:** The CWCCG supports EPA's decision to consider only anthropogenic sources of GHG emissions in determination of a facility's threshold level and emissions totals. This is an essential step that encourages the utilization of organic materials and biogas for renewable beneficial uses by local governments.

Response: See response to comment EPA-HQ-OAR-2008-0508-0312.1, excerpt 1.

Commenter Name: Jeffrey T. Miller Commenter Affiliation: Treated Wood Council (TWC) Document Control Number: EPA-HQ-OAR-2008-0508-0665.1 Comment Excerpt Number: 1

**Comment:** EPA should clarify that emissions from the combustion of biomass are not counted toward the reporting threshold, nor are reportable in the annual reports. In the Federal Register notice, on several occasions EPA recognizes that emissions from the combustion of biomass are not to be included when determining if a site exceeds the reporting threshold, nor for the actual reporting of GHG emissions. "In calculating emissions for this analysis, and for the proposed threshold, only CO<sub>2</sub> from the combustion of fossil fuels, in combination with all CH<sub>4</sub> and N<sub>2</sub>O emissions, are considered. CO<sub>2</sub> emissions from biomass are not considered as part of the determination of the threshold level. This treatment of biomass fuels is consistent with the IPCC Guidelines and the annual Inventory of U.S. Greenhouse Gas Emissions and Sinks, which account for the release of these CO<sub>2</sub> emissions in accounting for carbon stock changes from agriculture, forestry, and other land-use. ... Therefore, the proposed rule states that GHG emissions from biomass fuel combustion are to be excluded when evaluating a facility's status with respect to the 25,000 metric tons  $CO_2$  reporting threshold. This is similar to the approach taken by the IPCC and various other GHG emission inventories." (Federal Register notice, page 16482) "As described in proposal 40 CFR Part 98, subpart A, biomass-derived CO<sub>2</sub> emissions should not be taken into consideration when determining whether a facility exceeds the 25,000 metric tons CO<sub>2</sub> threshold." (ibid, page 16544) Members of our industry use wood-based (cellulosic) biomass as a combustion fuel for energy recovery operations. Cellulosic biomass is renewable, carbon-neutral energy; a byproduct from harvesting or timber/wood processing operations. Cellulosic biomass is originally produced by the photosynthetic extraction of  $CO_2$ from the atmosphere and will return carbon through either combustion or natural biological degradation. The combustion of cellulosic biomass has a lower greenhouse gas emission impact than naturally-occurring anaerobic cellulosic degradation (landfilling), which gives off methane (20 times that greenhouse gas equivalent compared to  $CO_2$  from combustion). Therefore, cellulosic biomass energy recovery through combustion is not only carbon neutral, but also has a lower greenhouse gas impact than the landfilling of the same materials. It is important for EPA to clarify in the final rule that emissions from the combustion of biomass are not to be included when determining if a site exceeds the reporting threshold.

**Response:** The rule clearly specifies at section 98.2(b) and (c) that emissions of methane and nitrous oxide from biomass combustion are considered in determining threshold applicability, but emissions for  $CO_2$  are excluded. Also, see response to EPA-HQ-OAR-2008-0508-0312.1, excerpt 1 and response on emissions from biomass when determining applicability in Volume 1: Selection of Source Categories to Report and Level of Reporting.

Commenter Name: Anonymous Commenter Affiliation: None Document Control Number: EPA-HQ-OAR-2008-0508-0166 Comment Excerpt Number: 3

**Comment:** Insure that boilers burning wood fuel would be exempt from all threshold calculations and reporting.

Response: See the response to EPA-HQ-OAR-2008-0508-0312.1, excerpt 1.

**Commenter Name:** Laurie Burt **Commenter Affiliation:** Massachusetts Department of Environmental Protection **Document Control Number:** EPA-HQ-OAR-2008-0508-0212b **Comment Excerpt Number:** 7

**Comment:** I believe that EPA's rules, the biomass emissions are not included in the calculations to determine whether or not the source must report in the actual determination. We think that that is important,

Response: See response to EPA-HQ-OAR-2008-0508-0312.1, excerpt1.

Commenter Name: Sarah E. Amick Commenter Affiliation: The Rubber Manufacturers Association (RMA) Document Control Number: EPA-HQ-OAR-2008-0508-0647.1 Comment Excerpt Number: 13

**Comment:** RMA asks the EPA to recognize that TDF contains biomass due to natural rubber content, a significant component of tires. We strongly oppose the classification of TDF as a 100% fossil fuel. Utilizing discarded tires as fuel displaces the use of traditional fossil fuels. In addition TDF reduces net carbon emissions because it contains natural rubber which is biomass, produced by sequestration of carbon dioxide through photosynthesis in rubber trees. According to RMA US tire shipment data for 2008, the overall percentage of TDF that is natural rubber or biomass is approximately 26%. RMA contacted EPA staff to gain clarity regarding the NPRM's exclusion of the biomass percentage in TDF, yet were unable to reach EPA staff about this topic. RMA welcomes the opportunity to meet with EPA staff in regards to the biomass percentage contained in TDF and to provide further clarification and information on TDF.

**Response:** TDF does not qualify as biomass. Biomass is a biodegradable residue from certain industrial activities that otherwise would release  $CO_2$  to the atmosphere following disposal whether used as a fuel or not. Burning the natural rubber contained in tires releases carbon that has previously been sequestered.

Commenter Name: Gregory M. Adams Commenter Affiliation: Sanitation Districts of Los Angeles County Document Control Number: EPA-HQ-OAR-2008-0508-0710.1 Comment Excerpt Number: 2 **Comment:** We support the treatment of biogenic emissions in the proposed rule, and agree that only anthropogenic emissions should count towards the threshold.

**Response:** EPA agrees with the commenter that only anthropogenic emissions should count towards the threshold.

### **Commenter Name:** Laurie Burt **Commenter Affiliation:** Massachusetts Department of Environmental Protection **Document Control Number:** EPA-HQ-OAR-2008-0508-0453.1 **Comment Excerpt Number:** 7

**Comment:** Section 98.2(b)(2) of the proposed regulation specifically excludes  $CO_2$  emissions resulting from the combustion of biomass from being included in determining applicability for sources meeting applicability requirements under 98.2(a)(2). However, methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) emissions from biomass combustion are included in determining applicability. Massachusetts believes that all GHG emissions from the combustion of biomass, which results in the release of greenhouse gases, should be included in determining the applicability for reporting under EPA's rule. Indeed, under Massachusetts' own GHG Reporting Rule, all GHG emissions from the combustion of biomass are included in calculations to determine applicability. This ensures that the emissions of all significant amounts of GHGs, regardless of their origin, are accounted for. Because the typical categories for reporting biomass CO<sub>2</sub> emissions (agriculture, forestry, and land use) are not covered in EPA's GHG Reporting Rule, it is appropriate to collect significant CO<sub>2</sub> emissions from biomass combustion under 98.2(a)(2). [Because "the purpose of the general stationary combustion source category [98.2(a)(2)] is to capture significant emitters of stationary combustion GHG emission that are not covered by the specific source categories described elsewhere in the preamble." Federal Register p. 16482.]

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0312.1, excerpt 1.

# **Commenter Name:** Laurie Burt **Commenter Affiliation:** Massachusetts Department of Environmental Protection **Document Control Number:** EPA-HQ-OAR-2008-0508-0453.1 **Comment Excerpt Number:** 5

**Comment:** Massachusetts does not support EPA's proposal that would avoid counting biogenic emissions when determining whether a facility is subject to the reporting rule. By excluding many large sources of biogenic combustion emissions from the program, EPA prevents the purposes of separate reporting from being fully realized. Furthermore, we do not find the reasons given by EPA for this exclusion, which include the need for better monitoring methods and the fact that these emissions may be tracked to some degree in land-based inventories, persuasive. These are complexities that need to be addressed, but are not a reasonable basis for excluding an entire class of emitting facilities from the program. Further, given the complexity of biomass reporting, it would be very beneficial to have one national method for reporting and we encourage EPA to establish such a methodology. Massachusetts urges EPA to include GHG emissions resulting from biomass and biofuels in every aspect of its regulation, including applicability, combustion, production, and reporting. We are enthusiastic about the possibility that domestic biomass feed stocks can be developed that avoid or mitigate climate effects, but it is imperative to gather data to support such a conclusion.

**Response:** See response on emissions from biomass when determining applicability in Volume 1: Selection of Source Categories to Report and Level of Reporting.

### **Commenter Name:** [name not given] **Commenter Affiliation:** Graphic Arts Coalition (GAC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0701.1 **Comment Excerpt Number:** 15

**Comment:** The Agency's proposed reporting system appears to contain contradictory requirements for reporting GHG emissions from biogenic fuel combustion. The proposed general reporting requirements state in section 98.2(b)(2) that "Carbon dioxide emissions from the combustion of biogenic fuels shall be excluded from the [reporting] calculations." This section eliminates the need for facilities emitting more than 25,000 t CO<sub>2</sub>e from stationary fuel combustion sources to report biogenic fuel combustion emissions. Proposed section 98.31, however, states that facilities must report their GHG emissions if they are subject to proposed section 98.2(a)(1), (2), or (3) and proposed section 98.33(e) contains a description of how to calculate biogenic carbon dioxide emissions. These sections require facilities emitting more than 25,000 t CO<sub>2</sub>e from stationary fuel combustion sources to report biogenic fuel combustion emissions. Complicating the matter is fact that proposed Section 98.1(b) states that "If a conflict exists between a provision in subpart A and any other applicable subpart, the requirements of the subparts B through PP of this part shall take precedence." Thus, reporting entities would defer to the general stationary fuel combustion source reporting requirements in Subpart C and report their carbon dioxide emissions from biogenic fuels when it is not clear if the Agency intends to require this or not. The Agency needs to clarify the reporting requirements for carbon dioxide emissions from biogenic fuel combustion.

**Response:** These provisions of the rule are not contradictory. See the response to comment EPA-HQ-OAR-2008-0508-0312.1, excerpt 1. Furthermore, the insertion of the word "reporting" in "Carbon dioxide emissions from the combustion of biogenic fuels shall be excluded from the reporting calculations," is incorrect. CO2 from biogenic fuels is excluded from the emission calculations for determining applicability, but not reporting.

#### **Commenter Name:** Chris Hornback

**Commenter Affiliation:** National Association of Clean Water Agencies (NACWA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0566.1 **Comment Excerpt Number:** 9

**Comment:** NACWA agrees that  $CO_2$  emissions from the combustion of biomass and biogas should not be included in the threshold determination.

**Response:** EPA agrees that biogenic  $CO_2$  emissions should not be included in the threshold determination.

# **Commenter Name:** Kevin L. Shafer **Commenter Affiliation:** Milwaukee Metropolitan Sewerage District (MMSD) **Document Control Number:** EPA-HQ-OAR-2008-0508-0536.1 **Comment Excerpt Number:** 2

**Comment:** MMSD disagrees with the EPA determination not to require the reporting of emissions from combustion of biomass unless the threshold quantities are triggered by other sources, e.g., biomass  $CO_2$  is not counted to get to the 25,000 TPY threshold. MMSD has for a number of years burned methane at one of its treatment plants to produce power. This plant falls below the 25,000 TPY threshold unless the use of methane at this plant is counted. In addition, MMSD is currently in process of designing a pipeline to deliver landfill gas to power its other treatment plant. While we recognize these projects have resulted in significant GHG emission reductions, we still believe that these types of emissions are worth reporting to the EPA, since they still constitute a significant quantity of GHG emissions. This is important information for the EPA to have in terms of evaluating overall  $CO_2$  emissions nationwide. MMSD has the data readily available and we believe it is important to document this information. We do not believe that GHG emissions from biomass should be regulated in the same way as GHG from other types of fuels; however, the amount of biomass in use and the emissions resulting, especially at large sources, is data that we believe should be gathered.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0165, excerpt 21.

Commenter Name: Stephen E. Woock Commenter Affiliation: Weyerhaeuser Company Document Control Number: EPA-HQ-OAR-2008-0508-0451.1 Comment Excerpt Number: 11

**Comment:** In Weyerhaeuser's view EPA has correctly excluded biogenic  $CO_2$  from the applicability threshold determination since biogenic  $CO_2$  emissions are not capped in existing GHG programs and are not expected to be in any future US program. However, separate reporting of biogenic  $CO_2$  as supporting information is appropriate for transparency and inventory balancing purposes.

**Response:** EPA agrees that biogenic  $CO_2$  emissions should not be included in the threshold determination, and that the reporting of biogenic CO2 is appropriate as supporting information.

Commenter Name: David R. Case Commenter Affiliation: Environmental Technology Council (ETC) Document Control Number: EPA-HQ-OAR-2008-0508-0664.1 Comment Excerpt Number: 1

**Comment:** EPA Should Not Include Hazardous Waste Facilities That Are Typically Net "Negative"  $CO_2e$  Emitters In This GHG Emission Reporting Program. The proposed rule is unclear and confusing on whether – and, if so, how – hazardous waste facilities would be required to report  $CO_2e$  emissions.

Although EPA conducted outreach to numerous industry sectors prior to publishing the proposed rule, neither the ETC nor any hazardous waste company was contacted during the outreach

effort. As a result, we are not certain that EPA intended to include hazardous waste facilities within the scope of the reporting provisions. If such facilities are meant to be included, we believe EPA has not provided a practical and reasonable means for hazardous waste facilities to determine  $CO_2e$  emissions for reporting purposes. The hazardous waste industry is not part of the utility or manufacturing sectors that typically are covered by GHG reporting programs. For example, neither the European Community nor Australia currently include hazardous waste incinerators in their reporting programs. The utility sector covers electric power, natural gas, and municipal sewage and water supply facilities which are powered by fossil fuel combustion and that contribute significant  $CO_2e$  emissions to the national inventory. Hazardous waste incinerators, on the other hand, combust only small quantities of fossil fuels during startup because the hazardous waste feed provides the energy for process combustion. Significantly, hazardous waste incinerators actually have net "negative"  $CO_2e$  emissions because the incineration process destroys chemical wastes with higher  $CO_2$  equivalent values. Likewise, recycling facilities for hazardous secondary materials reduce life cycle  $CO_2e$  emissions by reusing and reclaiming chemicals.

Manufacturing sectors typically covered by GHG reporting programs include petroleum products, chemical production, plastics, and metals manufacturing which also utilize fossil fuel materials for energy and process operations with consequent CO<sub>2</sub>e emissions. On the other hand, hazardous waste facilities are in the waste management and remediation services sector which effectively treat, recycle, and securely dispose of chemical and industrial wastes, contributing negligible CO<sub>2</sub>e emissions as an industry sector. The proposed rule is not clear on whether its provisions apply to hazardous waste facilities, and the ambiguity in the language suggests that EPA may not have intended to bring this sector within the scope of the reporting program. Hazardous waste facilities are not within any of the source categories enumerated in proposed § 98.2. We therefore examine § 98.2(a)(3) which provides that the GHG emission reporting requirements apply to a facility that meets the following three conditions:

- (i) The facility does not contain any source category designated in paragraphs (a)(1) and
  (2) of this section.
- (ii) The aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 mmBtu/hr or greater.
- (iii) The facility emits 25,000 metric tons  $CO_2e$  or more per year from all stationary fuel combustion sources.

For purposes of subsections (ii) and (iii) of §98.3(a)(3), hazardous waste facilities are not generally considered "fuel" combustion units, especially not fossil fuel combustion. For example, hazardous waste incinerators utilize relatively small amounts of diesel or natural gas only for startup operations after periodic shutdowns for maintenance. During normal operations, the high temperature necessary for the incineration process (typically above 1800° F) is maintained by the heat content of the hazardous waste feed.

As a result, the heat input capacity of a hazardous waste incinerator may be higher than 30mmBtu/hr, but this capacity is based on the heat value of the hazardous wastes to be incinerated, not on fossil fuel combustion. For this reason, if CO<sub>2</sub>e emissions were to be determined under subsection (iii) solely from the combustion of fossil fuels in the incinerator, CO<sub>2</sub>e emissions would be substantially below the 25,000 metric ton threshold. On the other hand, estimating total CO<sub>2</sub>e emissions from both fossil fuel combustion and hazardous waste

incineration fails to take into account the net  $CO_2e$  destruction that occurs from incineration. Many of the chemical wastes that are destroyed in a hazardous waste incinerator have  $CO_2$  equivalent values that are orders of magnitude greater than  $CO_2$ . The whole purpose of hazardous waste incineration is to destroy these chemicals and convert the toxic constituents into water vapor and basic elements such as  $CO_2$ , thereby meeting a destruction and removal efficiency (DRE) of 99.99% or greater. We estimate that hazardous waste incinerators typically destroy 2 to 3 times the  $CO_2e$  from chemical wastes compared to  $CO_2e$  emissions from the incinerator. Thus, hazardous waste incinerators actually have net negative  $CO_2e$  emissions. In fact,  $CO_2$  is an operating parameter used by hazardous waste incinerators and regulators to measures good combustion – the greater the  $CO_2$  produced, the higher the destruction efficiency of the incineration process.

In most cases, Federal and state law requires that these chemical wastes be incinerated as the best demonstrated available technology (BDAT). Congress has mandated in RCRA, and EPA has required in regulations, that most organic hazardous wastes be combusted in RCRA-permitted incinerators as part of the land disposal restrictions program. See 40 CFR Part 268. Taking this mandate into account, it seems fundamentally wrong to include hazardous waste incinerators in a Federal reporting program on GHG emissions for the potential future purpose of capping or requiring reductions in such CO<sub>2</sub> emissions. Because hazardous waste incinerators are unique in this respect, we urge EPA to apply an appropriate threshold to clearly exclude such facilities from the GHG emission reporting program of gross CO<sub>2</sub>e emissions above 25,000 metric tons per year. For hazardous waste incinerators, recognizing their unique nature as facilities required by law to destroy hazardous wastes in a process that results in net negative CO<sub>2</sub>e emissions, EPA should also apply a net CO<sub>2</sub>e emissions threshold. A hazardous waste incineration facility that has net negative CO<sub>2</sub>e emissions during a calendar year should also be excluded from this GHG emission reporting program.

**Response:** The rule does not allow for netting of emissions or the consideration of offsets in determining applicability to an emissions threshold. However, subpart C (General Stationary Combustion sources) in the final rule has been revised to specify that emissions from the combustion of hazardous wastes are excluded from reporting and from determining applicability of the rule to the facility. If any fossil fuels are combusted in a unit that also combust hazardous waste, then the emissions of fossil fuel would be considered in determining applicability of the facility to the reporting rule. See the preamble section on general stationary fuel combustion sources for a response on excluding combustion hazardous wastes and other exclusions from subpart C.

Commenter Name: Wesley L. McNealy Commenter Affiliation: Pepco Holdings, Inc. (PHI) Document Control Number: EPA-HQ-OAR-2008-0508-0547.1 Comment Excerpt Number: 10

**Comment:** We would like the Agency to consider a 25 MW threshold level for electric generating units. A 25 MW threshold level is currently used in the Acid Rain program and in the RGGI program. This would make the CO2, emissions reporting similar for all of these programs. While, we realize some units that meet the 25 MW threshold operate more as peaking units, and do not meet the 25,000 ton  $CO_2e$  threshold, they are still important sources of CO, that should be taken into consideration in any future climate change policy discussions.

**Response:** The rule applies generally to facilities that emit 25,000 tons  $CO_2e$  per year. After reviewing your comment, EPA has decided not to make the requested change to exclude units smaller than 25 MW, because that would mean that some facilities that exceed 25,000 tons  $CO_2e$  per year would not have to report. EPA is seeking a consistent and comprehensive data set for facilities emitting above 25,000 tons CO2e.

**Commenter Name:** Joel R. Hall **Commenter Affiliation:** INEOS Fluor Americas LLC **Document Control Number:** EPA-HQ-OAR-2008-0508-1525 **Comment Excerpt Number:** 2

**Comment:** Establish a minimum threshold (Hp, Btu/hr, etc.) for general stationary fuel combustion sources. If a facility is subject to the reporting requirements of the proposed rule simply because it is a source category listed under §98.2(a)(1) or (2) the facilities emission report must also cover all source categories for which calculation methodologies are provided under subparts B through J. Since there is no minimum threshold (Hp, Btu/hr, etc) exempted from Subpart C, as in §98.2(a)(3), an affected facility will be required to report GHG emissions from all stationary fuel combustion sources, regardless of size, under Subpart C. INEOS Fluor requests that a minimum threshold be established for the applicability of general stationary fuel combustion sources under Subpart C-General Stationary Fuel Combustion Sources in the final rule . INEOS requests that the threshold under §98.2(a)(3)(ii) be considered.

**Response:** Upon review, we determined that the final rule will not be changed in this regard. A large number of small sources can result in significant emission and should be reported. For a discussion of changes made to reduce burden and allow aggregation of some units, see the response in Subpart C: General Stationary Fuel Combustion Sources. For this reason, the final rule does not include a minimum threshold for combustion units.

Commenter Name: Stephen E. Woock Commenter Affiliation: Weyerhaeuser Company Document Control Number: EPA-HQ-OAR-2008-0508-0451.1 Comment Excerpt Number: 1

**Comment:** We direct EPA's attention to the potential inadvertent capture of industrial facilities that have electrical generation units into the electric utility generation sector's applicability requirements at 98.2(a)(1)(i), when those industrial facilities generating units will be more appropriately covered under the stationary fuel combustion provisions of 98.2(a)(2).

**Response:** EPA agrees with the commenter. For further discussion, see the response to comment EPA-HQ-OAR-2008-0508-0566.1, excerpt 6.

Commenter Name: Steven D. Meyers Commenter Affiliation: General Electric Company (GE) Document Control Number: EPA-HQ-OAR-2008-0508-0532.1 Comment Excerpt Number: 6 **Comment:** As an example of the confusing nature of the rule, the following question has been raised within GE concerning the applicability of the stationary source combustion category: Are all combustion units such as small process flames, process heaters and space heaters included in the stationary combustion source category?

**Response:** All types of stationary fuel combustion units are covered by subpart C of the rule, with some exclusions. See response under the definition of source category in the general stationary fuel combustion sources section of preamble for additional information.

## **Commenter Name:** Laurie Burt **Commenter Affiliation:** Massachusetts Department of Environmental Protection **Document Control Number:** EPA-HQ-OAR-2008-0508-0453.1 **Comment Excerpt Number:** 32

**Comment:** Section 98.2(b)(2), which is to be used for calculating emissions to determine if the 25,000 metric ton CO<sub>2</sub>e per year emission threshold applies, is unclear. The equation in 98.2(b)(4) directs the summation of emissions estimates from 98.2(b)(1-3). However, it appears that emissions from stationary combustion units might be counted twice as "stationary fuel combustion units" are directed to estimate emissions in 98.2(b)(1) and then "stationary combustion units" are directed to estimate emissions in 98.2(b)(2). Similarly, it appears there may be the possibility of double-counting for the miscellaneous uses of carbonate, which is directed to estimate emissions 98.2(b)(1) and (3). It is therefore unclear which section(s) stationary combustion units and miscellaneous uses of carbonate should use to estimate their emissions towards the 25,000 metric ton CO<sub>2</sub>e per year emission threshold. This confusion is furthered by the exclusion of CO<sub>2</sub> emissions from the combustion of biogenic fuels for "stationary combustion units" under 98.2(b)(2), but not for "stationary fuel combustion units" under 98.2(b)(1). Massachusetts suggests that EPA consider changing (b)(2) for stationary combustion units and (b)(3) for carbonate use to (b)(1)(i) and (ii), respectively.

**Response:** EPA agrees with the commenter and appreciates the input for this rule clarification. Changes have been incorporated in the final rule to clarify these points.

### **Commenter Name:** Laurie Burt **Commenter Affiliation:** Massachusetts Department of Environmental Protection **Document Control Number:** EPA-HQ-OAR-2008-0508-0453.1 **Comment Excerpt Number:** 29

**Comment:** Section 98.2(b) discusses how to calculate GHG emissions to determine the threshold for units in paragraph (a)(2) of that section, however there is no mention of how to calculate GHG emissions to determine the threshold for the "Electricity generating facilities" in paragraph 98.2(a)(1)(i) (or for municipal landfills in (xix) and manure management systems (xx)). The Reporting Threshold in 98.41, Subpart D: Electricity Generation, which states "You must report GHG emissions under this subpart if your facility contains one or more electricity generating units and the facility meets the requirements of either 98.2(a)(1) or (2)" does not provide any clarification on calculating the threshold for non-ARP facilities. Therefore, Massachusetts recommends that EPA add a reference directly in Section 98.2(a)(1)(i) to the threshold determination method contained in 98.43(b) or, preferably, should change 98.2(b) to

list the applicability determination references and/or methods for sectors in 98.2(a)(1) (which include (i)EGUs, (xix) municipal landfills, and (xx) manure management systems).

**Response:** In response to comments, the 25,000 ton  $CO_2e$  per year threshold in 98.2(a)(1) has been removed. Regarding applicability determination for non-ARP electric generating units, see the response to comment EPA-HQ-OAR-2008-0508-0381.1, excerpt 9. EPA agrees that the proposed rule did not specify threshold calculation procedures for municipal landfills and manure management systems, and these specifications have been added in the final rule.

**Commenter Name:** Caroline Choi **Commenter Affiliation:** Progress Energy **Document Control Number:** EPA-HQ-OAR-2008-0508-0439.1 **Comment Excerpt Number:** 5

**Comment:** The Company also supports EPA's proposal not to require reporting by facilities that determine based on 2010 data that they do not meet the applicability requirements of the rule. For new facilities or those that become subject as a result of a change, we understand that the facility would report for the first year only if actual annual emissions for the new or changed unit exceeded the threshold. With respect to applicability determinations, owners and operators are to determine applicability of this rule to their facilities by estimating 2010 actual emissions with data collected in 2010 using the methodology that would apply to that facility under the proposed rule. Proposed § 98.2(b)(2), for example, states that stationary combustion units may use "any appropriate method" specified in 98.33(a) to calculate annual emissions for applicability purposes. If by "appropriate," EPA means something other than the methodology that would apply if the unit was covered under the rule, the Company believes that EPA should make that clear. Facilities that determine they are subject to the rule would report annual emissions by the deadline and those that determine they are not subject would not report. For subsequent years, existing facilities would only be required to re-evaluate applicability if there is a change to the facility (e.g., process modification, increase in hours or production, change in fuel or raw material, addition of equipment) that could cause applicability to change. New or modified facilities must evaluate emissions in their first year of operation or change to determine applicability.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 4.

**Commenter Name:** Laurie Burt **Commenter Affiliation:** Massachusetts Department of Environmental Protection **Document Control Number:** EPA-HQ-OAR-2008-0508-0453.1 **Comment Excerpt Number:** 31

**Comment:** It would also be helpful if EPA would clarify whether cogeneration units, which produce electricity and steam, are considered 'electric generating units' and should report under either Section 98.2(a)(1) or (2), or if they should report under 98.2(a)(3). This is important because of the differences in the calculation methodologies for applicability and in the reporting requirements contained in 98.2(a)(1), (2) and (3).

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0381.1, excerpt 9.

#### **Commenter Name:** Laurie Burt **Commenter Affiliation:** Massachusetts Department of Environmental Protection **Document Control Number:** EPA-HQ-OAR-2008-0508-0453.1 **Comment Excerpt Number:** 30

**Comment:** It is unclear whether non-ARP facilities with units that generate electricity should report under 98.2(a)(1) or 98.2(a)(2). This is important because, as the regulation is currently proposed, units in 98.2(a)(2) exclude biomass  $CO_2$  emissions in the calculation of their threshold whereas the proposed regulation does not explicitly exclude biomass  $CO_2$  emissions from the threshold for units that fall into 98.2(a)(1). If it is EPA's intent that a facility which meets the 25,000 metric tons  $CO_2$  or more per year threshold solely through the generation of electricity should report under 98.2(a)(1) and not under 98.2(a)(2), this should be made explicit.

**Response:** The intent of the rule is to exclude  $CO_2$  emissions from the combustion of biomass from the calculation of GHG emissions for comparison to the 25,000 metric tons  $CO_2$  e threshold in all cases. The final rule has been revised to clarify this point. See response to comment EPA-HQ-OAR-2008-0508-0312.1, excerpt 1.

Commenter Name: Steven D. Meyers Commenter Affiliation: General Electric Company (GE) Document Control Number: EPA-HQ-OAR-2008-0508-0532.1 Comment Excerpt Number: 8

**Comment:** As an example of the confusing nature of the rule, the following question has been raised within GE concerning the applicability of the stationary source combustion category: Are fuel combustion units normally associated with other source categories also included in the stationary combustion source category?

**Response:** All stationary fuel combustion units are covered by subpart C of the rule unless an applicable subpart specifies a method for a particular type of unit. The language in each subpart of the rule has been revised to clarify the subpart under which each type of combustion unit would report.

**Commenter Name:** Lorraine Krupa Gershman **Commenter Affiliation:** American Chemistry Council (ACC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0423.2 **Comment Excerpt Number:** 20

**Comment:** Sections 98.2(f) and 98.3(b)(3) specify that a facility or supplier not meeting the threshold must reevaluate applicability whenever there is any change to the facility or supplier that could cause the facility or supplier to meet the applicability requirements, including but not limited to process modifications, increases in operation hours, increases in production, changes in fuel or raw material use, addition of equipment, and facility expansion. Section 98.3(b)(3) requires reporting starting with the first month of the change. This reevaluation apparently does not exempt de minimis changes, thus setting up facilities and suppliers with an ever-continuing reevaluation process. The start of reporting presumes every change will trigger reporting when data might not even be available to indicate exceedances until after the fact. This reevaluation requirement should be qualified to be triggered by significant changes relative to prior emission

rates or relative to the prior emissions level vs. threshold to minimize efforts. This could alternatively be reevaluated on a periodic frequency rather than not providing any time frame for the reevaluations. These changes are required in order to reduce the burden on both reporters and regulatory authorities.

Response: See the response to EPA-HQ-OAR-2008-0508-0513.1, excerpt 10.

**Commenter Name:** Rasma I. Zvaners **Commenter Affiliation:** American Bakers Association (ABA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0497.1 **Comment Excerpt Number:** 2

**Comment:** The proposal's requirement to verify a negative applicability determination is quite onerous. The Agency's proposed language at 40 CFR 98.2(f) is as follows: ". . . the owners and operators of a facility or supplier that does not meet the applicability requirements of paragraph (a) of this section are not required to submit an emission report for the facility or supplier. Such owners and operators must reevaluate the applicability of this part to the facility or supplier (which reevaluation must include revising of any relevant emission calculations or other calculations) whenever there is any change to the facility or supplier that could cause the facility or supplier to meet the applicability requirements of paragraph (a) of this section. Such changes include but are not limited to process modifications, increases in operating hours, increases in production, changes in fuel or raw material use, addition of equipment, and facility expansion." This language is so broad that replacing a water heater could trigger a "reevaluation". EPA's final rule should modify the above language to reflect the clear nature of the applicability determination that applies to "non-listed" source categories, that states the aggregate burner capacity of the facility is less than 30 million Btu and facility calculates less than 25,000 tons of  $CO_2e$ , then the rule is not applicable.

**Response:** See the response to EPA-HQ-OAR-2008-0508-0513.1, excerpt 10. Furthermore, the suggested language is not appropriate. The language in the rule is intended to apply to all three ways in which a facility determines applicability in 98.2(a).

Commenter Name: Jerry Call Commenter Affiliation: American Foundry Society (AFS) Document Control Number: EPA-HQ-OAR-2008-0508-0356.2 Comment Excerpt Number: 13

**Comment:** The proposed regulation provides that a facility or supplier not meeting the threshold must reevaluate applicability whenever there is any change to the facility or supplier that could cause the facility or supplier to meet the applicability requirements. Proposed 40 CFR §98.2(f). These changes include, but are not limited to, process modifications, increases in operational hours, increases in production, changes in fuel or raw material use, addition of equipment, and facility expansion. The proposed regulation further requires that reporting should start with the first month of the change when the facility or supplier becomes subject to this rule. Proposed 40 CFR §98.3(b)(3). This reevaluation requirement does not allow for any minor changes to occur without reevaluation, thus creating the scenario in which facilities would be engaged in a nearly continuous reevaluation process. The start of reporting presumes every change will trigger reporting when data might not be available to indicate a threshold would be exceeded. The

regulation would make more sense if facilities could re-evaluate on an annual basis. This would greatly simplify the reporting re-evaluation process as changes are made at a facility. These changes are required in order to reduce the burden on both reporters and regulatory authorities.

Response: See the response to EPA-HQ-OAR-2008-0508-0513.1, excerpt 10.

**Commenter Name:** Jeffry C. Muffat **Commenter Affiliation:** 3M Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0793.1 **Comment Excerpt Number:** 9

**Comment:** Sections 98.2(f) and 98.3(b)(3) require owners and operators not meeting the reporting threshold levels to reevaluate the rule applicability for any changes that could cause the facility to become subject to the rule and to report emissions for the first calendar year in which the change occurs, starting with the first month of the change. This reevaluation apparently does not allow for de minimis changes to occur without reevaluation and thus requires facilities and suppliers to set up an ever-continuing reevaluation process. Ample time should be given to facilities not meeting the reporting threshold to determine applicability and to implement the systems to start monitoring and recordkeeping for reporting. It is often not feasible to start reporting for the first month of change as monitoring and reporting systems might not yet be in place. The start date of required reporting presumes every change will trigger reporting when data might not even be available to indicate that a threshold level has been exceeded until after the fact. Facilities may not have previous 12-months of data to start calculating 12-month rolling averages.

**Response:** For EPA's response on the applicability determination issue for facilities not initially covered by the rule that undergo process changes, see the response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 10 and EPA-HQ-OAR-2008-0508-1741, excerpt 17.

Commenter Name: D. Lawrence Zink Commenter Affiliation: Montana Sulphur & Chemical Company Inc. (MSCC) Document Control Number: EPA-HQ-OAR-2008-0508-0505.1 Comment Excerpt Number: 7

**Comment:** We believe that there is no need for the use of "potential" emissions in the GHG reporting program. If EPA is interested in gathering data about select greenhouse gas emissions and their assumed effects on climate change, then the question is really about actual emissions. It is difficult to find a clear specification in the proposed rule that emissions to be reported are actual emissions. That fact must be inferred from the calculation methods. The "potential to emit" threshold of maximum rated heat input capacity of 30 mmBtu/hr muddies the water when one is trying to determine if the information being sought is in terms of "actual" or "potential" emissions. EPA asks if the threshold of facilities with maximum rated heat input capacity of 30 mmBtu/hr is appropriate. We believe that this threshold is unnecessary. EPA seems to want to gather data for facilities with emissions of CO<sub>2</sub>e greater than 25,000 metric tons per year. A 25,000 ton threshold seems sufficient for the purposes of the program as presented in the preamble to the proposed rule. Similarly, a separate threshold of 25,000 tons of methane seems capricious for landfills. We believe that EPA should develop clear, consistent and simplified emissions calculation tools for as many source categories as possible to assist potential reporters

in determining applicability, as well as to assist in actual reporting. For example, a threshold could be set on the Tier 1 fuel use, Tier 1 production levels, or other Tier 1 variables.

**Response:** See response on actual versus potential emissions in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions. The commenter is incorrectly construing that the use of the 30 MMBtu/hr threshold is based on potential emissions. In reality, this threshold is a simplified applicability threshold to exclude facilities that clearly cannot exceed 25,000 mt/yr. For EPA's response on the 30 mmBtu/hr threshold issue, see the response to comment EPA-HQ-OAR-2008-0508-0630.1, excerpt 22.

See the response to comments document for Subpart HH for more information on the threshold for landfills. For information on applicability, please see response to comment EPA-HQ-OAR-2008-0508-0439.1 and also preamble section determining applicability.

Commenter Name: Anonymous Commenter Affiliation: None Document Control Number: EPA-HQ-OAR-2008-0508-0166 Comment Excerpt Number: 1

**Comment:** Insure the Rule is clear that the emissions thresholds are based on actual emissions, NOT potential to emit.

**Response:** See response on actual versus potential emissions in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

Commenter Name: Steven M. Maruszewski Commenter Affiliation: Pennsylvania State University (Penn State) Document Control Number: EPA-HQ-OAR-2008-0508-0409.1 Comment Excerpt Number: 4

**Comment:** In establishing if a facility needs to report, Penn State agrees with the approach to use actual emissions, not potential to emit. A facility should be required to report only if actual emissions exceed the 25,000 mt CO<sub>2</sub>e threshold.

**Response:** See response on actual versus potential emissions in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

Commenter Name: Thomas M. Ward Commenter Affiliation: Novelis Corporation Document Control Number: EPA-HQ-OAR-2008-0508-0561.1 Comment Excerpt Number: 13

**Comment:** In determining applicability for reporting in the proposed rule under 40 CFR part 98 subpart A, Novelis supports emission threshold determinations based on actual facility emissions in the calendar year of operation, and not on a basis of potential-to-emit determinations using assumed continuous operating conditions of all emissions sources 24 hours per day for 365 days per year. The final rule should clarify that the actual emission determination for threshold

reporting is to be applied by facilities for determining the reporting applicability. Reporting for GHG emissions under the mandated program should not require the use of `potential-to-emit' calculations used under other regulations of the Clean Air Act (CAA) such as 'Prevention of Significant Deterioration' (PSD) provisions. Those provisions are designed to avoid sensitive ecological impacts from local and regional pollutant emissions that are not germane to the global climate change effects of GHG emissions. Furthermore, actual emissions as reported under the "Inventory of U.S. GHG Emissions and Sinks" form the basis for EPA's determination of the reporting thresholds in the proposed rule. The threshold determinations EPA has chosen in the proposed rule to balance reporting requirements and cost impacts are based on actual emission reporting and not on emission potential assumptions for continuous operation. Facility reporting determinations under potential-to-emit calculations could dramatically increase the number of reporting facilities and the burden of reporting well beyond EPA's impact determinations in the proposed rule. Therefore, the use of potential-to-emit determinations for threshold reporting assessments would necessitate EPA reassessing the impact of requirements in its economic evaluation and revising the reporting applicability thresholds under the rule.

**Response:** See response on actual versus potential emissions in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

### **Commenter Name:** Kathy G. Beckett **Commenter Affiliation:** West Virginia Chamber of Commerce **Document Control Number:** EPA-HQ-OAR-2008-0508-0956.1 **Comment Excerpt Number:** 7

**Comment:** With respect to applicability determinations, owners and operators are to determine applicability of this rule to their facilities by estimating 2010 actual emissions with data collected in 2010 using the methodology that would apply to that facility under the proposed rule, if it applied. If by "appropriate," EPA means something other than the methodology that would apply if the unit was covered under the rule, EPA should make that clear. Facilities that determine they are subject to the rule would report annual emissions by the deadline and those that determine they are not subject would not report. For subsequent years, existing facilities would only be required to re-evaluate applicability if there is a change to the facility (e.g., process modification, increase in hours or production, change in fuel or raw material, addition of equipment) that could cause applicability to change. Proposed § 98.2(f). New or changed facilities must evaluate emissions in their first year of operation or change to determine applicability. The Chamber generally supports EPA's proposal under § 98.2(f) not to require any reporting in advance of 2011 and not to require any reporting by facilities that determine based on 2010 data that they do not meet the applicability requirements of the rule. For new facilities or those that become subject as a result of a change, the Chamber assumes that the facility would report for the first year only if actual annual emissions for the new or changed unit exceeded the threshold. If EPA intended applicability to be based upon extrapolation of data to estimate annual emissions for the new unit or the changed unit following the change, EPA needs to make that clear. However, because EPA's proposal for determining applicability relies on the methodologies specified for reporting under the rule, the Chamber is concerned that facilities could be required to perform new monitoring under the rule in 2010 simply to determine (and document) whether the rule applies. Clarification of this requirement is requested.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1 excerpt 4.

# Commenter Name: See Table 4 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0455.1 Comment Excerpt Number: 2

**Comment:** Proposed § 98.340 would require reporting of GHG emissions from industrial landfills that meet or exceed the applicable thresholds in relevant subparts. The Proposal identifies food processing facilities, pulp and paper facilities, and ethanol production facilities as examples of the types of facilities that would have industrial landfills that might be subject to reporting requirements. The applicable subparts for these facilities (i.e., Subparts M, AA, J, respectively) identify onsite industrial landfills as being specific GHG sources at the facilities. The Class of '85 requests that the Agency clarify that GHG emissions from landfills located at other types of industrial facilities, whose respective subparts do not identify industrial landfills as a specific source of GHGs, do not need to be monitored and reported. The Group believes that other types of facilities should not be required to monitor and report GHG emissions from onsite landfills because, as explained by the Proposal, landfills at the identified facility types, such as pulp and paper and food processing facilities, are responsible for a majority of the CH<sub>4</sub> emissions from onsite industrial landfills. The significant burden associated with monitoring CH<sub>4</sub> emissions from lesser emitting landfills at other types of facilities, such as EGUs, is not justified by those landfills' limited CH<sub>4</sub> emissions. Similarly, proposed § 98.350 would require reporting of GHG emissions from onsite wastewater treatment systems at certain industrial facilities. Proposed § 98.350 appears to limit this requirement to the facility types identified in the section. The section states that "this source category applies to onsite wastewater treatment systems at pulp and paper mills, food processing plants, ethanol production facilities, and petroleum refining facilities." However, the Preamble states that "the only wastewater treatment process emissions to be reported in this rule are those from onsite wastewater treatment located at industrial facilities, such as at pulp and paper, food processing, ethanol production, petrochemical, and petroleum refining facilities." 74 Fed. Reg. at 16560 (emphasis added). This language implies that the listed facilities are just examples of industrial facilities that may be required to report GHG emissions from onsite wastewater treatment systems. The Class of '85 requests that the Agency clarify that only the facility types listed in § 98.350 would be required to report GHG emissions from onsite wastewater treatment facilities.

**Response:** At this time EPA is not going final with the portion of 40 CFR part 98, subpart HH (Landfills) that addresses industrial landfills nor 40 CFR part 98, subpart II (Wastewater Treatment). As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on subpart II or industrial landfills under subpart HH at this time.

Commenter Name: Michael W. Stroben Commenter Affiliation: Duke Energy Corporation Document Control Number: EPA-HQ-OAR-2008-0508-0407.1 Comment Excerpt Number: 20

**Comment:** Electric generating facilities, in particular coal-fired facilities, often include landfills used to store or dispose of inert material that do not produce CH<sub>4</sub>, such as coal combustion byproducts or construction material. The Subpart HH source category includes "industrial landfills (including, but not limited to landfills located at food processing, pulp and paper, and

ethanol production facilities)." Although the term, "industrial landfill," is not defined in the GHG reporting rule, Subpart A defines "landfill" broadly. Under proposed § 98.341, a facility must report under Subpart HH if it "contains a landfill process" and meets the requirements of either § 98.2(a)(1) or (2)." Proposed § 98.2(a)(1) applies to "municipal landfills" that generate  $CH_4$  in amounts equivalent to 25,000 metric tons of CO<sub>2</sub>e per year. Proposed § 98.2(a)(2) applies to "any facility" that emits 25,000 metric tons of CO<sub>2</sub>e per year in combined emissions from combustion and other sources. Subpart HH also contains methodologies for calculating CH<sub>4</sub> generation from various types of landfills, including "industrial landfills." Proposed § 98.343(a). Duke Energy is concerned that these broad applicability provisions and the existence of broadly applicable methodologies could require electric generating facilities subject to Subpart D to (1) calculate annual modeled CH<sub>4</sub> to determine applicability of Subpart HH or (2) conduct annual modeling under the Subpart HH methodologies, even when no CH<sub>4</sub> is produced at the landfill. These requirements would be very burdensome and would serve no purpose for landfills that do not generate CH<sub>4</sub>. To avoid these results, Duke Energy requests that EPA clarify the definitions of "landfill" and "landfill process" and provide an exemption from Subpart HH and the Subpart HH methodologies for those landfills at electric generating facilities that (1) only receive coal combustion byproducts or other inert waste streams, (2) have been exempted from an otherwise applicable CH<sub>4</sub> monitoring requirement in an existing permit based on a finding that no CH<sub>4</sub> is generated, or (3) are shown with testing not to generate  $CH_4$ , whether or not they are subject to a permit.

**Response:** At this time EPA is not going final with the portion of 40 CFR part 98, subpart HH (Landfills) that addresses industrial landfills. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on industrial landfills under subpart HH at this time.

Commenter Name: Andrew C. Lawrence Commenter Affiliation: Department of Energy (DOE) Document Control Number: EPA-HQ-OAR-2008-0508-0612.1 Comment Excerpt Number: 11

**Comment:** Additionally, in 98.2(a)(1), municipal landfills only need to report if onsite  $CH_4$  emissions are greater than 25,000 metric tons of  $CO_2e$ ; however, in 98.2(a)(2), there is no threshold provided for industrial landfills. As discussed previously, GHG emissions from an industrial landfill may be insignificant compared to the GHG emissions from stationary fuel combustion, but there is no applicability threshold for determining whether these insignificant  $CO_2e$  emissions must be reported.

**Response:** At this time EPA is not going final with the portion of 40 CFR part 98, subpart HH (Landfills) that addresses industrial landfills. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on industrial landfills under subpart HH at this time.

**Commenter Name:** Traylor Champion **Commenter Affiliation:** Georgia-Pacific, LLC (GP) **Document Control Number:** EPA-HQ-OAR-2008-0508-0380.1 **Comment Excerpt Number:** 34 **Comment:** GP's pulp and paper mill landfills contribute less than 1% of mill greenhouse gas emissions, which is typical of the industry. EPA should eliminate the requirement for pulp and paper mill industrial landfills to report emissions because their contribution is minimal.

**Response:** At this time EPA is not going final with the portion of 40 CFR part 98, subpart HH (Landfills) that addresses industrial landfills. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on industrial landfills under subpart HH at this time.

Commenter Name: Vince Brisini Commenter Affiliation: RRI Energy Inc. (RRI) Document Control Number: EPA-HQ-OAR-2008-0508-0618.1 Comment Excerpt Number: 5

**Comment:** In § 98.340, U.S EPA proposes to require the reporting of GHG emissions from industrial landfills that meet or exceed certain thresholds. In this section U.S. EPA also states that food processing facilities, pulp and paper facilities, and ethanol production facilities are examples of the types of facilities that could have industrial landfills subject to reporting requirements, and is consistent in noting onsite industrial landfills as GHG emission sources in the applicable subparts for these industries. It is appropriate that landfills from these sources are included in U.S. EPA's mandatory reporting requirements because--as noted in the proposed rule-these industries are responsible for the majority of methane emissions from onsite industrial landfills. However, although U.S. EPA consistently identified the aforementioned industries as having GHG emission sources from onsite landfills, it did not specify that other industrial sectors were excluded from assessing emissions from onsite landfills. U.S. EPA should not require industrial facilities other than those in the food processing, pulp and paper and ethanol production industries to monitor and report GHG emissions from onsite landfills. It is important to make this distinction, because the significant burden associated with monitoring methane emissions from lesser emitting landfills at other types of facilities, such as EGUs, is not justified by the insignificant methane emissions from those landfills. With respect to GHG emissions from industrial wastewater treatment, U.S. EPA indicates in the preamble to the rule that the pulp and paper, food processing, ethanol production, and petroleum refining industries are examples of the types of industries that may have GHG emissions from onsite wastewater treatment systems. However, the language in the preamble is reasonably unclear in indicating which, if any, additional industries are included or excluded under this requirement. Again, as the industries noted in the preamble represent the largest emitters of GHGs from wastewater treatment, U.S. EPA should clarify that this list of sources is not merely an example, but is instead a complete listing of the industries required to report GHG emissions from onsite wastewater treatment systems.

**Response:** At this time EPA is not going final with the portion of 40 CFR part 98, subpart HH (Landfills) that addresses industrial landfills nor 40 CFR part 98, subpart II (Wastewater Treatment). As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on subpart II or industrial landfills under subpart HH at this time.

# Commenter Name: Juanita M. Bursley Commenter Affiliation: GrafTech International Holdings Inc. Company (GrafTech) Document Control Number: EPA-HQ-OAR-2008-0508-0686.1 Comment Excerpt Number: 30

**Comment:** GrafTech knows that there are certain industrial sectors that, because of the nature of the byproduct materials generated and disposed in a permitted on-site landfill facility, do not generate any or only insignificant quantities of methane gas. In many cases, the methane gas generation is likely less than typical hazardous waste landfills and construction and demolition landfills, which can contain significant quantities of wastes that decay/decompose. Regardless, under the proposed rule, owners or operators of industrial landfills that do not contain significant quantities of wastes that decay/ decompose, i.e., have negligible concentrations of degradable organic carbon, such as typical carbon and graphite manufacturing byproducts, would still have to go through the arduous procedures to quantify and classify wastes disposed for every year of past operation, and model for methane emissions to determine applicability. Furthermore, Table HH-1 of Subpart HH – Emissions Factors, Oxidation Factors and Methods of the Proposed Rule does not include a default value for these types of inert or inorganic wastes. As a minimum, a facility should be able to model with user defined values for DOC and k, rather than using the DOC and k values currently listed for food processing and pulp and paper, which will significantly over-estimate the methane gas emissions. Therefore, GrafTech believes that owners or operators of such industrial landfills containing wastes with negligible concentrations of degradable organic carbon should not be burdened with the requirements to model to determine applicability, and then measure every load of waste disposed and model their methane gas emissions on an annual basis, just to be able to document every year that they do not exceed the reporting threshold.

**Response:** At this time EPA is not going final with the portion of 40 CFR part 98, subpart HH (Landfills) that addresses industrial landfills. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on industrial landfills under subpart HH at this time.

Commenter Name: Marcelle Shoop Commenter Affiliation: Rio Tinto Services, Inc. Document Control Number: EPA-HQ-OAR-2008-0508-0636.1 Comment Excerpt Number: 11

**Comment:** EPA recognizes in the preamble that "[t]he majority of the CH. emissions from onsite industrial landfills occur at pulp and paper facilities and food processing facilities." (74 Fed. Reg. at 16557). We believe there are many industrial landfills that do not receive significant quantities of organic content and therefore would not emit substantial levels of GHG emissions. For example, the estimated emissions from each of the two small landfills discussed above would be only approximately 4450 metric tons  $CO_2e$  per year. We therefore encourage EPA to specify a 25,000 metric tons  $CO_2e$  per year threshold for industrial landfills in subsection 98.2(a)(2)(xv), (the same as for municipal solid waste landfills in subsection 98.2(a)(1)(xix» and in subpart HH. EPA should make clear that industrial landfills with emissions below the threshold are not subject to reporting requirements under subpart HH or pursuant to 98.2(a)(1) or (2).4 **Response:** At this time EPA is not going final with the portion of 40 CFR part 98, subpart HH (Landfills) that addresses industrial landfills. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on industrial landfills under subpart HH at this time.

#### Commenter Name: Juanita M. Bursley Commenter Affiliation: GrafTech International Holdings Inc. Company (GrafTech) Document Control Number: EPA-HQ-OAR-2008-0508-0686.1 Comment Excerpt Number: 29

**Comment:** GrafTech is very concerned that, as proposed, this rule will be nearly as burdensome on facilities that do not have to report, as on those that must report in that virtually every industrial facility will be required to collect data and perform relatively complex calculations, and very burdensome modeling if it has an industrial landfill, in strict accordance with the prescribed emissions estimating procedures, just to determine if it is subject to this rule. In many cases, the owner or operator will just be documenting that the estimated GHG emissions from the facility do not exceed the reporting threshold. Collection of historical disposal data on all past wastes at all industrial landfills will be particularly difficult in many cases and will likely be inherently imprecise because of missing records due to the fact that landfill operators or owners were not required by permits or past regulations to maintain such detailed waste records. Furthermore, the modeling process to estimate methane emissions is particularly onerous, even with accurate input data, and will have to be contracted in most cases to professional environmental consulting firms rather than calculated by in-house resources using relatively simple formulas. Therefore, GrafTech has recommended that EPA provide simpler source category thresholds to determine applicability, like the one provided for stationary fuel combustion units, to reduce the burden on the majority of facilities making applicability determinations. For facilities that have fuel combustion units and operate an on-site industrial landfill (but, that either fall under no other GHG source categories or have negligible GHG emissions from those operations), the conservative 30 mmBtu/hr. aggregate maximum rated heat input capacity threshold cannot be used to determine if the facility is subject to the reporting requirements.

**Response:** At this time EPA is not going final with the portion of 40 CFR part 98, subpart HH (Landfills) that addresses industrial landfills. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on industrial landfills under subpart HH at this time.

Commenter Name: Marcelle Shoop Commenter Affiliation: Rio Tinto Services, Inc. Document Control Number: EPA-HQ-OAR-2008-0508-0636.1 Comment Excerpt Number: 7

**Comment:** Global warming potential values used for reporting worldwide are subject to change and may need to be updated from time to time to maintain consistency with the international community.

**Response:** See response on global warming potential values in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

#### **Commenter Name:** Chris Hobson **Commenter Affiliation:** Southern Company **Document Control Number:** EPA-HQ-OAR-2008-0508-1645.2 **Comment Excerpt Number:** 15

**Comment:** Table A-1 - SF<sub>6</sub> The global warming potential (GWP) shown in Table A-1 for SF<sub>6</sub> is 23,900. More recently the International Panel on Climate Change (IPCC) has determined that the 100-year GWP for SF<sub>6</sub> is 22,800 (2007 IPCC AR4), which is the number currently used by the U.S. Energy Information Administration and the U.S. Department of Energy and is found in the proposed American Clean Energy and Security Act of 2009.

**Response:** See response on global warming potential values in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

Commenter Name: Ron Downey Commenter Affiliation: LWB Refractories Document Control Number: EPA-HQ-OAR-2008-0508-0719.1 Comment Excerpt Number: 4

**Comment:** Preamble pages 20-22, Table 1 and Table 2. Specific NAICS codes are listed. Does this list encompass or include only those NAICS that are required to report GHG emissions? For example if the NAICS for your facility is not included in either table is GHG reporting per this proposed rule required? The rule should be very explicit that all sources of GHG are required to report regardless of NAICS classification.

**Response:** As discussed in the introduction in the preamble to the proposed rule (74 FR 16488, April 10, 2009), Table 1 of this preamble is not intended to be exhaustive, but rather provides a guide for readers regarding facilities likely to be regulated by this action. Table 1 of this preamble lists the types of facilities that EPA is now aware could be potentially affected by this action. Other types of facilities not listed in the table could also be subject to reporting requirements. To determine whether a facility is affected by this action, one should carefully examine the applicability criteria in paragraphs (a)(1), (a)(2), and (a)(3) of 40 CFR 98.2. For an explanation of how the 3-step applicability determination works, see the response to comment EPA-HQ-OAR-2008-0508-1741, excerpt 9.

**Commenter Name:** Kevin Fay **Commenter Affiliation:** International Climate Change Partnership (ICCP) **Document Control Number:** EPA-HQ-OAR-2008-0508-0490.1 **Comment Excerpt Number:** 7

**Comment:** We believe that the reporting process should also rely on the most up-to-date assessments of global warming potential and therefore should utilize the values contained in the IPCC Fourth Assessment Report.

**Response:** See response on global warming potential values in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

# **Commenter Name:** Stanley P. Rhodes **Commenter Affiliation:** Science Certification Systems (SCS) **Document Control Number:** EPA-HQ-OAR-2008-0508-1019.1 **Comment Excerpt Number:** 2

**Comment:** The GWP index published by the Intergovernmental Panel on Climate Change (IPCC) presents a variety of time horizons, from 20 to 500 years, demonstrating the relative radioactive forcing over time for various types of GHGs. However, exclusive reliance on the 100-year time horizon, as contained in the proposed rule, is inadequate to account for near-term climate impacts because the use of this time horizon effectively amortizes the effect of various GHGs over the entire 100-year period. In the case of shorter-lived gases, such as methane, tropospheric ozone, and black carbon, the effective potency in the near term is far greater than over the longer term. For instance, the IPCC has calculated that the GWP of methane is 72 times greater than CO<sub>2</sub> within a 20 -year time horizon. This result is more than three times the GWP that is calculated under a 100-year time horizon. In addition, under an annual time horizon, the GWP for methane (that is, its potency during first year of release) is 105 times greater than that of CO2. [See reference provided by commenter: "Lifecycle Assessment Arguments for Segragating Carbon Dioxide and Other Long-Lived GHG Emissions from Methane When Reporting Emissions."] Sole reliance upon the 100-year time horizon is contrary to sound public policy in view of the substantial body of scientific data that is now available, which demonstrate that certain critical environmental thresholds already have been exceeded or will be exceeded within the 20- year time horizon. These environmental factors include the melting of Arctic ice, sea level rise, loss of key habitat, increased release of methane from tundra regions, etc. We recognize EPA's need to use GWPs based on the 100 -year time horizon, consistent with its current obligations to provide an annual inventory of GHG Emissions and Sinks to UNFCCC. In addition, we strongly urge the EPA to: (1) calculate and publish annual and short-range (e.g., up to the 20-year time horizon ) GWP s for each GHG emission, established as needed by extrapolation from IPCC GWP protocols; and (2) establish appropriate reporting thresholds by GHG emission type, based on annual and 20-year time horizons, by which entities can calculate their unaggregated GHG emissions, as well as analyze and report their GHG emissions.

**Response:** See response on global warming potential values in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

Commenter Name: J. P. Cativiela Commenter Affiliation: Dairy Cares Document Control Number: EPA-HQ-OAR-2008-0508-1014.1 Comment Excerpt Number: 11

**Comment:** The proposed rule uses global warming potentials (GWPs) of 21 and 310 for  $CH_4$  and  $N_2O$ , respectively, which are based on the IPCC's Second Assessment Report (SAR). EPA should explain why the more up-to-date GWPs in the IPCC's Third Assessment Report (TAR) were not used in the proposed rule. We recommend that if the IPCC calculation methodology is used, the most up-to-date GWPs be used for consistency. Therefore, similarly to Comment 3 above, we recommend that EPA includes the GWPs in the reference document, which can be updated to reflect the most recent GWPs or that the EPA references the current IPCC GWPs.

**Response:** See response on global warming potential values in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

**Commenter Name:** Maureen Beatty **Commenter Affiliation:** National Refrigerants, Inc. (NRI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0434.1 **Comment Excerpt Number:** 4

**Comment:** The global warming potentials ("GWPs") designated for each HFC or other fluorinated GHG to be covered by the Reporting Rule should be consistent with those provided in any climate legislation that sets forth GWPs for such gases. This is particularly critical if reporting will be required in metric tons of carbon dioxide equivalents ("MT  $CO_2e$ ") so that reported figures under the rule and legislation are consistent and standardized.

**Response:** See response on global warming potential values in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

Commenter Name: Robert D. Bessette Commenter Affiliation: Council of Industrial Boiler Owners (CIBO) Document Control Number: EPA-HQ-OAR-2008-0508-0513.1 Comment Excerpt Number: 24

**Comment:** The GWPs in Table A-1 are consistent with EPA GHG Inventory report (Second Assessment Report figures). CIBO supports use of those GWP figures.

**Response:** See response on global warming potential values in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

Commenter Name: David Stirpe Commenter Affiliation: Alliance for Responsible Atmospheric Policy (ARAP) Document Control Number: EPA-HQ-OAR-2008-0508-0527.1 Comment Excerpt Number: 2

**Comment:** EPA has noted that it has chosen to use Global Warming Potentials (GWPs) published in the Second Assessment Report (SAR) of the Intergovernmental Panel on Climate Change (IPCC). The SAR was published in 1995. The Alliance requests that EPA use the GWPs from the IPCC's Fourth Assessment Report that was published in 2007. Emissions data must be consistent with the renewed data of the IPCC. Recent proposed climate change legislation also refers to the Fourth Assessment.

**Response:** See response on global warming potential values in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

**Commenter Name:** Michael E. Van Brunt **Commenter Affiliation:** Covanta Energy Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0548.1

# **Comment Excerpt Number:** 15

**Comment:** The EPA should use the Global Warming Potentials (GWPs) specified in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4). Both the European Union and Australia have already recommended that a post – Kyoto agreement reflect should include updated GWPs. Furthermore, the proposed Waxman-Markey American Clean Energy and Security Act of 2009 uses the GWPs of AR4.

**Response:** See response on global warming potential values in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

**Commenter Name:** Curtis J. Winner **Commenter Affiliation:** New Mexico Gas Company (NMGC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0585 **Comment Excerpt Number:** 7

**Comment:** NMGC also requests clarification on when the measurement of emissions are to be taken. The issue being that the major source of emission is the operation of the actual compressors. The operation of compressors in our case is directly tied to weather and market factors completely out of our control and which fluctuate from year to year. For these reasons there could be a situation where NMGC crosses the 25,000 metric ton threshold at the end of the year, because compressors have been running more than usual in the latter months. How would NMGC go back to the beginning of the year to meet the measurement requirements?

**Response:** At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Gregory A. Wilkins **Commenter Affiliation:** Marathon Oil Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0712.1 **Comment Excerpt Number:** 65

**Comment:** It is difficult to determine applicability with this reporting rule in regards to oil and natural gas systems. In order to determine applicability, an annual leak survey and measurement, which is not a requirement for any other air program, would have to be conducted to determine the fugitive emissions per facility. In order to avoid the expenses associated with such surveys, Marathon requests that EPA propose a simplified alternative method of determining applicability for oil and natural gas systems, and state this alternative in the rule language. Marathon would propose considering only the emissions from stationary combustion in order to determine applicability. If stationary source emissions at an oil and natural gas system facility exceed the program threshold, only then should fugitive emissions be considered.

**Response:** At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

# Commenter Name: See Table 9 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0709.1 Comment Excerpt Number: 5

**Comment:** We would appreciate some clarification in proposed section 98.2(a)(2) regarding which emission points we should count when trying to determine whether the emissions from a facility exceed the 25,000 tpy threshold. Paragraph (a)(2) says that any facility that "emits 25,000 metric tons CO<sub>2</sub>e or more per year in combined emissions from stationary fuel combustion units ...and all source categories that are listed... and that are located at the facility." The referenced list includes "(xii) Oil and natural gas systems." It is not clear to us whether fugitive emissions from oil and natural gas equipment should be measured and counted in determining whether a facility triggers the 25,000 tpy threshold for combustion. For example, at a compressor station or liquefied natural gas (LNG) storage facility, would we have to measure or estimate all fugitive emissions across the facility to determine whether the facility falls below the threshold for having to measure, estimate and report emissions from the facility? We urge you not to require this. It would add burden to facilities that might well fall below the reporting threshold and yet would be put through much of the cost and burden that would be imposed by having to file a report. Instead, we suggest that you create an easier bright line test under which a facility would trigger the threshold for reporting under section 98.2 and Subpart C if its GHG emissions from combustion sources exceed 25,000 tpy. In the alternative, we would support some other simple "screening mechanism" such as the size based threshold suggested in the comments of the Natural Gas Council on Subpart W. We understand that once a facility triggers the reporting requirement, the facility's emissions report would not be limited just to  $CO_2$ emissions from combustion, but would also include methane and N<sub>2</sub>O emissions, pursuant to section 98.32.

**Response:** At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Karen St. John Commenter Affiliation: BP America Inc. (BP) Document Control Number: EPA-HQ-OAR-2008-0508-0631.1 Comment Excerpt Number: 11

**Comment:** BP is concerned with the burden that would be imposed on some sectors, such as the oil and gas sector, whose applicability determination hinges on total emissions from combustion and non-combustion sources. Such facilities would have to undertake extensive data collection and measurement just for screening their facilities to define applicability for reporting under this rule. Instead, EPA should simplify applicability determination to minimize the burden of determining whether a facility is below the 25,000 tons of carbon dioxide equivalent (CO<sub>2</sub>e) per year threshold. BP endorses the recommendation of the API that offers to work with the EPA on the development of screening tools that are appropriate for the oil and natural gas sector.

**Response:** At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

### **Commenter Name:** Kim Dang **Commenter Affiliation:** Kinder Morgan Energy Partners, L.P. **Document Control Number:** EPA-HQ-OAR-2008-0508-0370.1 **Comment Excerpt Number:** 33

**Comment:** Kinder Morgan's alternative Subpart W rule language is attached as Appendix A. [See original letter in DCN:EPA-HQ-OAR-2008-0508-0370.1, Appendix A].

**Response:** At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Steve Donatiello Commenter Affiliation: Laclede Gas Company Document Control Number: EPA-HQ-OAR-2008-0508-0763.1 Comment Excerpt Number: 1

**Comment:** As proposed, 40 CFR 98.2(a)(2) requires reporting for all source categories listed in paragraph (a)(2). Under the current proposal, Laclede's Underground Storage (UGS) facility would automatically be pulled in as an "(xii) Oil and Natural Gas System," and as such would be subject to annual reporting. Putting this into perspective, this facility only emits approximately 1,000 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) per year based on annual Emission Inventory Questionnaire (EIQ) data. This is far below the 25,000 tons CO<sub>2</sub>e per year threshold for reporting. Moreover, the UGS facility is tied directly into and serves as an integral component of Laclede 's natural gas distribution system. Furthermore, the UGS facility is regulated by the Missouri Public Service Commission. It is recommended that EPA make provisions for facilities falling within the defined source categories, but having actual CO<sub>2</sub>e emissions that are diminutive, by establishing a one-time initial reporting option that would involve submitting a summary listing of the prior three years of CO<sub>2</sub>e emissions. If these annual emissions are 50% or more below 25,000 tons CO<sub>2</sub>e, no further reporting would be required.

**Response:** EPA received many comments on the complexity, clarity and specific elements of the proposed methods. At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Michael Bradley **Commenter Affiliation:** The Clean Energy Group (CEG) **Document Control Number:** EPA-HQ-OAR-2008-0508-0479.1 **Comment Excerpt Number:** 26

**Comment:** The Clean Energy Group requests clarification on the specific emission reporting requirements for oil and natural gas systems in addition to fugitive CO2 and  $CH_4$  emissions. For example, would the facility be required to report smaller combustion sources on site if under the same ownership control? What if not under the same ownership control? Would there be any emissions or heat input size threshold for determining applicability? Portable equipment or generating units designated as emergency generators should be exempted from this category.

**Response:** At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

# Commenter Name: See Table 10 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0635 Comment Excerpt Number: 73

**Comment:** We do not support EPA's exclusion of significant oil and gas sector combustion source categories by setting the reporting threshold unduly high. with respect to the oil and gas industry. The current proposed threshold for combustion sources in proposed 40 C.F.R. § 98(a)(3) (aggregate maximum rated heat input capacity of stationary fuel combustion units of 30 MMBtu/hr or greater and emission of 25,000 metric tons of CO<sub>2</sub>e of more per year from all stationary combustion sources) will limit reporting in the oil and gas industry to large turbines and generators and accordingly will exclude many combustion units We recommend that, at a minimum, proposed 40 C.F.R. § 98(a)(3) contain an explicit clause stating that O&G sector combustion sources are governed separately by Subpart W – Oil and Natural Gas Systems of the rule.

**Response:** At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Wesley L. McNealy Commenter Affiliation: Pepco Holdings, Inc. (PHI) Document Control Number: EPA-HQ-OAR-2008-0508-0547.1 Comment Excerpt Number: 4

**Comment:** PHI and its subsidiaries are currently assessing facility level greenhouse gas emissions to determine applicability. While this is relatively straight forward for major stationary combustion sources, it is more difficult for smaller stationary combustion sources and fugitive sources and equipment. To streamline this process and reduce administrative burdens, PHI encourages EPA to develop supporting guidance and tools containing simplified quantification methodologies to simplify the applicability determination. Doing so will minimize the burden of proving that a facility is below the 25,000 tons of  $CO_2e$  per year threshold. For example, in the natural gas sector, rather than requiring all facilities to undergo the costly process of conducting leak detection of fugitive emissions, EPA should specify simplified quantification methodologies.

**Response:** Regarding the need for simplified calculations to determine applicability, see the response to comment EPA-HQ-OAR-2008-0508-1142.1, excerpt 2. At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

# **Commenter Name:** Curtis J. Winner **Commenter Affiliation:** New Mexico Gas Company (NMGC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0585 **Comment Excerpt Number:** 4

**Comment:** The proposed regulations are confusing regarding how to determine if a facility meets the 25,000 metric ton emission threshold. To calculate the GHG emissions for comparison with the 25,000 metric ton threshold, the proposed regulation [Subpart A, 98.1 (b)(1)] says that you must estimate annual emissions from stationary fuel combustion units and any applicable source category listed. The next sentence in Subpart A, 98.2(b)(1) says that you must use the methodologies specified in each subpart. The applicable source category for NMGC would be Subpart W. Subpart W requires an annual leak detection of fugitive emissions described in 98.234 (d) or (e). The leak detection methods are extensive and expensive. The second step is to then measure emissions from sources that are found to leak using methods in 98.234 (c). Determining if there is a leak and then measuring the leak for all 24 listed sources imposes substantial costs to the LDC. This is especially true if a facility is not close to the 25,000 metric ton threshold after looking at combustion (Subpart C) and fugitive emissions from natural gas driven pneumatic pumps and blowdown venting, the biggest emitters of greenhouse gases at compressor stations. Therefore, for onshore natural gas transmission compressor stations, the initial calculation to determine if emissions exceed the threshold should include only emissions from combustion, NG driven pneumatic pumps, and blowdown venting. If those emissions do not approach the 25,000 metric ton limit, the additional work of a leak survey and calculating the emissions from all the sources listed in 98.232 (a) should not be required because it may not significantly add to the total emissions. NMGC suggests that the regulations be more specific about which sources in the source category must be estimated in determining if a facility meets the 25.000 metric ton threshold.

**Response:** At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: T. LaSalle Commenter Affiliation: HLP Engineering Inc Document Control Number: EPA-HQ-OAR-2008-0508-0266 Comment Excerpt Number: 1

**Comment:** A key term in the Definition of 'Facility' is 'contiguous'. This term is not defined in the proposed regulation and has led to a source of spirited debate over the past few years (in particular with oil and gas operations) regarding the task of evaluating major source applicability (i.e. Title V major source determinations). To support this claim, please note that various States w/i the US have different interpretations of this same term under their Title V permitting programs. It appears the writers have utilized much the same verbiage as previously provided by EPA, so this commenter feels that it opens the door for the same debate and that it would be beneficial to clear up any misunderstandings before final rule making. Since oil & gas operations are somewhat unique in their geographical facility layout/positioning, the term could be clarified for inland oil & gas operations if the final rule adopted the same language used in the writings of 40 CFR 63 - Subpart HH - assuming you do intend for the interpretation to be the same. In those writing, oil and gas operations are not considered to be contiguous if they operate under separate leases, pads, or 'permatized' areas - regardless of proximity to each other. For offshore oil and

gas operations, this commenter is unaware of the issue being addressed on a formal stage as it is common for structures over water to have individual structural components that are interconnected by 'catwalks' and normally dependent on each other. This commenter would like to see clarification as to whether two or more offshore facilities (dependent and/or independent of each other) connected by catwalks would be considered contiguous.

**Response:** At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Nicole McIntosh Commenter Affiliation: Consumers Energy Document Control Number: EPA-HQ-OAR-2008-0508-0584.1 Comment Excerpt Number: 5

**Comment:** For electric power systems, the threshold for reporting  $SF_6$  is 17,820 pounds of total nameplate capacity at the corporate level. We generally support the threshold and the process of reporting of  $SF_6$  emissions at the corporate level as this ensures accurate reporting through the use of a mass balance approach. There is some confusion in the rule however, when the EPA also proposes to require electric generating facilities to report emissions of all source categories once the 25,000 metric tons of  $CO_2$ e threshold is met. This would imply that  $SF_6$  emissions from a facility would be required to be reported at the facility level. We encourage the EPA to clarify that  $SF_6$  emissions reporting need only be done at the corporate level and not at the individual facility level. This will prevent double counting of emissions, provide more accurate and quality data and account for the emissions adequately for the purposes of this proposed rule.

**Response:** EPA appreciates comment. At this time EPA is not going final with the  $SF_6$  from electrical equipment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Randall R. LaBauve **Commenter Affiliation:** Florida Power & Light (FPL) Group **Document Control Number:** EPA-HQ-OAR-2008-0508-0624.1 **Comment Excerpt Number:** 8

**Comment:** The proposed rule states that the owner or operator of a "facility" would be required to report GHG emissions from all source categories at the facility for which there are methods developed and listed in the proposed rule.' This provision raises certain interpretive questions that FPL Group requests clarification on from EPA. Specifically, the proposed rule defines a facility as "under common ownership or common control." Since deregulation, co-located substations and other supporting infrastructure at electric generation facilities may be under the same ownership/control as the electric generating facility or they may be owned and operated by a separate entity (i.e., not the owner/operator of the electric generating facility). In these situations, it is unclear who would be obligated under the proposed rule to report any SF<sub>6</sub> emissions from co-located substations and other infrastructure. If co-located substations and other supporting infrastructure included SF<sub>6</sub>-containing equipment owned by the same electric generating facility owner, then it appears that the proposed rule would require any SF<sub>6</sub> emissions

to be included in the reporting by the generating facility owner. However, if the substation and other supporting infrastructure is owned by another entity (i.e., not the owner of the generating facility), it is unclear who would be responsible for reporting any  $SF_6$  emissions emanating from the co-located substations and other supporting structure, the owner of the generating facility or the owner of the  $SF_6$ -containing equipment.

**Response:** At this time EPA is not going final with the  $SF_6$  from electrical equipment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Wesley L. McNealy Commenter Affiliation: Pepco Holdings, Inc. (PHI) Document Control Number: EPA-HQ-OAR-2008-0508-0547.1 Comment Excerpt Number: 17

**Comment:** PHI agrees with the reporting threshold approach EPA is taking for  $SF_6$  emissions. A threshold based on an electric power system's  $SF_6$  nameplate capacity allows sources to quickly determine whether they are subject to regulation. However, EPA should recognize that nameplate capacity inventory of in-service power systems is achievable for distinct facilities such as substation sites but would be virtually impossible for most power systems in the transmission and distribution lines system.

**Response:** At this time EPA is not going final with the  $SF_6$  from electrical equipment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Michael Bradley **Commenter Affiliation:** The Clean Energy Group (CEG) **Document Control Number:** EPA-HQ-OAR-2008-0508-0479.1 **Comment Excerpt Number:** 24

**Comment:** EPA is also proposing that a facility meeting the SF<sub>6</sub> threshold to report greenhouse gas emissions would also be required to report on all sources in any source category for which calculation methodologies are provided in the proposed rule. The Clean Energy Group requests clarification on the specific SF<sub>6</sub>emission reporting requirements for electric power systems that are in addition to the fugitive SF<sub>6</sub> and PFC emissions. Does this mean that the distribution system would also be required to report emissions from smaller combustion sources from multiple individual locations? Would an individual facility be required to report smaller combustion sources on site if under the same ownership control? Would there be any emissions or heat input size threshold for determining applicability? Portable equipment or generating units designated as emergency generators should be exempted from this category.

**Response:** At this time EPA is not going final with the  $SF_6$  from electrical equipment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

# Commenter Name: Marc J. Meteyer Commenter Affiliation: Compressed Gas Association (CGA) Document Control Number: EPA-HQ-OAR-2008-0508-0981.1 Comment Excerpt Number: 54

**Comment:** CGA does not object to the proposed "All-In" Threshold specifically for Producers of Industrial GHGs as referenced in the preamble. We are not currently aware of any small-scale production facilities (for instance R&D) that would be inadvertently included with an "All In" threshold approach. However, this uncertainty could be addressed by setting a capacity-based threshold of 25,000 metric tons  $CO_2e$ .

**Response:** See the preamble for the response on research and development under other general rule requirements.

Commenter Name: Steven M. Maruszewski Commenter Affiliation: Pennsylvania State University (Penn State) Document Control Number: EPA-HQ-OAR-2008-0508-0409.1 Comment Excerpt Number: 17

**Comment:** The Aluminum Production and Glass Production source categories have research exemptions. Penn State recommends adding a general exemption for all research activities at Universities in categories for which calculation methodologies are provided. This research is conducted at a small scale and only gets wrapped up into the reporting rule due to stationary source emissions and potential inclusion of other source categories such as Electricity Generation. Reporting for the emissions from stationary sources used in operations, which is the majority of campus emissions, that meet the 25,000 mtCO<sub>2</sub>e threshold would still be required. Alternately, language could be added where academic institutions only report under the stationary combustion source category if they exceed the 25,000 mt CO<sub>2</sub>e threshold.

**Response:** See the preamble for the response on research and development under other general rule requirements.

Commenter Name: Robert Ko Greenslade Commenter Affiliation: Fulbright & Jaworski L.L.P. Document Control Number: EPA-HQ-OAR-2008-0508-0382.1 Comment Excerpt Number: 1

**Comment:** SwRI is requesting that EPA specifically exempt the SwRI facility in San Antonio from all monitoring and reporting requirements in the final mandatory greenhouse gas (GHG) reporting rule. Due to the sheer number and different types of projects conducted at the San Antonio facility, as well as the ever-changing nature of the research and development projects, the proposed rule would impose a significant and disproportionate burden on SwRI. Moreover, reporting by SwRI would not provide EPA with any meaningful additional GHG emissions data because the proposed rule also requires the upstream fuel suppliers and manufacturers of vehicle engines, including those involved in the research and development projects at the San Antonio facility, to monitor and report the same GHG emission data in their annual reports.

As discussed below, the exemption would not affect EPA's ability to collect accurate and comprehensive emission data for future policy decisions as contemplated by the FY 2008 Consolidated Appropriations Act. Further, SwRI is not aware of any other nonprofit, applied research and development facility that creates, invents, and develops technology advances to assist unrelated industries in lowering their emissions. Thus, including an exemption for the SwRI facility in San Antonio would have little or no effect on the goal of the proposed rulemaking. SwRI has 11 technical divisions that handle nearly 2,000 projects at any given time. Preliminary estimates indicate that total annual GHG emissions generated at the San Antonio facility are below the proposed threshold of 25,000 metric tons of Carbon Dioxide (COB2B) equivalent (mtCOB2Be). However, future emissions from existing equipment could exceed this applicability threshold, depending on the type, extent, and duration of experiments conducted. The Engine, Emissions and Vehicle Research Division and the Fuels and Lubricants Research Division, both located in San Antonio, are engaged in research and development for over 180 different clients on projects related to mobile sources, including research in support of regulatory agencies seeking to establish emissions limits and test procedures for mobile sources and research in the areas of fuels and lubricants, emissions reduction technologies, and cleaner, more fuel-efficient engines. While the testing is designed to evaluate emissions from mobile source engines and fuels, the testing facilities are stationary. Consequently, there is some ambiguity about whether the proposed rule requires monitoring and reporting if the GHG emissions are generated by mobile source engines and fuels at stationary testing facilities.

The testing emissions account for approximately one-third of the total number of projects and generate 75% to 85% of all GHGs emitted at the San Antonio facility. One of the primary activities in the Engine, Emissions and Vehicle Research Division is the development of cleaner and more fuel-efficient engines. The Department of Emissions Research and Development has been performing work in this area since 1966, with an unprecedented project to assess diesel odor and smoke for the predecessors of EPA, the National Air Pollution Control Administration of the Department of Health, Education, and Welfare. From this humble beginning, and with the passage of the Clean Air Act and formation of EPA, SwRI has been working under contract almost continuously with the EPA to help understand the sources of air pollution and their magnitude, develop and qualify test procedures, and then develop technologies to reduce these emissions. While project activity requires the operation of engines and vehicles in the performance of the research, many of these are fitted with low-emission technologies. The results of SwRI's work greatly contribute to the overall reduction of emissions including COB2B by providing services that reduce the need for others to operate those engines and vehicles in redundant efforts, and by developing technologies that, when placed into production, will greatly reduce those emissions worldwide.

Additionally, SwRI has operated the U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC) Fuels and Lubricants Research Laboratories since 1957, dedicated to fuels and lubricants research on behalf of the United States military. Much of SwRI's work is performed on engine dynamometer test stands or on test vehicles or using analytical procedures. In total, SwRI operates approximately 266 test stands and fixed dynamometers at the San Antonio site. Engine sizes range from approximately 10 horse power (HP) to 3,000 HP (0.025 to 7.6 million Btu per hour or MMBtu/hr), with most being between 100 to 500 HP (0.25 to 1.27 MMBtu/hr). Some of these sources are rarely operated, while others are operated for thousands of hours in a calendar year, with the duration and frequency of equipment use depending on client needs and the types of experiments conducted. In any given year, some test equipment will be used for multiple experiments and could combust many types of compatible fuels or fuel blends. Testing by SwRI often involves a wide variety of liquid and

gaseous fuels and additives, from traditional gasoline and diesel fuels to custom fuel mixes, including fuels blended with ethanol. The amount of analytical data available for these fuels and fuel blends depends on whether that data is needed for the particular experiment being conducted. In some cases, SwRI will have high heating value and carbon content data for a fuel or fuel blend, but in many others it will not. Less than 15% to 25% of total GHGs are generated by stationary fossil fuel combustion sources, as that term is used in Subpart C of the proposed GHG reporting rule.

As discussed below, SwRI believes that the burdens that would be imposed on the organization by the proposed rule go beyond what was contemplated when the rule was drafted. It is clear from even a cursory examination of the preamble to the proposed GHG reporting rule that EPA sought to craft a reasonable balance between the information that would be gathered by the rule and the burdens associated with gathering and calculating that information. For example, EPA discusses that the thresholds selected, largely corresponding to 25,000 mtCOB2Be per year, will cover 85% to 90% of U.S. emissions, "while keeping reporting burden to a minimum." 74 Fed. Reg. 16,447, 16,467 (Apr. 10, 2009). This concern for balance is also apparent in Subpart C of the proposed rule, which relates to stationary combustion sources. Subpart C would allow emissions for small sources, i.e., units with a capacity of less than 250 MMBtu/hr, to be estimated using simplified Tier 1 and Tier 2 calculations, but only if the fuel or fuels utilized are listed in Table C-1 of the proposed rule. Unfortunately, these simplified calculation methods will provide little relief for SwRI's facility in San Antonio. First, many of the experiments conducted at SwRI involve fuel blends, some of which will not correlate with the fuels listed in Table C-1 of the proposed rule, meaning that SwRI would need to analyze some fuel mixtures for carbon content in order to conduct Tier 3 calculations. For example, SwRI conducts tests using fuel mixes composed of petroleum-based fuels and ethanol or other biofuels that are not listed on Table C-1. Even when the fuel used in a test is primarily composed of a fuel listed in Table C-1, SwRI might need to blend the fuel with additives or dopants, in order to mimic real-world scenarios in a laboratory setting. For example, SwRI often uses nitromethane doping to increase NOx emissions or to accelerate catalyst aging during control technology testing. Second, SwRI will need to maintain records and perform calculations for hundreds of separate sources and, because many of these calculations will involve multiple fuels or fuel mixes, multiple calculations could be required for some of these sources. SwRI respectfully submits that this level of effort was not contemplated by EPA in drafting Subpart C, which does not include any exemptions for very small combustion sources. Moreover, the significant variability in the type, number, and duration of tests conducted by SwRI in any given year means that the organization cannot simply make a one-time calculation demonstrating that actual emissions for the prior year were less than 25,000 mtCO<sub>2</sub>e and also demonstrating that future emissions will not exceed that threshold. The only way SwRI will be able to demonstrate compliance on an annual basis will be to gather the requisite analytical data and perform calculations every year. An exemption from the final GHG reporting rule for the San Antonio facility would not undermine the goals of the rule. First, the San Antonio facility does not fall into any of the NAICS codes listed in Table 1 of the proposed rule, which accords with the fact that SwRI is a nonprofit research organization, does not produce or manufacture industrial products, and does not fit within an industrial source category. Therefore, the exemption of GHG emissions data for the facility will not impede EPA efforts to craft emissions standards for these industrial source categories. Second, the GHG emissions from the San Antonio facility would be generated from stationary equivalents of motor vehicle engines and/or experimental fuels and fuel mixtures; however, the information would not necessarily correlate to emissions for any particular new commercially produced motor vehicle engine or for commercially-available fuels. Accordingly, the rule provisions requiring reporting by upstream fuel producers (Subparts LL through NN) and new motor vehicle and motor vehicle

engine manufacturers (Subpart QQ) would provide a better and more comprehensive data set for structuring new GHG emissions standards for fuels and/or mobile sources. Finally, if SwRI's San Antonio facility is exempted from the final GHG reporting rule, there would be a negligible impact on the amount of data gathered by the rule. For example, the GHG emissions from the San Antonio facility would be approximately 0.00035% of the estimated 7,054.2 million mtCOB2Be generated by U.S. sources in 2006. [Footnote: Assuming threshold emissions of 25,000 mtCOB2Be and the 2006 U.S. GHG emissions reported in the Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2006 (April 2008)]. Based on the information provided above, the proposed mandatory GHG reporting rule would impose a significant and disproportionate burden on SwRI without providing EPA with additional relevant data to formulate GHG policies and standards. Accordingly, SwRI requests that the final mandatory GHG reporting rule specifically exempt SwRI from all monitoring and reporting requirements for GHG emissions. SwRI is willing to meet with EPA and to submit any additional information that would be helpful to EPA in assessing this request. [See DCN:EPA-HQ-OAR-2008-0508-382.1 for a description of project at the San Antonio facility.]

**Response:** The final rule includes an exemption for research and development activities. However, the exemption applies to specific research and development activities at a facility. A whole facility would not be exempted because a research activity was being conducted at some locations at an site. See the preamble discussion under other general rule requirements for the full explanation of the research and development exemption.

In regard to GHG emissions from mobile source engines and fuels at stationary testing facilities, see response to comment EPA-HQ-OAR-2008-0508-0355.1, excerpt 4, in the Subpart C response to comments document.

In regard to fuel blend emission factors, see response to comment EPA-HQ-OAR-2008-0508-0419.1, excerpt 10 in the Subpart C response to comments document.

# Commenter Name: Donald R. Schregardus Commenter Affiliation: Department of the Navy, Department of Defense (DoD) Document Control Number: EPA-HQ-OAR-2008-0508-0381.1 Comment Excerpt Number: 7

**Comment:** The rule does not include an exemption for research and development activities other than for Subpart F, Aluminum production, and Subpart N, Glass production. Only Subparts F and N provide an exemption for R&D and the exemption is limited to a "research and development process unit." A "research and development process unit" is defined in § 98.6 as "a process unit whose purpose is to conduct research and development for new processes and products and is not engaged in the manufacture of products for commercial sale, except in a de minimis manner." DoD performs R&D in many areas (e.g., facilities and infrastructure, energy, environmental protection and conservation, communications, and weapons platforms such as aircraft, all-terrain vehicles, and vessels) that present similar situations to those discussed by EPA in the preamble of the rule (74 FR 16580). The context of the discussion on exempting R&D activities in the preamble is limited to suppliers of industrial GHGs, specifically as it relates to small-scale production facilities. The discussion follows: "The requirement that all facilities report would simplify the rule and permit facilities to quickly determine whether or not they must report. The one potential drawback of this requirement is that small-scale production facilities (e.g., for research and development) could be inadvertently required to report their

production, even though the quantities produced would be small in both absolute and  $CO_{2}e$ terms. We are not currently aware of any small-scale deliberate production of N<sub>2</sub>O or fluorinated GHGs, but we request comment on this issue. These research and development facilities could be specifically exempt from reporting. An alternative approach that would address this concern would be to establish a capacity-based threshold of 25,000 metric tons CO<sub>2</sub>e, summed across the facility's production capacities for N<sub>2</sub>O and each fluorinated GHG. We request comment on these alternative approaches." DoD believes that exemptions for R&D should be available to any of the listed source categories covered by Subparts B through JJ and not limited to only Subparts F and N. DoD also believes that R&D exemptions should not be dependent on a capacity-based threshold of 25,000 metric tons CO<sub>2</sub>e because reliable information on emissions of GHG on sources under any particular phase of a R&D program might not be available, will add significant cost to the project to test for GHG emissions, and the emissions will change as the source becomes subject to variations as part of the scope of the R&D program. EPA has allowed exemptions for R&D in other rules, including 40 CFR Subpart EEE, National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors, § 63.1200.b(2), in which EPA exempts hazardous waste combustors that are a research, development, and demonstration source. Another alternative is to provide a case by case mechanism whereby an affected facility could submit a request for a R&D exemption for a particular source category, subject to the Administrator's approval. Provide an exemption for R&D activities for all of the source categories covered by Subparts BB through JJ. In lieu of this, DoD recommends that EPA add a section in the proposed rule to allow an affected facility to request from the Administrator an exemption for R&D activities for any source category covered by Subparts B through JJ. The following language is suggested: "§ 98.xxx Research and development exemption. (a) A facility that is not covered by a research and development exemption in subparts B through JJ of this part may request an exemption to cover a source category under this section for use under an ongoing, planned or anticipated research and development program. Unless otherwise required by the Administrator, a facility requesting such an exemption need only furnish the information required by paragraphs (a)(1) and (a)(2) of this section, along with a description of the recordkeeping and control procedures that will be employed to assure that the source categories are used for purposes consistent with this paragraph. Any facility requesting a research and development exemption must provide the following: (1) A description of the proposed research and development program, including its expected duration. (2) A description of the emission sources for which the exemption is being requested, to include the number of sources within each of the source categories to be affected."

**Response:** See the preamble for the response on research and development under other general rule requirements. The suggested language is unnecessary because the final rule does not require a facility to petition EPA for the research and development exemption.

#### **Commenter Name:** Lorraine Krupa Gershman **Commenter Affiliation:** American Chemistry Council (ACC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0423.2 **Comment Excerpt Number:** 8

**Comment:** A general exemption from the requirements of the reporting rule is requested for research and development (R&D) activities. Emissions from R&D operations are de minimis. Without an exemption, however, they would be subject to significant reporting requirements with only small gains in terms of emission coverage. The rationale for an R&D exemption is clear. The goal of R&D is to be innovative, to try new and different technologies and processes,

perform experiments and invent new products along with the methods to make those products. The procedure of trying something new and failing is an integral and accepted part of R&D. In the R&D environment, we routinely deal with small batches, hand mixing and addition of experimental materials. Burdensome reporting requirements add a further, and unnecessary, hurdle to innovation and experimentation. There is precedence for including an R&D exemption in EPA rules. In Section 1 12(c)(7) of the Clean Air Act amendments of 1990, which sets the framework for national emission standards for hazardous air pollutants (NESHAPs), Congress recognized the uniqueness of R&D facilities and directed EPA to establish a separate source category for research and laboratory facilities. EPA acknowledged that such a separate category was necessary <sup>3</sup>to assure equitable treatment of such facilities.<sup>2</sup> (57 FR 31576, July 16, 1992.) EPA has included the R&D exemption in many final NESHAPs, including the petroleum refinery industry NESHAP, the phosphate fertilizer production plant NESHAP, the printing and publishing industry NESHAP, the wood furniture and woodworking NESHAP, the NESHAP covering organic hazardous pollutants from equipment leaks, the magnetic tape manufacturing NESHAP and the hazardous waste combustor NESHAP. Additionally, in 40 CFR 2.301, a provision dealing with the treatment of confidential information, an exemption is provided for R&D information. The exception for R&D again recognizes that it is critically important for companies to maintain confidential protection of R&D information. An exemption for R&D is consistent with the goals of the proposed GHG reporting rule. The preamble to the proposed rule states that the goals include, among others: 1) balancing rule coverage while excluding small entities; and 2) reducing the reporting burden where feasible. (74 FR 16456.) The intent of the proposed GHG reporting rule appears to focus on large-scale industrial plant operations. Facilities considered to be <sup>3</sup>covered entities' include such broad manufacturing categories as aluminum production, ammonia manufacturing, cement production, and certain sources that emit or produce more than 25,000 tons of carbon dioxide equivalents. Additionally, the proposed rule speaks in terms of emissions associated with <sup>3</sup>any stationary source that produces, or any entity that imports, for sale in interstate commerce. (Emphasis added.) EPA recognizes <sup>3</sup>the potential burden of reporting emissions for smaller sources, (74 FR16473), and describes the proposed rule as affecting <sup>3</sup>only larger facilities, would require reporting of significant emission points only, and would contain simplified reporting where practicable.<sup>(74</sup> FR 16474.) The evaluations underlying the requirements of the reporting rule appear not to have considered the costs and technical feasibility of applying the same reporting requirements to certain R&D operations, which are by nature much smaller in scale and operate in an intermittent manner and/or on a <sup>3</sup>batch' scale. The proposed reporting rule does not contain a general R&D exemption. It only contains an R&D exemption for two of the covered categories, Subpart F – Aluminum Production (which exempts  $^{3}$ experimental cells' as well as R&D process units) and Subpart N – Glass Production. Neither the preamble language nor Subparts F and N does not discuss the criteria used to exempt these R&D sources, nor do the technical support documents for these two categories. It is unclear why R&D exemptions are provided for these two categories but not for all categories listed in the rule. ACC requests that EPA exempt all R&D activities from the reporting rule. The proposed reporting rule defines <sup>3</sup>research and development process unit' as: <sup>3</sup>a process unit whose purpose is to conduct research and development for new processes and products and is not engaged in the manufacture of products for commercial sale, except in a de minimis manner.' (74 FR 16626.) This definition focuses on the <sup>3</sup>process unit' and would appear to cover process units which are dedicated solely to R&D and to units which are used for R&D with only a de minimis amount of production for sale. However, it does not appear to exempt process units which are used for R&D with greater than a de minimis amount of production. ACC requests that all R&D emissions and R&D production (gases produced to be used for further R&D) be exempt from the reporting rule to encourage innovation and experimentation without the burdens of significant reporting obligations. ACC requests that language specifically

be added to the final reporting rule that reads: <sup>3</sup>The requirements of this rule do not include research and development activities. Research and development activities are those activities conducted in process units or at laboratory bench-scale settings whose purpose is to conduct research and development for new processes and products and not for the manufacture of products for commercial sale, except in a de minimis manner.'

**Response:** See the preamble for the response on research and development under other general rule requirements. The final rule language incorporates the commenter's suggested language.

Commenter Name: Rich Raiders Commenter Affiliation: Arkema Inc. Document Control Number: EPA-HQ-OAR-2008-0508-0511.1 Comment Excerpt Number: 26

**Comment:** EPA should also consider the burden of reporting GHG emissions from co-located research and development activities and pilot plants when the host facility is subject to Part 98. In the existing CAA, these non-manufacturing facilities are managed separately from the host facility's activities to avoid a variety of regulatory conflicts, such as the difficulties of accurately calculating research and development emissions. EPA should either adopt the California 3% exemption, sever co-located research and development activities and pilot plants from regulated reporter Part 98 obligations, or place a 25,000 mtpy CO<sub>2</sub>e exemption for co-located research and development and pilot plant activities in Subpart A. Because product innovation is an important part of long term manufacturing success in any manufacturing industry, Part 98 should conform to the existing CAA for this important issue.

**Response:** See the preamble for the response on research and development under other general rule requirements.

**Commenter Name:** Jeffry C. Muffat **Commenter Affiliation:** 3M Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0793.1 **Comment Excerpt Number:** 4

**Comment:** A general exemption from the requirements of the reporting rule is requested for R&D activities. Emissions from R&D operations are de minimis. Without an exemption, however, they would be subject to significant reporting requirements with only small gains in terms of emission coverage. Absent such a general exemption, 3M requests that language specifically be included that exempts R&D activities from the reporting requirements of Subparts L and OO. The rationale for an R&D exemption is clear. The goal of R&D is to be innovative, to try new and different technologies and processes, perform experiments and invent new products along with the methods to make those products. The procedure of trying something new and failing is an integral and accepted part of R&D. In the R&D environment, we routinely deal with small batches, hand mixing and the addition of experimental materials. Burdensome reporting requirements add a further, and unnecessary, hurdle to innovation and experimentation, not to mention the potential of having to meter/monitor several hundreds or thousands of small stacks. There is precedence for including an R&D exemption in EPA rules. In Section 1 12(c)(7) of the Clean Air Act amendments of 1990, which sets the framework for national emission standards for hazardous air pollutants (NESHAPs), Congress recognized the uniqueness of R&D facilities

and directed EPA to establish a separate source category for research and laboratory facilities. EPA acknowledged that such a separate category was necessary "to assure equitable treatment of such facilities." 57 Fed. Reg. 31576. EPA has included the R&D exemption in many final NESHAPs, including the petroleum refinery industry NESHAP, the phosphate fertilizer production plant NESHAP, the printing and publishing industry NESHAP, the wood furniture and woodworking NESHAP, the NESHAP covering organic hazardous pollutants from equipment leaks, the magnetic tape manufacturing NESHAP and the hazardous waste combustor NESHAP. Additionally, in 40 CFR Section 2.301, a provision dealing with the treatment of confidential information, an exemption is provided for R&D information. The exception for R&D again recognizes that it is critically important for companies to maintain confidential protection of R&D information. An exemption for R&D is consistent with the goals of the proposed GHG reporting rule. The preamble to the proposed rule says that the goals include, among others: 1) balancing rule coverage while excluding small entities; and 2) reducing the reporting burden where feasible. 74 Fed. Reg. 16456. The intent of the proposed GHG reporting rule appears to focus on large-scale industrial plant operations. Facilities considered to be covered by the proposed rule include such broad manufacturing categories as aluminum production, ammonia manufacturing, cement production, and certain sources that emit or produce more than 25,000 tons of carbon dioxide equivalents. Additionally, the proposed rule speaks in terms of emissions associated with "any stationary source that produces, or any entity that imports, for sale in interstate commerce." EPA recognizes "the potential burden of reporting emissions for smaller sources", 74 Fed. Reg. 16473, and describes the proposed rule as affecting "only larger facilities, would require reporting of significant emission points only, and would contain simplified reporting where practicable." 74 Fed. Reg. 16474. The evaluations underlying the requirements of the reporting rule would appear to not have considered the costs and technical feasibility of applying the same reporting requirements to certain R&D operations, which are by nature much smaller in scale and that operate in an intermittent manner and/or on a "batch" scale. The proposed reporting rule does not contain a general R&D exemption and only contains an R&D exemption for two of the covered categories, Subpart F – Aluminum Production (which exempts "experimental cells" as well as R&D process units) and Subpart N -Glass Production. The preamble language for the rule in general, for Subpart F or for Subpart N does not contain any discussion of the criteria used to exempt these R&D sources, nor do the technical support documents for these two categories. It is unclear why R&D exemptions are provided for these two categories but not for all categories listed in the rule. Certain 3M R&D operations would be burdened with significant reporting obligations under the proposed rule for extremely small gains in terms of the emissions reported. For example, 3M Center in Maplewood, Minnesota serves as 3M's worldwide headquarters and centralized R&D site. One operation on the site involves research and development on various fluorinated gas products and processes. Extremely small quantities of fluorinated greenhouse gases would be emitted, estimated in 2007 as a typical year to be 2,500 metric tons CO2e. 95-100% of emissions and production would be from R&D activities depending on the year. Because this operation is collocated on the same site with other R&D operations and administrative offices from which stationary fuel combustion unit emissions exceed 25,000 metric tons CO<sub>2</sub>e, the operation arguably would be required to report emissions and production of fluorinated greenhouse gases under proposed Subpart L covering Fluorinated GHG Production and Subpart OO covering Suppliers of Industrial GHGs. Similarly, 3M also conducts research and development at one of its manufacturing facilities. This site is a large manufacturing facility that also is home to a research and development/small-scale fluorinated gas manufacturing facility. The facility operates in a separate building from other operations on the site, and emits fluorinated greenhouse gases from R&D activities as well as from small-scale production activities. This facility also produces fluorinated gases for further R&D purposes at other sites and for

commercial sale/transfer to customers and other down stream users. Equipment or process units in the facility may be dedicated to R&D (no production), may be used primarily for R&D with only de minimis amounts of production, or may be used for R&D but also for production in greater than de minimis amounts. Except for scale, small-scale production equipment is designed in analogous fashion to production equipment. For example, small-scale reactors range from 10 to 20 gallons whereas full-scale factory equipment will typically range from 1000 to 8000 gallons with similar materials of construction and operating ranges. This design similarity enhances the R&D value of the facility due to the inherent scalability for the product and processes developed there. Small-scale production equipment tends to have low utilization which is appropriate to stay agile for changing R&D needs. Total emissions from the facility (emissions associated with R&D and production for sale) were calculated to be approximately 23,400 metric tons CO<sub>2</sub>e in 2008, with the majority of emissions coming from small-scale production activities. It is estimated that over the past eight years, R&D emissions from the facility have averaged approximately 1-2 metric tons CO<sub>2</sub>e. Over the past 9-10 years, we estimate that the total mass produced from our fluorochemical synthesis unit at the facility can approximately be broken down into 50% produced for further R&D purposes and 50% produced for sale or transfer to other 3M operations as an intermediate in the making of a product. Because the facility both emits fluorinated greenhouse gases from R&D and production activities and produces greenhouse gases for further R&D or commercial use, this facility is subject to both Subparts L and OO of the proposed rule. Additionally, the facility is collocated with manufacturing operations on a large single site where stationary combustion sources exceed 25,000 metric tons CO<sub>2</sub>e and where certain other full-scale manufacturing operations may be subject to both proposed Subparts L and OO. EPA recognized the possible need for additional exemptions in the preamble discussion accompanying Subpart OO of the proposed rule, requesting comment on whether there are R&D facilities and/or facilities that do small-scale deliberate production of GHGs: "The requirement that all facilities report would simplify the rule and permit facilities to quickly determine whether or not they must report. The one potential drawback of this requirement is that small-scale production facilities (e.g. for research and development) could be inadvertently required to report their production, even though the quantities produced would be small in both absolute and CO<sub>2</sub>e terms. We are not currently aware of any small-scale deliberate production of N20 or fluorinated GHGs, but we request comment on this issue. These research and development facilities could be specifically exempt from reporting. An alternative approach that would address this concern would be to establish a capacity-based threshold of 25,000 metric tons CO<sub>2</sub>e summed across the facility's production capacities for N20 and each fluorinated GHG. We request comment on these alternative approaches." 74 Fed. Reg. 16580. In response to this request for comment, and as a comment on the GHG reporting rule generally, 3M believes that it is consistent with the rule's intent to have both of the following: 1) an exemption for emissions from R&D activities; and 2) an exemption for small-scale production of GHGs. 3M requests that EPA exempt all R&D activities from the reporting requirements of the proposed rule, or at a minimum, from the requirements of Subparts L and OO. The proposed reporting rule defines "research and development process unit" as "a process unit whose purpose is to conduct research and development for new processes and products and is not engaged in the manufacture of products for commercial sale, except in a de minimis manner." 74 Fed. Reg. 16626. This definition focuses on the "process unit" and would appear to cover process units which are dedicated solely to R&D and to units which are used for R&D with only a de minimis amount of production for sale. However, it does not appear to exempt process units which are used for R&D with greater than a de minimis amount of production. As discussed in detail above, 3M does have facilities that engage in R&D involving GHGs, as well as some that engage in small-scale production involving GHGs. 3M also has process units that sometimes do R&D and sometimes are involved in small-scale production, and

therefore asks that the focus of the exemption change from R&D process units to R&D activities. First, with respect to R&D, unless EPA includes a general R&D exemption for all reporting and recordkeeping requirements, 3M requests that all fluorinated GHG R&D emissions and fluorinated GHG R&D production (gases produced to be used for further R&D) be exempt from the reporting rule to encourage innovation and experimentation without the burdens of significant reporting obligations. As such, the reporting rule should include a provision that allows for the separation of R&D fluorinated gas emissions and R&D production activities from "commercial sale" emissions and production activities, even if the emissions or production for sale are generated from the same process unit. 3M requests that language specifically be added to Section 98.120 and to Section 98.4 10 that reads: "This source category does not include research and development activities. Research and development activities are those activities conducted in process units or laboratory bench-scale units whose purpose is to conduct research and development for new processes and products and not for the manufacture of products for commercial sale." Secondly, to the extent that EPA does not address de minimis emissions and production in a more general sense, and to address the emissions and production from smallscale production activities, 3M requests that EPA establish a threshold of 25,000 metric tons  $CO_2e$ , under which a simplified methodology could be used to calculate emissions. Such a threshold would exempt the small amount of fluorinated gas production and emissions occurring at facilities like 3M Center or at the R&D/small-scale manufacturing facility at our larger manufacturing site from the burdensome mass balance measurements and emission calculation methodology proposed in the rule. The threshold should be based on actual emission calculations rather than a "capacity-based" threshold to make the reduced reporting burden meaningful. Such reduced reporting and monitoring requirements will ensure that the small gains in emissions coverage are adequately balanced against the burden placed on small R&D and small-scale manufacturing operations.

**Response:** See the preamble for the response on research and development under other general rule requirements. Regarding the suggestion that EPA should establish the 25,000 metric tons  $CO_2e$  threshold for fluorinated GHG production, at this time EPA is not going final with the subpart for emissions from fluorinated GHG production. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Sarah B. King **Commenter Affiliation:** DuPont Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0604.1 **Comment Excerpt Number:** 9

**Comment:** Research and development activities, including pilot and demonstration plants, should be exempted from the source category-specific requirements of the reporting. Emissions from R&D operations are de minimis. Without an exemption they would be subject to significant reporting requirements with relatively insignificant gains in terms of emission coverage. Note that regardless of such exemption from source-category reporting, to the extent that the R&D operations on a site add to the general stationary fuel combustion sources on that site, those operations could be required to report as part of the Subpart C (§98.30) reporting requirements for the site. See the American Chemistry Council comments for more details.

**Response:** See the preamble for the response on research and development under other general rule requirements.

### **Commenter Name:** Robert Rouse **Commenter Affiliation:** The Dow Chemical Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0533.1 **Comment Excerpt Number:** 19

**Comment:** An Exemption for R&D Facilities Should be Added to the Rule A general exemption from the requirements of the reporting rule is requested for research and development (R&D) activities. Emissions from R&D operations are de minimis. Without an exemption, however, they would be subject to significant recordkeeping and reporting requirements with only small gains in terms of emission coverage. The rationale for an R&D exemption is clear. The goal of R&D is to be innovative, to try new and different technologies and processes, perform experiments and invent new products along with the methods to make those products. The procedure of trying something new and failing is an integral and accepted part of R&D. There is precedence for including an R&D exemption in EPA rules. In Section 1 12(c)(7) of the Clean Air Act Amendments of 1990, which sets the framework for national emission standards for hazardous air pollutants (NESHAPs), Congress recognized the uniqueness of R&D facilities and directed EPA to establish a separate source category for research and laboratory facilities. EPA acknowledged that such a separate category was necessary "to assure equitable treatment of such facilities." 57 FR 31576. EPA has included the R&D exemption in many final NESHAPs. An exemption for R&D is consistent with the goals of the proposed GHG Reporting Rule. The preamble to the proposed rule says that the goals include, among others: 1) balancing rule coverage while excluding small entities; and 2) reducing the reporting burden where feasible. 74 FR 16456. Dow suggests that language specifically be added to the GHG Reporting Rule that reads: "The requirements of this rule do not include research and development activities. Research and development activities are those activities conducted in process units or at laboratory bench-scale settings whose purpose is to conduct research and development for new processes and products and not for the manufacture of products for commercial sale, except in a de minimis manner."

**Response:** See the preamble for the response on research and development under other general rule requirements.

Commenter Name: Andrew C. Lawrence Commenter Affiliation: Department of Energy (DOE) Document Control Number: EPA-HQ-OAR-2008-0508-0612.1 Comment Excerpt Number: 6

**Comment:** The proposed rule does not include an exemption for research and development (R&D) activities other than for Subpart F, Aluminum production, and Subpart N, Glass production. DOE believes that exemptions for R&D activities should be available to any of the listed source categories covered by Subparts B through JJ and not limited to only Subparts F and N. DOE notes that EPA has allowed exemptions for R&D in other rules, including 40 CFR Subpart EEE, National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors, 3.1200.b(2), in which EPA exempts hazardous waste combustors that are a research, development, and demonstration source. DOE recommends that EPA provide an

exemption for R&D activities for all of the source categories covered by Subparts B through JJ. As a second option, DOE recommends that EPA add a section in the proposed rule to allow an affected facility to request from the Administrator an exemption for R&D activities for any source category covered by Subparts B through JJ. The following language is suggested: "98.xxx Research and development exemption. (a) A facility that is not covered by a research and development exemption in subparts B through JJ of this part may request an exemption to cover a source category under this section for use under an ongoing, planned or anticipated research and development program. Unless otherwise required by the Administrator, a facility requesting such an exemption must furnish the information required by paragraphs (a)(1) and (a)(2) of this section, along with a description of the record-keeping and control procedures that will be employed to assure that the source categories are used for purposes consistent with this paragraph. Any facility requesting a research and development program, including its expected duration. (2) A description of the emission sources for which the exemption is being requested, to include the number of sources within each of the source categories to be affected."

**Response:** See the preamble for the response on research and development under other general rule requirements.

**Commenter Name:** Carol E. Whitman **Commenter Affiliation:** National Rural Electric Cooperative Association (NRECA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0483.1 **Comment Excerpt Number:** 9

**Comment:** §98.2(g) states that: Once a facility or supplier is subject to the requirements of this part, the owners and operators of the facility or supply operation must continue for each year thereafter to comply with all requirements of this part, including the requirement to submit GHG emission reports, even if the facility or supplier does not meet the applicability requirements in paragraph (a) of this section in a future year. We can appreciate the need for consistent yearly reporting for facilities covered by this rule and the potential for problems to arise from sporadic reporting by facilities with emissions that bounce back and forth across the minimum threshold simply due to normal operating fluctuations. However, the rule does need to include a permanent reporting exemption for electricity generation facilities that shut down permanently. Generators should be able to discontinue reporting once they notify EPA that the unit is shut down. These procedures should be consistent with and no more stringent than the reporting of CEMS data by generators under the Clean Air Act. We urge EPA to add this provision.

**Response:** See the preamble for the response on reporting frequency and provisions to cease reporting.

Commenter Name: See Table 1 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0440.1 Comment Excerpt Number: 6

**Comment:** EPA also asserts that the calculation of total emissions for purposes of determining whether a facility exceeds the threshold should not include biogenic  $CO_2$  emissions (e.g., those resulting from the combustion of biofuels). Therefore, these emissions, while accounted for and

reported separately, are not considered in a facility's emissions totals (74 Fed. Reg. 16469). AMI agrees that biofuel combustion emissions should be excluded from the threshold. [Footnote: Many meat industry facilities routinely substitute biofuels (e.g., yellow grease) produced onsite for some portion of the total consumption of higher-priced natural gas and fuel oil.]

**Response:** See response on biomass emissions in Volume 1: Selection of Source Categories to Report and Level of Reporting.

Commenter Name: See Table 11 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0395.1 Comment Excerpt Number: 23

**Comment:** TCFA concurs with EPA's statement, "A facility that is subject to the proposed rule only because of emissions from manure management would also report  $CO_2$ ,  $CH_4$ , and  $N_2O$  emissions from the combustion of supplemental fuel in flares using the methods in proposed 40 CFR part 98, subpart C, but would not be required to report any other combustion emissions." This statement maintains EPA's intent of reporting ONLY those GHG emissions relating to direct emissions from primary manure management system components—those components associated with the stabilization and/or storage of livestock manure.

**Response:** EPA thanks the commenter for their input. EPA concurs that the intent of the rule as pertains to manure management systems is to collect data on GHG emissions associated with the components related to the stabilization or storage of livestock manure.

**Commenter Name:** Robert Rouse **Commenter Affiliation:** The Dow Chemical Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0533.1 **Comment Excerpt Number:** 40

**Comment:** In 98.350, EPA defines a wastewater treatment system as "the collection of all processes that treat or remove pollutants and contaminants... and chemicals from waters released from industrial processes," and further states that the Subpart II source category applies to "onsite wastewater treatment systems at pulp and paper mills, food processing plants, ethanol production plants, petrochemical facilities, and petroleum refining facilities." A few aspects of the definition and its interrelationship with 98.2 are confusing as written and need further clarification as follows: 1. Although EPA has broadly defined the source category, suggesting that all emissions from all wastewater treatment systems that fall under the applicability thresholds of 98.2 are covered under this Subpart, EPA has only provided calculation methodologies for anaerobic systems and oil/water separators; aerobic systems are not included. We recommend that EPA further clarify in 98.350(a) that the source category only includes anaerobic systems and that aerobic wastewater systems are exempted. We also recommend that EPA clarify that the source categories to which this applies are defined elsewhere in 98 as follows: 98.350(a) A wastewater treatment system is the collection of all processes that treat or remove pollutants and contaminants, such as soluble organic matter, suspended solids, pathogenic organisms, and chemicals from waters released from industrial processes. This source category applies to on-site wastewater treatment systems that include anaerobic treatment and that are located at pulp and paper mills, food processing plants, ethanol production plants,

petrochemical facilities, and petroleum refining facilities as defined elsewhere in 98. 2. The applicability portion of 98.350 covers only wastewater treatment systems at certain types of facilities (i.e. pulp and paper mills, food processing plants, ethanol production plants, petrochemical facilities, and petroleum refining facilities). This statement is considerably more limiting than the applicability statements of 98.2(a), which suggests that any facility covered under a subpart of the rule and otherwise meeting the thresholds of 98.2 would need to report wastewater emissions under 98.350. EPA should clarify 98.2 to indicate that reporting under the source category is only required if the facility meets any additional thresholds or applicability statements, and related monitoring, recordkeeping, and verification requirements, of this part apply to the owners and operators of any facility that meets the requirements of either paragraph (a)(1), (a)(2), or (a)(3) of this section and the criteria for each category as defined elsewhere in 98; and any supplier that meets the requirements of paragraph (a)(4) of this section.

**Response:** At this time, EPA is not going final with the wastewater treatment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Gregory A. Wilkins **Commenter Affiliation:** Marathon Oil Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0712.1 **Comment Excerpt Number:** 102

**Comment:** Marathon requests clarification on the definition of facility. Marathon requests clarifying wording showing that co-located facilities that are not listed as a source category, do not meet the combustion threshold, and that are located next to, but are not part of, a regulated facility (assuming that they are owned or operated by the same entity) are not required to submit emissions information as a part of the neighboring regulated facility or on its own. Examples of co-located facilities that would be affected by this include a terminal or pipeline station located next to a refinery. On page 74 FR 16469 of the preamble, EPA states that, "The use of total emissions is necessary because some facilities are comprised of multiple process units or co-located source categories that individually may not be large emitters." Because EPA states "co-located source categories", Marathon assumes that since terminals and pipeline facilities are not listed source categories, even if they are located adjacent to a refinery also owned by Marathon, they would not be required to report.

**Response:** For a facility (as defined in subpart A of the rule), the rule requires reporting from any source categories for which emission calculation methods are provided in the rule. At complex facilities, determining what equipment must be accounted for can require interpretation based on site-specific circumstances. The commenter does not provide sufficient facts to make a determination in the hypothetical case provided. At a petroleum refinery, however, any storage tank at the facility could be covered if under common ownership and control as the refinery operation.

Commenter Name: Jessica S. Steinhilber Commenter Affiliation: Airports Council International North America (ACI-NA) Document Control Number: EPA-HQ-OAR-2008-0508-1063.1 Comment Excerpt Number: 5 **Comment:** EPA's proposed rule calls for facility-wide reporting. Our understanding is that, similar to the requirements for criteria pollutant reporting, the proposed rule would not require an airport to report GHG emissions generated by its tenants, vendors, or other associated operators. Should facility-wide reporting include tenants, vendors, or other operators, it would be costly and time-consuming (if not infeasible) to accurately include the emissions of numerous tenants. Additionally, airports should not be required to report emissions associated with onsite construction activities, including construction equipment and concrete batch plants. ACI-NA supports the reporting of GHG emissions only under direct ownership and control of facility operators.

Response: See the response to comment EPA-HQ-OAR-2008-0508-604.1, excerpt 13.

Commenter Name: Ram K. Singhal Commenter Affiliation: Rubber Manufacturers Association (RMA) Document Control Number: EPA-HQ-OAR-2008-0508-0600 Comment Excerpt Number: 1

**Comment:** Because RMA's members are not among the manufacturing source categories listed in Part 98, Subparts B through JJ and do not supply fuel, GHGs emissions on which they would be required to report if such emissions exceed applicability thresholds would be based only on stationary fuel combustion, provided that the aggregate maximum rated heat input of the stationary fuel combustion units at the facility is 30 mmBtu/hr or greater and the facility emits 25,000 metric tons of CO<sub>2</sub>e or more per year from all "stationary fuel combustion sources." RMA requests that EPA confirm this understanding, and importantly, that the Agency also confirm that if applicability is triggered for such a facility, other incidental GHGs from sources such as refrigeration are not required to be included in order to determine either applicability of the reporting requirements or to be included in the reports themselves.

**Response:** The commenter's interpretation of the applicability provisions appears to be correct, although each facility is responsible for reviewing the rule and determining applicability based on their understanding of their operations. Refer to the response to comment EPA-HQ-OAR-2008-0508-1741, excerpt 9 for clarification on applicability determination. For facilities that must report, emissions reporting is required for only those source categories for which emission calculation methodologies are provided in any subpart of the rule.

**Commenter Name:** Steven D. Meyers **Commenter Affiliation:** General Electric Company (GE) **Document Control Number:** EPA-HQ-OAR-2008-0508-0532.1 **Comment Excerpt Number:** 4

**Comment:** Some of the applicability thresholds for various source categories are confusing. In some cases, sources within certain source categories must report regardless of the quantity of their direct emissions, while other source categories must report only if emissions from a combination of sources within certain source categories exceed 25,000 metric tons. Stationary combustion sources must report if they emit more than 25,000 tons, and sources within some source categories don't have to report at all, even if they emit more 25,000 metric tons, because no calculation methodology has been set in the regulation.

**Response:** Refer to the response to comment EPA-HQ-OAR-2008-0508-1741, excerpt 9 for clarification on applicability determination. See the preamble for more information on thresholds and source categories selected. See also response to comments document Volume 1—Selection of Source Categories.

Commenter Name: Lorraine Krupa Gershman Commenter Affiliation: American Chemistry Council (ACC) Document Control Number: EPA-HQ-OAR-2008-0508-0423.2 Comment Excerpt Number: 18

**Comment:** Section 98.2(a)(3) covers facilities not specifically listed in \$98.2(a)(1) or (2) but whose CO<sub>2</sub>e emissions from stationary combustion are >25MTe/yr and aggregate heat input is >30MMBtu/hr. Those facilities only report stationary source emissions. The provision to report only stationary source emissions should be universal to all reporting entities.

**Response:** The commenter has misunderstood the rule. Reporting is required only for stationary sources. Reporting direct emissions from mobile sources is not required for any facilities subject to the rule. See the response to comments document Volume 1—Selection of Source Categories.

Commenter Name: Mary J. Doyle Commenter Affiliation: BG North America, LLC (BG) Document Control Number: EPA-HQ-OAR-2008-0508-0714.1 Comment Excerpt Number: 7

**Comment:** EPA should better define and clarify certain aspects of the Proposed Rule before making it final. While the Proposed Rule states that it would require only reporting of "significant emissions points," nowhere in this document is this term defined.

**Response:** The intention of the rule is to require reporting from facilities that emit higher levels of greenhouse gas emissions. We appreciate the comment and note that the term "significant emissions points" is not used in the final rule and therefore a definition is unnecessary. A facility is required to report emissions from all source categories at the facility for which calculation methodologies are provided in any subpart of the final rule.

**Commenter Name:** Leslie Sue Ritts **Commenter Affiliation:** National Environmental Development Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0504.1 **Comment Excerpt Number:** 5

**Comment:** NEDA/CAP especially appreciates the clarifications offered in the Work Sheets on the General GHG Reporting Provisions, which make it clear that for non-listed source categories for which subparts are proposed, only combustion sources are included in determining applicability. http://www.epa.gov/climatechange/emissions/downloads/GeneralProvisions.pdf. We urge EPA to include the Tables in this factsheet in the final codified rule. In addition, we recommend that EPA amend the general applicability provisions of Part 98.1 to list units that will automatically be excluded from applicability determinations for all categories of GHG emitting facilities (i.e., not just combustion units, but also facilities covered by subparts B through on a unit-specific basis would be a significant cost for insignificant emissions.

**Response:** For a discussion of guidance and tools, see the preamble discussion on determining applicability.

### Commenter Name: Andrew C. Lawrence Commenter Affiliation: Department of Energy (DOE) Document Control Number: EPA-HQ-OAR-2008-0508-0612.1 Comment Excerpt Number: 7

**Comment:** As stated in 98.2(a)(1) of the proposed rule, any facility that contains any of the source categories listed within that section must report GHG emissions in carbon dioxide equivalent (CO<sub>2</sub>e), following the calculations provided in Subparts B through JJ. In 98.2(a)(2) of the proposed rule, any facility that emits more than 25,000 metric tons of CO<sub>2</sub>e or more per year from stationary fuel combustion units, miscellaneous uses of carbonate, and the source categories listed in section (a)(2) of the subpart must report GHG emissions in  $CO_2e$ , following the calculations provided in Subparts B through JJ. As DOE interprets the rule, if a facility exceeds the threshold identified in 98.2(a)(1) or 25,000 metric tons of CO<sub>2</sub>e for 98.1(a)(2), the facility is required to report GHG emissions in the category that exceeds the threshold value. In addition, GHG emissions from any other category must be reported, even if the applicability threshold(s) for that category were not exceeded. For example, a facility that has CO<sub>2</sub>e emissions greater than 25,000 metric tons from stationary fuel combustion would have to report GHG emissions from onsite electrical power systems, even though the nameplate  $SF_6$  and perfluorocarbon (PFC) capacity is below 17,820 lbs., the applicability threshold for reporting provided in Subpart DD. If this interpretation is correct, DOE suggests that reporting exemptions be provided in each subpart to limit the extent to which insignificant emissions would need reported. Failure to do so would result in extensive data collection activities and quality control programs for minor emissions sources. If this interpretation is incorrect, DOE suggests that the language in 98.2(a) be modified to clarify that GHG emissions need only be reported for the source category in which GHG emissions exceed 25,000 metric tons per year CO<sub>2</sub>e.

**Response:** The commenter's interpretation of the rule appears correct. The rule has been structured so that smaller emission sources are not required to be reported. For example, portable equipment and emergency generators are excluded from the definition of stationary fuel combustion sources. See the preamble for the response on de minimis reporting for small emission points. The example provided refers to the sulfur hexafluoride (SF<sub>6</sub>) from electrical equipment source category. At this time EPA is not going final with the sulfur hexafluoride (SF<sub>6</sub>) from electrical equipment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Marc J. Meteyer Commenter Affiliation: Compressed Gas Association (CGA) Document Control Number: EPA-HQ-OAR-2008-0508-0981.1 Comment Excerpt Number: 32 **Comment:** The reporting threshold, as defined in \$98.2(a)(2) states "Any facility that emits 25,000 metric tons CO<sub>2</sub>e or more per year in combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate, and all source categories that are listed in this paragraph...." It is unclear whether this threshold is meant to incorporate facilities that have both stationary combustion units and fluorinated production processes. The reporting in Subpart L specifically addresses reporting emissions from stationary combustion units, so it can be inferred that this category must also have a stationary combustion source to meet the reporting threshold. It can be interpreted that Fluorinated GHG production facilities without a combustion source would need to be evaluated under Subpart OO instead. Since there appears to be overlap between Subpart L and Subpart OO, it is suggested that the applicability for these two source categories be clearly defined, or that the subparts be combined into one.

**Response:** At this time EPA is not going final with the fluorinated greenhouse gas production subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time. Suppliers of industrial greenhouse gases are distinct from production facilities and are subject to 98.2(a)(4) in the rule.

Commenter Name: John R. Evans Commenter Affiliation: LyondellBasell Industries Document Control Number: EPA-HQ-OAR-2008-0508-0718.1 Comment Excerpt Number: 1

**Comment:** The proposed rule for the reporting of GHG provides a multi-layer approach for determining reporting applicability. LyondellBasell believes this reporting threshold can be significantly abbreviated by simply requiring reporting by all facilities that emit more than 25,000 tons of greenhouse gases, as defined. Proposed language is as follows: "section 98.2 Do I need to report? Any facility that emits 25,000 metric tons CO<sub>2</sub>e or more per year from sources for which calculation methodologies are provided in part 98, subparts B through JJ." This simplified reporting threshold determination would capture at least as many facilities as the existing proposal while, at the same time, removing confusion from the rule.

**Response:** The proposed approach to determining applicability was not changed in the final rule. The requirement that all facilities in certain industries must report was adopted to simplify the applicability determination for several industries. Also, for equity reasons, some industries had recommended that all facilities in their industry be required to report, and this concept was incorporated in the proposed and final rule. See also Preamble Section II discussing thresholds and the response to comments document for reporting thresholds (Vol. 2).

Commenter Name: Skiles W. Boyd Commenter Affiliation: DTE Energy Document Control Number: EPA-HQ-OAR-2008-0508-0606.1 Comment Excerpt Number: 10

**Comment:** Clarification is needed that combustion and fugitive (including venting) emissions are added together to determine whether a facility's 25,000 ton threshold is exceeded and falls subject to reporting. The rule itself is clear albeit complicated but the preamble is misleading. For instance, the preamble does not appear to consider stationary combustion. DTE Energy

recommends EPA make the distinction in the rule and add perhaps a redundant statement in Subpart W that combustion sources must be included in the threshold determination.

**Response:** EPA determined that the rule is sufficiently clear on this point and additional guidance on applicability determinations and reporting requirements can be found in the information sheets and other guidance materials that are or will be posted on the EPA website. Regarding the comment on subpart W, at this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Robert D. Bessette Commenter Affiliation: Council of Industrial Boiler Owners (CIBO) Document Control Number: EPA-HQ-OAR-2008-0508-0513.1 Comment Excerpt Number: 7

**Comment:** This covers facilities not specifically listed in (a)(1) or (2) but whose  $CO_2$  emissions from stationary combustion are >25,000 MTCO<sub>2</sub>e/yr and aggregate heat input is >30 MMBtu/hr. Those facilities report only stationary source emissions. The provision to report only stationary (not portable) source emissions should be universally applied to all reporting entities.

**Response:** EPA exempts portable equipment in the definition of the stationary fuel combustion source category in section 98.30(b)(1). EPA is not aware of the use of portable equipment in other source categories and therefore is not adopting a broad exemption at this time.

**Commenter Name:** David Rich **Commenter Affiliation:** World Resources Institute (WRI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0642.1 **Comment Excerpt Number:** 3

**Comment:** WRI supports EPA's approach of requiring reporting from all facilities in specified sectors, regardless of emissions output in a given year.

**Response:** See the discussion in the proposal and promulgation preamble regarding the selection of the reporting threshold.

Commenter Name: Steven D. Meyers Commenter Affiliation: General Electric Company (GE) Document Control Number: EPA-HQ-OAR-2008-0508-0532.1 Comment Excerpt Number: 10

**Comment:** As an example of the confusing nature of the rule, the following question has been raised within GE concerning the applicability of the stationary source combustion category: Are emissions from biogenic fuels required to be reported as an addition to fossil fuels in determining whether the 25,000 metric ton threshold has been exceeded?

**Response:** Emissions from biomass combustion are not included in the applicability determination, but these emissions are to be reported by facilities required to report under this

rule. See response on biomass emissions in Volume 1: Selection of Source Categories to Report and Level of Reporting.

**Commenter Name:** Willie R. Taylor **Commenter Affiliation:** U.S. Department of the Interior **Document Control Number:** EPA-HQ-OAR-2008-0508-0474.1 **Comment Excerpt Number:** 1

**Comment:** The BLM finds that the proposed rule is unclear as to whether all stationary sources in each category are to perform an initial calculation to determine whether a category falls into the identified threshold of 25,000 metric tons of carbon dioxide (CO2) equivalent. Please clarify the process and procedures that are to be used to determine whether a source category emits 25.000 metric tons of CO2 equivalents.

**Response:** For a description of the steps to determining applicability, see the response to comment EPA-HQ-OAR-2008-0508-1741, excerpt 9. For a discussion of which data to use in determining if a facility meets the 25,000 metric tons/year threshold level, see the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 4 and EPA-HQ-OAR-2008-0508-0489.1, excerpt 6.

Commenter Name: Sarah B. King Commenter Affiliation: DuPont Company Document Control Number: EPA-HQ-OAR-2008-0508-0604.1 Comment Excerpt Number: 15

**Comment:** §98.2(a)(3) covers facilities not specifically listed in (a)(1) or (2) but whose  $CO_2$  emissions from stationary combustion are >25MTe/yr and aggregate heat input is >30MMBtu/hr. Those facilities only report stationary source emissions. The provision to only report stationary source emissions should be universal to all reporting entities so that sources that are mobile do not need to be reported.

**Response:** The reporting rule does not require stationary sources to report emissions from mobile sources.

Commenter Name: Robert Naerebout Commenter Affiliation: Idaho Dairymen's Association, Inc. Document Control Number: EPA-HQ-OAR-2008-0508-0314.1 Comment Excerpt Number: 10

**Comment:** The proposed rule has two separate sets of reporting requirements in its voluminous 818 page preamble and 593 page rules. First presented are the general provisions which require all sectors of the economy to report annual emissions of carbon dioxide (C02), methane (CIL,), nitrogen oxide (N20), sulfur hexafluoride (SF<sub>6</sub>), and other fluorinated gases including nitrogen triflouride (NF1) and hydrofluorinated ethers (HFEs) in terms of carbon dioxide equivalents (C02e), EPA establishes a threshold for each listed economic sector in its illusory attempt to exempt small facilities while mandating larger facilities to report, monitor and record keep, The Clean Air Act mandates major source permitting requirements on emission sources of 250 tons

of any regulated air pollutant To be consistent with the Clean Air Act many smaller sources of GHGs will be required to report. Moreover, sectors of the economy not listed but are apparently still required to comply but their circumstances are unclear. Subsequently presented are the sector-specific reporting requirements, The rulemaking does not clearly notify all sectors of the economy of this reporting obligation.

**Response:** With a careful reading of section 98.2 of the subpart A (General Provisions), a facility can determine if reporting is required. The rule is complex and the commenter is correct that reporters must comply with reporting requirements of subpart A and one or more other subparts, depending on what processes exist at a facility. EPA is planning to conduct an outreach program to help notify potentially affected sources of the existence of the rule and the general reporting requirements. We also have developed and will continue to develop tools to assist facilities in determining if they are subject to the rule and, if so, how to estimate and report emissions. See Volume 9, the response to comments on legal issues, for a discussion on whether this rule triggers other CAA programs.

Commenter Name: Jerry Call Commenter Affiliation: American Foundry Society (AFS) Document Control Number: EPA-HQ-OAR-2008-0508-0356.2 Comment Excerpt Number: 2

**Comment:** Under the proposed regulation, the metal casting industry is not identified as a listed source category for GHG reporting. As a result, a metal casting facility would only have to report its GHG emissions from its stationary fuel combustion sources for the calendar year if: a) the aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 mmBtu/hr or greater, and b) the facility emits 25,000 metric tons of  $CO_2$  equivalent or more from all stationary fuel combustion sources. Proposed 40 CFR §98.2(a)(3).

**Response:** This interpretation appears correct.

**Commenter Name:** Lorraine Krupa Gershman **Commenter Affiliation:** American Chemistry Council (ACC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0423.2 **Comment Excerpt Number:** 17

**Comment:** Section 98.2(a)(1)(i) expands on the definition of electric generating units under the Acid Rain program by including sources <sup>3</sup>... that contain electric generating units that collectively emit 25,000 Te or more per year.' This definition inappropriately groups industrial generation units with electric utility generation facilities. These industrial emissions would be captured in the proposal anyway by sources emitting >25MTe/yr, so it is unnecessary for EPA to include them within the electric generation subset. ACC recommends that EPA delete the portion of the statement <sup>3</sup>or that contain electric generating units that collectively emit 25,000 metric tons  $CO_2e$  or more per year' in the final rule.

**Response:** In response to multiple comments, this clause has been removed in the final rule. See response in Volume 16: Subpart D: Electricity Generation.

# Commenter Name: Jessica S. Steinhilber Commenter Affiliation: Airports Council International North America (ACI-NA) Document Control Number: EPA-HQ-OAR-2008-0508-1063.1 Comment Excerpt Number: 1

**Comment:** Identifying and quantifying the emissions associated with a particular facility can assist in the development of actions to reduce those emissions. Many airports in the U.S. have already undertaken inventories of the GHG emissions associated with their operations. Numerous complexities are associated with the development of an airport inventory. Airport owners and operators contribute a small percentage of the GHG emissions associated with the airport's operations. The largest single contributor is aircraft, with vehicles accessing the airport representing another large portion of the emissions. Airports' ownership and control generally extends to such sources as shuttles, employee vehicles, and facility energy usage, including heating and cooling. While airports lack ownership or control over many of the GHG emission sources associated with the airport, many have included those other sources in their inventories for informational purposes. It must be clearly recognized that airports have little, if any, opportunity to effectuate emission reductions from those sources they do not control. In fact, airports are federally preempted from placing restrictions on aircraft operations. However, airports have felt that including those sources in an airport inventory provides communities and other interested entities with information about the full scope of emissions associated with operations at the airport. It also provides a resource for airports, airlines, other tenants, government agencies, and communities to use in identifying opportunities to work together to reduce emissions from all sources. There should, however, be no connection drawn between the inclusion of non-airport owned and controlled sources within an airport inventory and the responsibility or authority of an airport to reduce emissions from those sources. Airports should not be mandated to report those airport-related emissions they do not own and control.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 13. The fact that an airport or company included specific sources in a previous inventory does not set a precedent under this rule. The requirements of this rule define what must be reported.

Commenter Name: Karyn Andersen Commenter Affiliation: RR Donnelley Document Control Number: EPA-HQ-OAR-2008-0508-0345.1 Comment Excerpt Number: 5

**Comment:** California CARB has communicated they will send this requirement to be filled out and returned by all sites they have identified to be in scope. Will the federal program be similar, or is the onus on each site to self-identify?

**Response:** EPA has not identified a list of all facilities and suppliers to which the rule might apply. Each facility or supplier will have the obligation to determine if the rule applies to them. For a discussion of guidance and tools, see the preamble discussion on determining applicability.

**Commenter Name:** Robert D. Bessette **Commenter Affiliation:** Council of Industrial Boiler Owners (CIBO) **Document Control Number:** EPA-HQ-OAR-2008-0508-0513.1 **Comment Excerpt Number:** 9 **Comment:** The reference for monthly heat value determination in §98.3(d)(4) is incorrect as equation C-9; it should instead reference Equation C-10a. Equation C-9 uses default values (see p16634 for equations).

**Response:** EPA agrees with the commenter. The erroneous sentence has been removed in the final rule to harmonize the paragraph with other changes to the calculation and monitoring methods, so the sentence is no longer relevant.

# Commenter Name: Pamela F. Faggert Commenter Affiliation: Dominion Document Control Number: EPA-HQ-OAR-2008-0508-1741 Comment Excerpt Number: 7

Comment: The proposed rule does not provide "screening mechanisms" or simplified measurement methods that would allow facilities to determine whether they are subject to the reporting obligations. In order to initially determine whether a facility exceeds the threshold for emissions reporting, the proposed rule appears to require an estimation of that facility's emissions using the methodology that would apply to any activity for which a calculation or estimation method is prescribed in the rule. Therefore, facilities could be required to perform extensive new monitoring under the rule in 2010 simply to determine whether the rule applies to them. This of particular concern to the oil and natural gas industry since the proposed rule requires direct measurement of a facility's fugitive emissions using the methods prescribed in Subpart W in order to initially determine whether a given natural gas facility exceeds the threshold for emissions reporting. In its discussion of the implementation schedule for the rule, EPA assumes that many reporting entities already have GHG monitoring capability due to the requirements of other air quality programs. This assumption is not valid for oil and natural gas systems, which have never been subject to extensive direct measurement of fugitive emissions as called for in the proposed Subpart W provisions. Unlike other industrial sectors, oil and natural gas facilities do not have already-installed mechanisms for monitoring and measuring fugitive emissions as called for in the proposed rule: For these facilities, the Subpart W requirements and the task of determining the applicability of the rule to existing facilities represents a significant departure from current practice and will require considerable time and resources. The lack of a screening mechanism undermines the administrative and cost benefits EPA is seeking to achieve by selecting a reporting threshold of 25,000 tons  $CO_2$  equivalent per year. For these reasons, we endorse INGAA's recommendation that EPA consider a capacity-based threshold or "simplified emission calculation tools" that would allow natural gas transmission compression facility operators to easily determine whether the Subpart W reporting requirements apply. Rather than requiring all facilities to undergo the costly process of conducting leak detection of fugitive emissions, the use of a threshold based on capacity or unit size or the use of existing emission factors, documented in GHG emission protocols such as the Greenhouse Gas Emission Estimation Guidelines for Natural Gas Transmission and Storage and the American Petroleum Institute (API) Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Gas Industry (API Compendium) would simplify the applicability determination to minimize the burden of proving that a facility is below the 25,000 tons of CO<sub>2</sub> per year threshold. These initial applicability determination methodologies can be separate from methodologies used for actual reporting, and the applicability assessment could be reevaluated periodically (every 5 years, for example). To the extent EPA has concerns about the accuracy of emission factors, it could

recommend reporters consider, when using estimation estimates, applying a 5 or 10% margin of error in their applicability determination.

**Response:** With respect to EPA providing simplified measurement methods, see the response to comment EPA-HQ-OAR-2008-0508-1142.1, excerpt 2. With respect to the discussion on Subpart W, at this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Bob Dinneen **Commenter Affiliation:** Renewable Fuels Association (RFA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0494.1 **Comment Excerpt Number:** 22

**Comment:** There are several ethanol plants that are capturing  $CO_2$  from the fermentation process and removing these emissions from the atmosphere. The capture and removal of  $CO_2$  produced by fermentation is a net reduction in atmospheric  $CO_2$ , not just a reduction in  $CO_2$  emissions. These facilities should be allowed to count these emissions against their total for determining whether the threshold is met, and they should be included in any reports to EPA.

**Response:** At this time EPA is not going final with the ethanol production subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Marc J. Meteyer Commenter Affiliation: Compressed Gas Association (CGA) Document Control Number: EPA-HQ-OAR-2008-0508-0981.1 Comment Excerpt Number: 31

**Comment:** The definition of this source category is limited to facilities that produce a GHG from any raw material or feedstock chemical, and excludes the reuse or recycling of a fluorinated GHG. Referring to Subpart A, General Provisions, the definition of production is limited to reaction, oxidation, or other chemical or physical methods of transformation. Furthermore, transform is to use and entirely consume (except for trace concentrations) nitrous oxide or fluorinated GHGs in the manufacturing of other chemicals for commercial purposes. Based on these definitions, it is the interpretation of CGA member companies that the purification process does not meet the definition of production or transformation, and this process is not subject to this subpart.

**Response:** At this time EPA is not going final with the fluorinated greenhouse gas production subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Lorraine Krupa Gershman **Commenter Affiliation:** American Chemistry Council (ACC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0423.2 **Comment Excerpt Number:** 116 **Comment:** Section 98.24 1 states that Subpart X is applicable if the facility contains a petrochemical production process and the facility meets the requirements of either §98.2(a)(1) or (2). The second part of this applicability statement in §98.241 is redundant and potentially confusing because §98.2(a)(1) states that the reporting requirements apply to any facility that contains a petrochemical production source category. We therefore recommend that it be clarified or deleted.

**Response:** EPA agrees with the commenter. The text in the final rule has been changed.

**Commenter Name:** Lorraine Krupa Gershman **Commenter Affiliation:** American Chemistry Council (ACC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0423.2 **Comment Excerpt Number:** 147

**Comment:** The applicability portion of \$98.350 covers only wastewater treatment systems at certain types of facilities (i.e. pulp and paper mills, food processing plants, ethanol production plants, petrochemical facilities, and petroleum refining facilities). This statement is considerably more limiting than the applicability statements of \$98.2(a), which suggests that any facility covered under a subpart of the rule and otherwise meeting the thresholds of \$98.2 would need to report wastewater emissions under \$98.350. EPA should clarify \$98.2 to indicate that reporting under the source category is only required if the facility meets any additional thresholds or applicability statements of that Subpart. Our proposed language is below [the phrase "and the criteria for each category as defined elsewhere in this Part" is new language]. "\$98.2(a) The GHG emission reporting requirements, and related monitoring, recordkeeping, and verification requirements of either paragraph (a)(1), (a)(2), or (a)(3) of this section and the criteria for each category as defined elsewhere in this Part" is new language]. "\$98.2(a) The GHG emission reporting requirements, and related monitoring, recordkeeping, and verification requirements of either paragraph (a)(1), (a)(2), or (a)(3) of this section and the criteria for each category as defined of any facility that meets the requirements of either paragraph (a)(1), (a)(2), or (a)(3) of this section and the criteria for each category as defined elsewhere in this Part; and any supplier that meets the requirements of paragraph (a)(4) of this section.

**Response:** At this time EPA is not going final with the wastewater treatment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Lorraine Krupa Gershman Commenter Affiliation: American Chemistry Council (ACC) Document Control Number: EPA-HQ-OAR-2008-0508-0423.2 Comment Excerpt Number: 21

**Comment:** The last sentence of §98.3(d)(4) contains references to equations C-2a and C-9. However, equation C-9 uses the default HHV, not a determined HHV. The correct reference appears to be equation C-10a.

**Response:** EPA thanks the commenter for their input. The erroneous sentence has been removed in the final rule to harmonize the paragraph with other changes to the calculation and monitoring methods, so the sentence is no longer relevant.

# Commenter Name: Reed B. Hitchcock Commenter Affiliation: Asphalt Roofing Manufacturers Association (ARMA) Document Control Number: EPA-HQ-OAR-2008-0508-0794.1 Comment Excerpt Number: 1

**Comment:** The GHG Reporting Proposal requires facilities with stationary fuel combustion sources that emit more than 25,000 metric tons of carbon dioxide equivalent ( $CO_2e$ ) per year to report their GHG emissions, if the aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 mmBtu per hour or greater. EPA also considered a 100,000 metric ton threshold for facilities. ARMA supports this higher threshold. Raising the threshold to 100,000 metric tons would decrease reporting burdens on manufacturers while at the same time still capturing a very high percentage of GHGs emitted in the country. EPA estimates that raising the threshold would halve the number of reporters (from 13,000 to 6,500). At the same time, this higher threshold still would capture 82 percent of estimated national GHG emissions, a high percentage. In addition to reducing calculation and reporting burdens on manufacturers, the 100,000 metric tons threshold would make the size of the registry more manageable for EPA. ARMA also concurs with the arguments found in the comments of the National Association of Manufacturers for changing the threshold to 100,000 metric tons.

**Response:** See the response on selection of thresholds in the preamble and Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions.

Commenter Name: J. P. Cativiela Commenter Affiliation: Dairy Cares Document Control Number: EPA-HQ-OAR-2008-0508-1014.1 Comment Excerpt Number: 14

**Comment:** We agree with the proposed rule language that  $CO_2$  emissions from combustion devices using digester gas should not included in the reporting methodology.

**Response:** EPA thanks the commenter for their input. Emissions from digester gas utilization onsite at a manure management facility is not included. However, emissions from digester gas use at stationary combustion sources at other covered facilities are reported under the rule.

**Commenter Name:** Laurie A. Lehmberg **Commenter Affiliation:** Texas Instruments Incorporated (TI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0682.1 **Comment Excerpt Number:** 14

**Comment:** Section 98.1 states that semiconductor manufacturing facilities with an annual production capacity that exceeds 1080 m2 silicon per year are covered by the reporting rule. It is unclear how production capacity is defined as actual manufacturing levels can fluctuate over time. Also, the rule's applicability should be explicitly for semiconductor fabs, and not assembly/test manufacturing facilities. Some assembly/test facilities could be said to have a capacity greater than 1080 in2 silicon per year (depending on the precise definition) but these facilities are not significant users of fluorinated compounds.

**Response:** At this time EPA is not going final with the electronics manufacturing subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: James M. Bushee Commenter Affiliation: PGC Electricity Committee Document Control Number: EPA-HQ-OAR-2008-0508-0683.1 Comment Excerpt Number: 6

**Comment:** Given the breadth of the reporting requirements and their applicability to many small businesses or less-environmentally sophisticated entities, EPA should consider additional steps to increase parties' compliance flexibility and reduce costs. EPA should recognize that errors are likely to occur – especially in the early years of the program - and therefore reasonably allow parties to submit amendments to their annual reports when an error is discovered, without subjecting such parties to penalties.

**Response:** See the response on making corrections to annual reports in the preamble and Volume 14: Subpart A: Definitions, Incorporation by Reference, and other Subpart A Comment, and also Volume 8: Compliance and Enforcement.

**Commenter Name:** William D. Schrand **Commenter Affiliation:** Southwest Gas Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0417.1 **Comment Excerpt Number:** 3

**Comment:** Clarification should however, be provided to determine whether fugitive emissions from natural gas equipment should be measured and counted to determine whether or not a facility triggers the 25,000 tpy threshold for combustion.

**Response:** At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Michael Bradley **Commenter Affiliation:** The Clean Energy Group (CEG) **Document Control Number:** EPA-HQ-OAR-2008-0508-0479.1 **Comment Excerpt Number:** 27

**Comment:** Under the proposed rule, facilities would be required to report emissions from stationary combustion sources if the facility emitted 25,000 metric tons of  $CO_2e$ . If the maximum rated heat input capacity for all stationary fuel combustion equipment is less than 30 million British thermal units (Btu) per hour, the facility would be presumed to emit less than 25,000 metric tons of  $CO_2e$  and the facility would not have to calculate or report emissions. However, we request clarification for the unlikely but potential situation where the heat input is just under the Btu per hour threshold but the facility has the potential to emit HFC, SF<sub>6</sub>, or other greenhouse gases. Would potential emissions of these other gases require reporting? Clean Energy Group companies are currently assessing the applicability of this source category to their

**Response:** The 30 million Btu per hour threshold applies only to facilities with emissions from stationary fuel combustion and no other source categories covered by the rule. Therefore, in the scenario described by the commenter, the 30 million Btu per hour threshold would not apply, and all GHG emissions and source categories would be assessed to determine applicability. In the final rule, the general stationary fuel combustion source category excludes portable equipment, emergency generators, or emergency equipment, as defined in §98.6.

**Commenter Name:** Tim Higgs **Commenter Affiliation:** Intel Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0759.1 **Comment Excerpt Number:** 10

**Comment:** Applicability Threshold Must be Clarified Section 98.1 states that semiconductor manufacturing facilities with an annual production capacity that exceeds 1080 m2 silicon per year are covered by the reporting rule. It is unclear how production capacity is defined as actual manufacturing levels can fluctuate year by year. Also, the applicability should be explicitly for semiconductor fabs, and not assembly/test manufacturing facilities. Some assembly/test facilities could be said to have a capacity greater than 1080 m2 silicon per year (depending on the precise definition) but these facilities are not significant users of fluorinated compounds.

**Response:** At this time EPA is not going final with the electronics manufacturing subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Michael Bradley **Commenter Affiliation:** The Clean Energy Group (CEG) **Document Control Number:** EPA-HQ-OAR-2008-0508-0479.1 **Comment Excerpt Number:** 17

**Comment:** EPA is also proposing that a reporting facility would be required to report greenhouse gas emissions from all sources in any source category for which calculation methodologies are provided in the proposed rule, 40 CFR part 98, subparts B through JJ. The Clean Energy Group requests clarification on the specific emissions reporting requirements for electric generating sources in addition to the stationary combustion provisions. For example, would the facility be required to report smaller combustion sources on site or SF 6 emissions from co-located. switchyards if under the same ownership control? What if the smaller combustion sources or SF<sub>6</sub> sources are on site but owned by a separate entity, or are later sold to a separate entity?

**Response:** Facilities with electricity generating units, including those subject to the Acid Rain Program, would report emissions from all combustion sources that are subject to subpart C of the rule and from all sources in any source category for which calculation methodologies are provided in the proposed rule. If an emitting unit is not under the common control of the same

party, then that unit would be considered to be a separate facility. Facilities not under common control or ownership are considered different facilities. At this time EPA is not going final with the  $SF_6$  from electrical equipment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Sarah B. King Commenter Affiliation: DuPont Company Document Control Number: EPA-HQ-OAR-2008-0508-0604.1 Comment Excerpt Number: 14

**Comment:** In §98.2(a)(1)(i), DuPont recommends that EPA delete the portion of the statement "or that contain electric generating units that collectively emit 25,000 metric tons  $CO_2e$  or more per year." This definition is broader than just Acid Rain units and inappropriately groups industrial generation units with electric utility generation facilities. These combustion related industrial  $CO_2$  emissions would be captured in the proposal by sources emitting >25MTe/yr, so there is no logical reason for EPA to include them within the electric generation subset.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0381.1, excerpt 9.

Commenter Name: Paul Dubenetzky Commenter Affiliation: KERAMIDA Inc. Document Control Number: EPA-HQ-OAR-2008-0508-0419.1 Comment Excerpt Number: 8

**Comment:** Emissions calculations are inherently fraught with issues regarding accuracy, precision, and significant figures required for reporting. The proposed rule's general applicability threshold is 25,000 metric tons of annual  $CO_2e$  emissions. That sets up a dynamic of applicability being defined in terms of two significant figures, the emissions calculation methodology providing 2 to 4 significant figures, and general expectation that the rule will require reporting at least to the nearest metric ton. Setting aside mathematical conventions, the U.S. EPA should specifically establish by rule whether the reporting requirement is to the nearest whole metric ton, or some other specification (40 CFR98.3(c), 74 FR 16614).

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0647.1, excerpt 16 in the comment response document on Subpart A: Content of Annual Report.

# Commenter Name: Leslie Riegle Commenter Affiliation: American Association of Airport Executives (AAAE) Document Control Number: EPA-HQ-OAR-2008-0508-1574 Comment Excerpt Number: 1

**Comment:** If this proposed rule is finalized in its current form it is likely to directly affect a number of airports in the United States primarily in the area of electricity generation, and heating/cooling. Many complexities exist within an airport structure. These complexities would make this proposed rule very difficult for airports in several ways, as it would rely on Clear Air Act permitting principles to determine what sources need to be included in the emissions

assessment. This would include all sources on the property that are under common ownership or common control. Therefore all airport-owned and controlled stationary sources on an airport property would be assessed together. Airports have various tenants that have different air quality permits, and would likely be treated as individual facilities under this proposed rule. Airports currently do not have access to the information kept by various tenants on their vehicles/machinery, and it is our belief they should be treated separately. Additionally, it must be clearly recognized that airports have little, if any, opportunity to effectuate emission reductions from those sources they do not control. The aviation industry is unique, and should be treated as such. A Guidebook was produced April 2009, by the Airport Cooperative Research Program (ACRP) to address this issue. This Guidebook provides a framework for identifying and quantifying specific components of contributions to GHG emissions by the aviation community, and provides appropriate recommendations regarding methodologies for accounting for various emissions sources, the scope of emissions to include, and how to avoid redundancies across the industry. AAAE feels this Guidebook is a good resource for airports and its approach should be considered.

Response: See the response to comment EPA-HQ-OAR-2008-0508-604.1, excerpt 13.

Commenter Name: Rich Raiders Commenter Affiliation: Arkema Inc. Document Control Number: EPA-HQ-OAR-2008-0508-0511.1 Comment Excerpt Number: 10

**Comment:** 1. Relocate § 98.2(a)(2)(v), the fluorinated GHG source category, from a threshold source category, to § 98.2(a)(1)(xix), an "all-in" source category. 2. Remove the citation to 2.14 million metric tons in § 98.2(a)(1)(ix). 3. Revise § 98.2(a)(4)(v)(B) to include all importers of industrial GHG gases. 4. Revise § 98.2(a)(4)(v)(C) to include all exporters of non-ODS industrial GHG gases: "Exporters of industrial greenhouse gases and exporters of articles containing industrial greenhouse gases with total bulk exports that exceed 25,000 metric tons  $CO_2e$  per year.

**Response:** The final rule retains the applicability thresholds mentioned by the commenter. The rationale for the thresholds for each of these source categories was explained in the preamble to the proposed rule. The commenter offered no reasons for why the threshold analyses were not valid, posing only that removing thresholds would add only about 100 additional reporters. We do not concur with this rationale. The reason for establishing these thresholds is to avoid creating burdensome reporting requirements for low-emitting facilities and for importers and exporters of very small volumes of product. For further discussion, see the preamble for the response on thresholds.

**Commenter Name:** Steven D. Meyers **Commenter Affiliation:** General Electric Company (GE) **Document Control Number:** EPA-HQ-OAR-2008-0508-0532.1 **Comment Excerpt Number:** 9

**Comment:** As an example of the confusing nature of the rule, the following question has been raised within GE concerning the applicability of the stationary source combustion category: Are

emissions from all fuel combustion sources required to be reported even if they are not associated with the source category that meets a reporting threshold?

**Response:** If a facility includes a source category covered under 40 CFR 98.2(a)(1) or (a)(2), then the facility must report emissions as specified under subpart C for all stationary combustion sources at the facility, even if the stationary combustion sources are not associated with the source category covered under 40 CFR 98.2(a)(1) or (a)(2).

Commenter Name: See Table 7 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0679.1 Comment Excerpt Number: 13

**Comment:** "(a) The GHG emissions reporting requirements, and related monitoring, recordkeeping, and verification requirements, of this part apply to the owners and operators of any facility that meets the requirements of either paragraph (a)(1), (a)(2), or (a)(3) of this section; and any supplier that meets the requirements of paragraph (a)(4) of this section..." (74 FR 68, page 16612) and it goes on to list the source categories that are subject to reporting and the respective subparts and applicability thresholds. API Comments The section cited above is titled in the proposed MRR, "Do I need to report?" API and its members have reviewed the information provided by EPA within the context of typical industry business arrangements and how these various permutations would be implemented in practice. Aside from the legal construct, different business structure of ownership and operations also has implications on data availability and the ability to monitor and certify applicable GHG emissions. Two examples out of the many permutations where 'owners' and 'operators' might lead to different reporting obligations, a) Facilities that are co-located on a common site, but under different fractional ownership and different operational control, and b) Captive operations, within a host site, which are neither owned nor operated by the overall facility owner/operator. API contends that the demarcation of a "reporter" is the one who has operational control. EPA says that "operational control" (see footnote on page 16592) is defined as "having the full authority to introduce and implement operational, environmental, health and safety policies." This definition is consistent with the API/IPIECA Petroleum Industry Greenhouse Gas Reporting Guidelines. This interpretation also follows the definition in California's AB32 program, which states "Operational Control' for a facility subject to this article means the authority to introduce and implement operating, environmental, health and safety policies. In any circumstance where this authority is shared among multiple entities, the entity holding the permit to operate from the local air pollution control district or air quality management district is considered to have operational control for purposes of this article." API recommends that EPA include California's definition of operational control in the final MRR to minimize confusion and ascertain proper determination of reporting obligations. Additionally, API recommends that EPA exempt from the rule's requirements passive owners and other entities that have no operational connections to the facility with reporting obligations. For example, EPA should adopt an exemption similar to the TRI program for certain owners of leased property. In that program, "[t]he owner of a covered facility is not subject to reporting . . . if such owner's only interest in the facility is ownership of the real estate upon which the facility is operated." See 40 C.F.R. § 372.38(e). At a minimum, EPA should include such an exemption in this rule. API also requests an opportunity to further discuss with EPA additional classes of owners or operators that are appropriate for exemption from the rule's requirements.

**Response:** In response to the comment on co-located and fractional ownership, see the response to EPA-HQ-OAR-2008-0508-0604.1, excerpt 13. The definition of a facility encompasses all equipment that is under common ownership "or" control. Based on the commenter's description, it appears that the equipment is part of a single facility because of the common ownership by one party. EPA recognizes that each situation is different and, in making any interpretational findings, EPA will consider the facts of each situation on a case-by-case basis. The rule does not include a definition of "operational control," because EPA determined that a definition is unnecessary. The definition of operational control in AB 32 may be appropriate for California, but may not be suitable for all circumstances. If issues arise, EPA will use the same principles to determine owners or operators as are applied to other Clean Air Act programs. Under the final GHG reporting rule, owners and operators of facilities are required to designate a representative who is responsible for reporting emissions. "Owner" and "operator" are both defined in the rule. In situations of complex ownership patterns, owners and operators have the flexibility, through the certificate of representation required by the rule, to designate the accountable owners and operators. This designation, however, does not necessarily limit the liability defined in the rule by the definition of owner and operator. In response to the comment on passive owners, refer to the definition of owner. "Owner means any person who has legal or equitable title to, has a leasehold interest in, or control of a facility or supplier, except a person whose legal or equitable title to or leasehold interest in the facility or supplier arises solely because the person is a limited partner in a partnership that has legal or equitable title to, has a leasehold interest in, or control of the facility or supplier shall not be considered an "owner" of the facility or supplier."

EPA determined that it is not appropriate to change the definition of facility to resolve complex owner and operator relationships. In fact, EPA does not take a position on those issues and provides reporters the flexibility to determine an appropriate relationship through the choice of a Designated Representative. The owners and operators themselves can determine who has relevant ownership and control, and is therefore accountable for meeting the requirements of the rule. This accountability is established through execution of the documents of agreement and the certificate of representation. For more information about the Designated Representative please see section V of the preamble, 98.4 of Part 98 and volume 11 of the response to comments document. For more information about EPA's decision to require facility level reporting please see section II of the preamble and the relevant response to comments.

#### Commenter Name: See Table 3 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0433.2 Comment Excerpt Number: 61

**Comment:** Wording showing that co- located facilities that are not listed as a source category, even if owned or operated by the same entity, and that are located next to a facility subject to this rule, are not required to submit emissions information as part of the neighboring regulated facility or on its own is needed. This is all assuming that this individual facility would not independently be required under the rule to report GHG emissions. Examples of co- located facilities that would be affected by this include terminals located next to a refinery or a pipeline station. We also request clarifying language on facilities owned and/or operated by different parties, or have two different parties that own a percentage of equity in a regulated facility. EPA should state in the rule that either owner or operator of the regulated facility can submit the required information, and for equity shared facilities.

**Response:** In the example provided, terminals located next to a refinery or pipeline station would be considered to be single facility, if owned or operated by the same individuals. If an emitting unit is not under the common control of the same party, then that unit would be considered to be a separate facility. Facilities not under common control or ownership are considered different facilities. Regarding equity-shared facilities, EPA recognizes the facilities can have complex ownership patterns. In some cases, minority owners may hold a small percentage of share in the company and have no part in the routine operation of the facility. For this reason, the rule provides that reports can be certified and submitted by a designated representative of the owners and operators. Under section 98.4 of the rule, a certificate of representation must be submitted to EPA to authorize the designated representative to act on behalf of the owners and operators. Nothing in the rule says that the certificate must list all of the legal owners of the facility. In situations of limited partners, the certificate can list the relevant set of owners and operators that are accountable for the facility or supplier. See also the response to EPA-HQ-OAR-2008-0508-0679.1, excerpt 13.

Commenter Name: Pamela F. Faggert Commenter Affiliation: Dominion Document Control Number: EPA-HQ-OAR-2008-0508-1741 Comment Excerpt Number: 10

**Comment:** Once it has been determined that a facility triggers reporting requirements, there is a broad requirement for a facility to report emissions from all activities at the facility for which a reporting methodology has been proposed under this rulemaking even if emissions from such an activity are insignificant or if the proposed measurement and/or emission estimate methods are not readily applicable to a particular facility-related activity. For example, the requirement to monitor, measure and report methane emissions (using the methodology specified in Subpart HH) from conventional large, municipal or commercial landfills triggers a similar requirement for coal-fired electric generating facilities to report methane emissions from onsite landfills. This requirement is not reasonable since coal ash and oil ash do not produce much methane and any GHG emissions from an onsite landfill will be a very small, insignificant contribution to the facility's overall GHG footprint. This would also apply to wastewater treatment typically found at electric generating power stations. For this reason, EPA should provide confirmation in the rule that ash landfills and wastewater treatment activities at power stations are not subject to reporting, or should provide exemptions based on size.

**Response:** At this time EPA is not going final with the portion of 40 CFR part 98, subpart HH (Landfills) that addresses industrial landfills nor 40 CFR part 98, subpart II (Wastewater Treatment). As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on subpart II or industrial landfills under subpart HH at this time.

**Commenter Name:** Benjamin Brandes **Commenter Affiliation:** National Mining Association (NMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0466.1 **Comment Excerpt Number:** 9

**Comment:** In addition to the reporting exemption provided for stationary fuel combustion units that operate under a maximum aggregate heat input capacity of 30 million British thermal units

per hour (mmBtu/hr), EPA should consider establishing exemptions for certain portable and stationary emissions units, as well as other small sources (e.g., small wastewater treatment facilities and landfills at mining operations, etc.), using approaches similar to those adopted by some states during the permitting process for criteria pollutants. Developing a list of insignificant activities will allow facilities to avoid the distractions and expense associated with trying to quantify heat input values and emissions for sources emitting minor amounts of GHG and allow them to focus their efforts on stationary sources that are of potential significance.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0380.1, excerpt 25.

Commenter Name: Lauren E. Freeman Commenter Affiliation: Hunton & Williams LLP Document Control Number: EPA-HQ-OAR-2008-0508-0493.1 Comment Excerpt Number: 5

**Comment:** With respect to applicability determinations, as UARG understands the proposal, owners and operators are to determine applicability of this rule to their facilities by estimating 2010 actual emissions with data collected in 2010 using the methodology that would apply to that facility under the proposed rule, if it applied. Proposed § 98.2(b)(2), for example, states that stationary combustion units may use "any appropriate method" specified in § 98.33(a) to calculate annual emissions for applicability purposes. If by "appropriate," EPA means something other than the methodology that would apply if the unit was covered under the rule, EPA should make that clear. Facilities that determine they are subject to the rule would report annual emissions by the deadline and those that determine they are not subject would not report. For subsequent years, existing facilities would only be required to re-evaluate applicability if there is a change to the facility (e.g., a process modification, increase in hours or production, change in fuel or raw material, or addition of equipment) that could cause applicability to change. Proposed § 98.2(f). New or changed facilities must evaluate emissions in their first year of operation or change to determine applicability. UARG generally supports EPA's proposal under § 98.2(f) not to require any reporting in advance of 2011 and not to require any reporting by facilities that determine based on 2010 data that they do not meet the applicability requirements of the rule. For new facilities, or those that become subject as a result of a change, UARG assumes that the facility would report for the first year only if actual annual emissions for the new or changed unit exceeded the threshold. If EPA intended applicability to be based upon extrapolation of data to estimate annual emissions for the new unit or the changed unit following the change, EPA needs to make that clear.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 4.

# 2. **REPORTING SCHEDULE**

**Commenter Name:** Gregory M. Adams **Commenter Affiliation:** Sanitation Districts of Los Angeles County **Document Control Number:** EPA-HQ-OAR-2008-0508-0710.1 **Comment Excerpt Number:** 9 **Comment:** To require CEMS to be installed by January 1, 2011 (for Tier 4 facilities like those that combust municipal solid waste) may be too aggressive given the additional complexities of soliciting competitive bids, purchasing, installation, calibration, verification and final permitting of the CEMS. This is especially true for facilities in the Title V program where the permitting would have to be routed through EPA and may require public noticing and commenting. We ask that this condition be relaxed by one year, particularly for facilities with complex Title V permits.

**Response:** See Section III.C of the preamble for a discussion changes made to the requirements regarding use of CEMs in the final rule.

**Commenter Name:** Benjamin Brandes **Commenter Affiliation:** National Mining Association (NMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0466.1 **Comment Excerpt Number:** 4

**Comment:** NMA does not support the proposed reporting date of March 31 each year because that date coincides with the reporting deadline of other federal programs. Generally, the same individuals at NMA member companies are responsible for reporting in compliance with other regulatory programs. Requiring reporting on the same date as other programs would impose unnecessary burdens on those individuals within affected industries. NMA recommends that EPA move any reporting deadline under this proposal to the second quarter.

**Response:**, See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Stephen E. Woock Commenter Affiliation: Weyerhaeuser Company Document Control Number: EPA-HQ-OAR-2008-0508-0451.1 Comment Excerpt Number: 17

**Comment:** EPA proposes at §98.3(b) that each annual report be delivered by March 31 of the year following data collection. Weyerhaeuser urges EPA to consider resetting this to a reporting date in the 3rd quarter of the year. Our experience with GHG data collection, calculations and internal verifications leads us to appreciate the need for additional time to accomplish the task necessary to do the reporting accurately. As proposed we believe the schedule will create unnecessary disruption and burden in many cases. We also note the data is not time sensitive from an environmental impacts aspect since the GHG emissions are significant from a global mixing process perspective and timeframe, not a local or acute health perspective. Similarly, with regards to future regulatory caps or other reduction programs, setting a first quarter reporting deadlines to accommodate the data collection and reporting, as does the TRI program. We believe it would cause no impact in the program to move the reporting date.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. For a discussion of our reasons for developing the rule and the urgency to collect data in a timely manner, see Section II.G of the preamble and Volume 9 (Legal Issues) of this document.

**Commenter Name:** Steven D. Meyers **Commenter Affiliation:** General Electric Company (GE) **Document Control Number:** EPA-HQ-OAR-2008-0508-0532.1 **Comment Excerpt Number:** 17

**Comment:** The collection, calculation, quality assurance, certification and reporting of GHG data is often a detailed and complex process for a large industrial site that has many individual GHG emission sources, particularly if many fuel combustion sources need to be reported individually and several emission source categories are present. Completion of all of these activities by March 31st as proposed by EPA is not practicable and should be changed to April 30th. First of all, many utilities do not bill on a calendar month basis. In addition, there is often a delay of a month before the utility bills the customer. Therefore, if a utility is billing on a mid to late month basis, a site may not receive its final invoice until late February. In addition, the important effort to ensure that the data is of the highest quality and appropriate for certification will take time. GE will expect our reporting sites to perform extensive quality assurance reviews with corporate oversight to assure that data is accurate. In some cases, the company may conduct additional reviews of the data. Finally, data can only be entered into the electronic reporting tool after all of these activities are completed. Additional quality assurance reviews will be needed after data entry to assure that the data entry process has been completed accurately.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: See Table 1 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0440.1 Comment Excerpt Number: 17

**Comment:** EPA concluded that annual emissions reporting is sufficient for policy development and is consistent with other existing mandatory and voluntary GHG reporting programs at the State and Federal levels. The agency cautioned, however, that as future policies develop it may be necessary to reconsider the reporting frequency and require more or less frequent reporting (e.g., quarterly reporting under future programs or policy initiatives, particularly if regulatory in nature such as a cap-and-trade program). To that end, for the meat industry, annual reporting is more than adequate for a period that would depend on the emissions level.

**Response:** EPA has retained annual reporting in the final rule. EPA is not going final with subpart M (Food Processing). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart M at this time.

Commenter Name: Nancy N. Young Commenter Affiliation: Air Transport Association of America, Inc. (ATA) Document Control Number: EPA-HQ-OAR-2008-0508-0522.1 Comment Excerpt Number: 16 **Comment:** ATA also supports EPA's proposal that reporting be performed on an annual basis. More frequent reporting will not serve any meaningful policy objective, and would impose problematic and unwieldy administrative and resource burdens on the regulated community, given the scope of the reporting scheme and its novelty.

**Response:** EPA has retained annual reporting in the final rule.

**Commenter Name:** Leslie Sue Ritts **Commenter Affiliation:** National Environmental Development Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0504.1 **Comment Excerpt Number:** 14

**Comment:** The proposal would require initial submission of GHG emissions reports on or before March 31, 2009. We urge EPA, however, to provide five months instead of three months for reports to be made to the Agency. Three months are likely to be too short to validate information, correct data if necessary, and certify the emissions information. Furthermore, there are typically several other reports due during this same time frame, such as quarterly emission or deviation reports, under Title V of the CAA, as well as annual state emission inventory reports, etc., making the submission of a GHG inventory report at the same time an avoidable burden. On the other hand, the next logical period would be six months or June 30th for submission and our members believe that it would be more appropriate and frankly easier for them to undertake this responsibility separately from their semi-annual Title V reporting obligations. Therefore, NEDA/CAP recommends such reports should be submitted no later than May 31, annually, beginning in the year 2012, or a year following the effective date of the reporting requirements whichever occurs first. In addition, as we urged above, facilities should be able to submit a negative declaration or negative certification if a facility's emissions are less than the applicability threshold. If emissions remain below the thresholds for a three year period, the facility should be allowed to exit the reporting program.

**Response:** For the response to the comment regarding the March 31st reporting deadline, see the preamble (Section II.J). . For the response on the initial reporting year, see the preamble (Section II.G). For the response to the comment regarding the "once-in-always-in" provisions, see the preamble response on frequency and provisions to cease reporting.

Commenter Name: Charlie Burd and Nicholas DeMarco Commenter Affiliation: Independent Oil and Gas Association of West Virginia (IOGA-WV) and West Virginia and Natural Gas Association (WVONGA) Document Control Number: EPA-HQ-OAR-2008-0508-0516.1 Comment Excerpt Number: 13

**Comment:** We believe that the proposed March 31 reporting deadline is extremely burdensome as the majority of other environmental reporting deadlines also fall within the first quarter of the year, including: Title V semiannual monitoring reports and annual certifications under the Clean Air Act; quarterly deviation reports under the Clean Air Act; Discharge Monitoring Reports under the Clean Water Act; and Tier II reports under the Emergency Preparedness and Community Right-to-Know Act. The WV Associations request that EPA consider changing its proposed March 31 deadline for annual reporting to June 30. A June 30th submission deadline

would help prevent GHG reporting obligations from interfering with these existing reporting requirements.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

## **Commenter Name:** Gary Moore **Commenter Affiliation:** Pensacola Plant of Ascend Performance Materials LLC **Document Control Number:** EPA-HQ-OAR-2008-0508-0366.1 **Comment Excerpt Number:** 20

**Comment:** As the same personnel who will prepare these reports are also involved in preparing other EPA mandated reports (annual Title V certifications, annual emission reports, etc.), we propose that the report due date be moved from March 31 to July 1 of each year. While this corresponds to the due date of the SARA 313 TRI reporting, we feel that this allows sufficient time for report preparation.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Stephen E. Woock Commenter Affiliation: Weyerhaeuser Company Document Control Number: EPA-HQ-OAR-2008-0508-0451.1 Comment Excerpt Number: 12

**Comment:** Weyerhaeuser agrees with and supports EPA's proposal for annual reporting of GHG emissions. Annual reporting is the most appropriate reporting schedule for this type of emission to air, where there is no local or short-term impact anticipated. It is consistent with other GHG inventory programs (e.g. Annex I countries in the United Nations Framework Convention on Climate Change report annually) and inventory-focused environmental media emission reporting programs in the US, e.g. the Toxic Release Inventory (TRI). There also would accrue no benefits from more frequent reporting (e.g. quarterly) with regard to data quality, which includes elements such as data accuracy or QA/QC activities. Consequently, the accuracy of the calculated GHG emissions would not improve if reported more frequently. A more frequent reporting schedule would impose a burdensome, unnecessary and costly paperwork exercise on the reporters. Also, because EPA's proposed Tier 1, 2 and 3 calculation methodologies require direct measurement of the fuel usage, and in some cases fuel testing, the annual reporting time frame will allow facilities to properly conduct these activities (including all of the associated QA/QC procedures), as well as provide the necessary time to perform the calculations. In its proposed rule preamble EPA suggests that future GHG regulatory programs, such as a cap-andtrade structure similar to the Acid Rain Program, might require more frequent (e.g. quarterly) reporting. While Weyerhaeuser will evaluate and comment on the merits of any such proposed rule when it is proposed, we note that EPA must be suggesting future quarterly reporting for all covered facilities in a cap-and-trade program in deference to that existing requirement for electric utility generating units in the Acid Rain and CAIR programs and other industry in the NOx SIP Call program. We suggest that EPA should not consider bringing all other facilities into a frequent reporting requirement without understanding the cost-benefit aspects of imposing such a requirement. There are far more facilities outside of those programs that are expected to be within this GHG reporting rule.

**Response:** EPA has retained annual reporting in the final rule.

Commenter Name: See Table 3 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0433.1 Comment Excerpt Number: 3

**Comment:** A biennial reporting requirement will reduce the reporting burden and provide industry with much needed time to ensure data quality assurance for future submittals.

**Response:** EPA has retained annual reporting in the final rule. In deciding on the frequency of reporting, EPA balanced the burden of annual reporting against ensuring that data of sufficient quality and quantity are collected in a timely manner to support current and future policy decisions and regulatory program development. Various commenters recommended reporting should be less frequent (e.g., biennial). Some suggested data be reported for a single year and additional reporting be required only if plant changes resulted in significant increases in emissions (e.g., 25%). EPA determined that allowing facilities to report emissions for single year or once every two or three years would not provide EPA with sufficient data for the timely analysis and/or development of new regulations or programs under the Clean Air Act. Previous experience with other CAA programs has shown that emissions data from a single year is not always representative of normal operations, and hence emissions, for specific facilities. For these reasons, we determined that reporting with biennial or longer frequency or allowing facilities to report emissions only when emissions increase significantly would not meet our needs.

**Commenter Name:** Bob Dinneen **Commenter Affiliation:** Renewable Fuels Association (RFA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0494.1 **Comment Excerpt Number:** 10

**Comment:** For any final rule, EPA should at least move to biennial reporting, give facilities at least six months to prepare the reports for the prior year, and include a sunset provision, particularly as climate change policies begin to be implemented. In the alternative, EPA should require annual reports for a limited period of time, such as three years, which is sufficient to establish a baseline to be used against future climate change policy.

**Response:** For the response to the comment on the reporting deadline, see the preamble (Section II.J) for the response on the selection of the reporting deadline. For the response to the comment on biennial reporting, see the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3. For the response to the comment on the duration of the program, see the response to comment EPA-HQ-OAR-2008-0508-0712.1, excerpt 7 in the comment response document titled "Initial Year of Reporting, Duration of the Reporting Program, and Provisions to Cease Reporting."

# **Commenter Name:** Angela Burckhalter **Commenter Affiliation:** Oklahoma Independent Petroleum Association (OIPA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0386.1 **Comment Excerpt Number:** 9

**Comment:** EPA proposes annual reports be submitted by March 31 each year; however, this overlaps with many reporting requirements (e.g. SARA Title III, Tier II reports). We request EPA change the GHG reporting date from March 31 to July 1 to allow industry (especially small businesses) time to adequately address all their reporting requirements.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Willie R. Taylor **Commenter Affiliation:** U.S. Department of the Interior **Document Control Number:** EPA-HQ-OAR-2008-0508-0474.1 **Comment Excerpt Number:** 9

**Comment:** The MMS does not support a March 31 reporting date. This would provide insufficient time for quality checks, emission calculations, and generating a report. A June 30 date would be more reasonable.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Kathleen M. Sgamma Commenter Affiliation: Independent Petroleum Association of Mountain States (IPAMS) Document Control Number: EPA-HQ-OAR-2008-0508-0521.1 Comment Excerpt Number: 7

**Comment:** Reporting frequency should be decided based on information needs and anticipated use of the data. Annual reporting may be appropriate at this time, but less frequent reporting may be more appropriate when devising the long term regulatory framework. Less frequent data collection may be beneficial in tracking significant changes to facility emissions and balance thoroughness with minimizing the burden on reporting facilities.

**Response:** EPA has retained annual reporting in the final rule. See comment EPA-HQ-OAR-2008-0508-433.1, excerpt 3 for the response to requiring reporting less frequently than annual. Various commenters requested either more frequent or less frequent reporting, and several suggested that EPA commit to a phased approach that either lengthened or decreased the frequency of reporting. Given available information and changing policy landscape for climate change, EPA has determined that it is premature to include requirements for either more or less frequent reporting in this rule. However, changes to the frequency of reporting may be necessary in the future either to inform new policy development or for implementing future programs

Commenter Name: Robert J. Martineau, Jr.

#### **Commenter Affiliation:** Counsel, Waller Lansden Dortch & Davis, LLP **Document Control Number:** EPA-HQ-OAR-2008-0508-0414.1 **Comment Excerpt Number:** 9

**Comment:** At a minimum, after the first few years of reporting, the report should be required only at periodic intervals, for example, every three years. Changes from year to year at a source will provide little useful information to EPA or to the public.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-433.1, excerpt 3 for our rationale for requiring annual reporting. See the response to comment EPA-HQ-OAR-2008-0508-0521.1, excerpt 7 for our decision regarding changing the frequency of reporting under the rule over time.

Commenter Name: Karen S. Price Commenter Affiliation: West Virginia Manufacturers Association (WVMA) Document Control Number: EPA-HQ-OAR-2008-0508-0475.1 Comment Excerpt Number: 9

**Comment:** We believe that the proposed March 31 reporting deadline is extremely burdensome as a significant level of other environmental reporting deadlines also fall within the first quarter of the year, including: Title V semiannual monitoring reports and annual certifications under the Clean Air Act; quarterly deviation reports under the Clean Air Act; Discharge Monitoring Reports under the Clean Water Act; and Tier II reports under the Emergency Preparedness and Community Right-to-Know Act. The WVMA requests that EPA consider changing its proposed March 31 deadline for annual reporting to June 30. A June 30th submission deadline would help prevent GHG reporting obligations from interfering with these existing reporting requirements.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Bob Dinneen **Commenter Affiliation:** Renewable Fuels Association (RFA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0494.1 **Comment Excerpt Number:** 9

**Comment:** Three months is insufficient time for facilities to compile and prepare the reports that would be required under the Proposed Rule. Other reporting programs allow longer time intervals for reporting, including up to six months.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Kathleen M. Sgamma **Commenter Affiliation:** Independent Petroleum Association of Mountain States (IPAMS) **Document Control Number:** EPA-HQ-OAR-2008-0508-0521.1 **Comment Excerpt Number:** 9 **Comment:** Since EPA is requiring different calculation methods than what is currently being used to determine emissions inventories, IPAMS requests that emissions inventories be due later than states' current emissions inventories due date, which is typically March 31 each year.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

# **Commenter Name:** Henry Derwent **Commenter Affiliation:** International Emissions Trading Association (IETA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0512.1 **Comment Excerpt Number:** 8

**Comment:** IETA applauds EPA for proposing annual reporting from covered sectors and organizations.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: See Table 8 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0412.1 Comment Excerpt Number: 12

**Comment:** GPA objects to EPA's proposal to require annual reporting on March 31st, which does not provide adequate time to prepare and submit accurate data. GPA suggests that the annual report be submitted by June 30th because many state inventory reporting requirements for criteria pollutants are already due by March 31st. The staff that prepares the criteria pollutant reports will typically be the same personnel responsible for preparing the GHG inventory annual reports; therefore, imposing an identical March 31st deadline for the annual GHG reports as for the criteria pollutant reports would place an inordinate burden on these staff to meet both reporting obligations, while still ensuring the accuracy of the data reported.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Keith A. Nagel **Commenter Affiliation:** ArcelorMittal USA and Severstal North America **Document Control Number:** EPA-HQ-OAR-2008-0508-0496.1 **Comment Excerpt Number:** 3

**Comment:** The Proposed Rule would require facilities to compile all data, prepare comprehensive reports and submit those reports to U.S. EPA by March 31 annually. While we recognize EPA's desire to collect GHG emissions information as soon as possible, unless the underlying methodology is dramatically simplified, it will be impossible to collect, organize, confirm and certify comprehensive facility-wide and unit-level information for facilities with hundreds of distinct emissions sources in just three months – particularly given the unfamiliarity with this new reporting regime. Also, requiring GHG reporting on March 31 would further

burden environmental managers who are already working overtime to prepare quarterly and annual Title V, SARA Tier II and annual/biennial hazardous waste reports due on or shortly after that date. In order to improve the quality of submissions and avoid further overburdening environmental compliance personnel, we request that EPA revise the reporting date to July 1. This date would coincide with the deadline for annual reporting under CERCLA's Toxic Release Inventory program (which is conceptually similar and requires collection of some of the same underlying information).

**Response** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Keith Overcash Commenter Affiliation: North Carolina Division of Air Quality (NCDAQ) Document Control Number: EPA-HQ-OAR-2008-0508-0588 Comment Excerpt Number: 7

**Comment:** NC DAQ agrees with the need to report annual data; however, consistent with our comment above, facilities should not be burdened with multiple reporting schedules associated with multiple reporting systems. Specifically, the proposed rule requires annual reporting for data from most industrial sources on March 31, but requires data from EGUs to be reported quarterly. Criteria pollutant data must be reported 12 months after the end of the calendar year, or December 31, under the AERR. NC DAQ requires Title V facilities to submit annual emissions by June 30. Toxics Release Inventory data must be reported to EPA annually on July 1. The NC DAQ believes that these disparate reporting times can and should be harmonized, and that air agencies should be consulted about the best, most efficient way to do so.

**Response:** EPA has retained annual reporting in the final rule.

Commenter Name: Myra C. Reece Commenter Affiliation: South Carolina Department of Health and Environmental Control (SC DHEC) Document Control Number: EPA-HQ-OAR-2008-0508-0654.1 Comment Excerpt Number: 5

**Comment:** We would like to see the reporting deadline for this data be consistent with the deadline for the criteria pollutant data and the hazardous air pollutants (HAP) data; which is December 31st, under the Air Emissions Reporting Rule (AERR).

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: James S. Loving Commenter Affiliation: National Cooperative Refinery Association (NCRA) Document Control Number: EPA-HQ-OAR-2008-0508-0609.1 Comment Excerpt Number: 4 **Comment:** EPA should simplify the reporting process, including less frequent reporting. NCRA recommends biennial reporting. This modification would significantly reduce costs without detracting from environmental objectives.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3.

**Commenter Name:** Christina T. Wisdom **Commenter Affiliation:** Texas Chemical Council (TCC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0638.1 **Comment Excerpt Number:** 4

**Comment:** TCC agrees with EPA that the reporting of emissions should be required no more frequently than annually.

**Response:** EPA has retained annual reporting in the final rule.

Commenter Name: Vince Brisini Commenter Affiliation: RRI Energy Inc. (RRI) Document Control Number: EPA-HQ-OAR-2008-0508-0618.1 Comment Excerpt Number: 4

**Comment:** RRI requests that U.S. EPA establish a May 30<sup>th</sup> deadline, as opposed to a March 31st deadline to allow reporters adequate time to compile emission reports to meet the specific GHG program reporting requirements. Because of the multiple annual air emissions reporting deadlines other U.S. EPA programs (e.g., 40 CFR Part 75, 40 CFR Part 60, etc.), mandatory state or regional programs (e.g., state AEIs, California Air Resources Board [CARB] GHG reporting, Regional Greenhouse Gas Initiative [RGGI] reports, etc.), and other voluntary programs (e.g., California Climate Action Registry [CCAR]/The Climate Registry, Carbon Disclosure Project [CDP], etc.) are set for the end of the first quarter or fourth month of each year, RRI requests that U.S. EPA consider establishing a May 30th deadline to allow reporters adequate time to compile emission reports to meet the specific GHG program reporting requirements. This allows the collection of the necessary information, especially non-CEMS data, within the current time frame and facilitates the use of consistent data for all of the reporting requirements.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Randall R. LaBauve **Commenter Affiliation:** Florida Power & Light (FPL) Group **Document Control Number:** EPA-HQ-OAR-2008-0508-0624.1 **Comment Excerpt Number:** 4

**Comment:** Beyond our concerns with the initial implementation data of the new mandatory GHG reporting program, FPL Group does not believe a reporting deadline of March 31 allows adequate time to collect and verify data. On this basis, we suggest moving the reporting deadline to June 30 of the year following the reporting year.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Keith Adams **Commenter Affiliation:** Air Products and Chemicals, Inc. **Document Control Number:** EPA-HQ-OAR-2008-0508-1142.1 **Comment Excerpt Number:** 4

**Comment:** EPA has proposed a reporting date of March 31st each year. Air Products strongly recommends EPA extend the reporting date until June 30th . This date is consistent with EPA Climate Leaders program, with which we have submitted data for two consecutive years. It is our experience that, from the close of the calendar year, it takes five to six months to collect, compile, analyze, quality assurance check, calculate and then format the resulting data in the required format for reporting. This experience has been reinforced by this year's reporting for six facilities under California's mandatory GHG reporting rule. These facilities faced a June 1 reporting deadline. In addition to the challenges met by compliance staff of completing the report, Air Products site managers then performed a rigorous review of the data, consistent with their obligation to certify the accuracy of the report. A March 31st reporting deadline is not feasible; it should be extended to June 30th.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Steve Donatiello **Commenter Affiliation:** Laclede Gas Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0763.1 **Comment Excerpt Number:** 3

**Comment:** Regulatory reporting obligations to EPA, other federal agencies and state regulatory agencies are heavily concentrated in the first quarter of each year. Therefore, to help ease this regulatory burden, it is recommended that the reporting due date for the information specified in this rule instead be established as "...no later than July 1 of each calendar year for GHG emissions in the previous calendar year."

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Sean Atkins Commenter Affiliation: Crosstex Energy Services Document Control Number: EPA-HQ-OAR-2008-0508-1131.1 Comment Excerpt Number: 3

**Comment:** Crosstex opposes the annual March 31st reporting deadline due to the already existing large number of state and federal annual reports required to be submitted during the first quarter of each year (e.g., Emission Inventories, SARA Title III, Fugitive Monitoring Reports, Title V annual certifications, etc.). The annual March 31st GHG reporting deadline proposed

creates an undue strain on internal resources and the professional community assisting in the generation of these reports. Crosstex Proposed Alternative: Adjusting the annual reporting due date from March 31st to June 30th will help to not compound the already existing burden of first quarter reporting.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Thomas Siegrist Commenter Affiliation: Koch Nitrogen Company LLC Document Control Number: EPA-HQ-OAR-2008-0508-0351.1 Comment Excerpt Number: 20

**Comment:** The March 31 submittal date for GHG emissions reports is not sufficient time for facilities to review and prepare certified reports of GHG emissions. The Proposed Rule would require regulated entities to submit their annual GHG emissions reports no later than March 31 of each calendar year to report on their GHG emissions during the previous calendar year. Id. (proposed § 98.3(b)). Many facilities submitting GHG emissions reports are currently subject to other significant annual environmental reporting requirements with deadlines at or near March 31. For example, KNC facilities are typically engaged in EPCRA Tier II reporting, Clean Air Act Title V compliance certifications, Clean Air Act quarterly excess emissions reporting, and the preparation and review of other facility-specific environmental reports during the first calendar quarter of each year. Adding an additional and fairly time intensive reporting requirement that involves detailed review of activity data and calculations during this already very busy quarter would impose an unnecessary burden on those charged with such responsibilities. It is important for EPA to allow adequate time for data compilation, calculation, and appropriate quality assurance and quality control review prior to submittal of GHG reports. As with annual EPCRA Form R reports, it would be advisable to move the reporting deadline several months later on the calendar. Accordingly, KNC suggests that EPA require submittal of annual GHG emissions reports no later than July 1 of each year.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: John Quinn Commenter Affiliation: Constellation Energy Document Control Number: EPA-HQ-OAR-2008-0508-0668.1 Comment Excerpt Number: 3

**Comment:** One option contained in the proposal was to establish the annual reporting submittal deadline as May 31 rather than March 31. Constellation supports this later submission date to ensure we have the time to compile and quality assure all of the data, especially data from our natural gas system which may not be fully vetted by the earlier March 31 date.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

# **Commenter Name:** Traylor Champion **Commenter Affiliation:** Georgia-Pacific, LLC (GP) **Document Control Number:** EPA-HQ-OAR-2008-0508-0380.1 **Comment Excerpt Number:** 8

**Comment:** GP requests that the annual reporting deadline be extended from March 31st of each year to June 30th of each year to provide facilities more time to collect, finalize, and quality assure the data to be reported. Facilities have dozens of emission points and processes from which data on GHG emissions will need to be collected, quality assured, and certified by the designated representative. In addition, there are many other regulatory reporting requirements in the first quarter of the calendar year including Title V compliance certifications and quarterly and/or semiannual monitoring reports, HON/MON/PC WP/PO WC/Resin MACT quarterly and/or semiannual reports, CERCLA 313 reports, etc. that require reviewing potentially hundreds of permit conditions and regulatory requirements, which commands the attention of the environmental resources at facilities. Therefore, extending the annual reporting deadline to June 30th would allow facility staff to devote more time and resources to the GHG reporting requirements.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Lorraine Krupa Gershman **Commenter Affiliation:** American Chemistry Council (ACC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0423.2 **Comment Excerpt Number:** 2

**Comment:** The proposed rule requires that GHG emissions for a reporting year be submitted by March 31 of the following year. We recommend that this due date be moved to later in the year to better coincide with other reporting requirements. Many States and local regulatory agencies require submittal of a significant number of reports between March and July of each year, which require the dedication of facility resources. In addition, final fuel usage data for the previous year is often not available until late February. This data is a key component in calculating GHG emissions, and would leave companies with only a month to calculate emissions before the March 31 deadline. We note that the Climate Registry requires data be submitted by June 30, EPA's Climate Leaders has a June 30 deadline, and California's Mandatory GHG emissions reporting program has a June 1 deadline for some source categories. Many companies already have reporting systems set up to meet these existing timelines and this earlier reporting timeframe would require additional reporting resources in order to complete the calculation and reports. ACC strongly recommends that EPA finalize a reporting deadline of July 1, which is consistent with other GHG reporting programs and coincides with the deadline for data submittal to TRI.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** R. Skip Horvath **Commenter Affiliation:** Natural Gas Supply Association (NGSA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0594.1

### **Comment Excerpt Number:** 2

**Comment:** The annual report should be filed in June, not March. A second-quarter reporting deadline is more consistent with existing state greenhouse gas reporting programs. Most other environmental reports are also due on March 31 and requiring preparation and filing of this significant report contemporaneously with those reports is overly burdensome. NGSA believes the later effective date of the Proposed Rule will allow adequate time to evaluate and analyze the final regulatory requirements, install necessary facilities, implement data collection procedures, properly train personnel and implement document collection and retention procedures to meet EPA's requirements. However, if EPA does not select the later implementation date, NGSA urges EPA to adopt the proposed alternative that reduces the collection burden for the first year, by allowing companies to report emissions using the "best available information."

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** William Yanek **Commenter Affiliation:** Glass Association of North America (GANA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0586.1 **Comment Excerpt Number:** 2

**Comment:** GANA agrees that reporting GHG emissions on an annual basis is appropriate and necessary. It respectfully requests, however, the report-submittal deadline be set at July 1 of each year, six months after the end of the preceding emissions monitoring year. EPA underestimates the time the flat glass manufacturing industry requires to compile, verify, and review the annual data needed for submittal to EPA and to prepare the annual GHG emissions reports, particularly during the first few years of implementation of EPA's new emissions reporting requirements. An annual July 1 reporting deadline allows industry's emissions sources reasonable time to compile the data and perform internal checks on that data before submittal to EPA. Importantly, a July 1st reporting timeframe also is consistent with and complements the current deadline for the glass industry to submit its Toxics Release Inventory ("TRI") reports to EPA under EPA's current TRI program and would allow glass manufacturing emissions sources subject to both requirements - GHG and TRI reporting - to coordinate their internal reporting efforts.

**Response:** EPA has retained annual reporting in the final rule. See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Kyle Pitsor Commenter Affiliation: National Electrical Manufacturers Association (NEMA) Magnet Wire Section Document Control Number: EPA-HQ-OAR-2008-0508-0622.1 Comment Excerpt Number: 2

**Comment:** While the EPA rule does not require facilities and suppliers to begin collecting data until January 1, 2010, the deadline for the first emissions report (March 31, 2011) is impractical given its coincidence with the same reporting deadline for Superfund Amendments and Reauthorization Act (SARA) Tier II reports. By assigning a March 31, 2011, deadline for facilities and suppliers to report GHG emissions, EPA has created a significant burden for those

who are obligated to complete SARA Tier II reports. Magnet wire producers also prepare Toxics Release Inventory (TRI) reports annually, which require a great deal of preparation each spring in advance of the July 1 deadline. For this reason, the NEMA Magnet Wire EHS Committee respectfully requests that EPA delay the due date for the first GHG emissions report until summer 2011.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

## Commenter Name: Skiles W. Boyd Commenter Affiliation: DTE Energy Document Control Number: EPA-HQ-OAR-2008-0508-0606.1 Comment Excerpt Number: 2

**Comment:** DTE Energy supports a reporting deadline moved from March 31st to June 30th to spread out reporting obligations between the first and second quarters. Year end data that may be required to meet the obligations of the proposed rule is often not finalized and quality assured until the end of the first quarter of each year.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Kelly R. Carmichael **Commenter Affiliation:** NiSource **Document Control Number:** EPA-HQ-OAR-2008-0508-1080.2 **Comment Excerpt Number:** 2

**Comment:** NiSource does not believe a reporting deadline of March 31 allows adequate time to collect and verify data, especially during the initial years of the program. Since NiSource would be impacted by various sections of the rule addressing electric generation, electric power systems, natural gas transmission and storage, as well as, gas distribution, in order to prepare for reporting for these sections of the rule, NiSource proposes moving the reporting deadline to June 30 of the year following the reporting year. While some of the proposed GHG emissions reporting requirements build off of existing programs for which methodologies and data gathering procedures are in place (e.g. EGUs with CEMS), several areas of the proposed rule (especially the oil and natural gas sub categories) will require the development of significant new operating procedures and staff training in order to collect the data in the manner that EPA is proposing. Even within the electric sector, with historically robust reporting, there are several new areas subject to reporting, which will require the development of new methodologies and training of staff. A few months, or even weeks, from publication of the final rule to full implementation is simply not enough time to implement the new procedures necessary to obtain high quality data.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. For the response to the comment regarding the initial reporting year, see the preamble response on the selection of the initial reporting year. EPA is not going final with subpart W (Oil and Natural Gas Systems) and subpart DD (Sufur Hexafluoridefluoride (SF<sub>6</sub>) from Electrical Equipment). As we consider next steps, we will be reviewing the public comments and other

relevant information. Therefore, we are not responding to comments on these subparts at this time.

Commenter Name: Dean C. DeLorey Commenter Affiliation: Beet Sugar Development Foundation (BSDF) Environmental Committee Document Control Number: EPA-HQ-OAR-2008-0508-0559.1 Comment Excerpt Number: 4

**Comment:** GHG reporting should be on a triennial or at most biannual basis with a sunset after three or four reporting periods. Less frequent reporting than annual and a sunset time frame are appropriate because this reporting effort is: (i). Not insignificant especially for our industry; (ii.) GHG inventory values are not likely to change significantly in one year without a major economic event that will not need actual emission inventories to be recognized; and (iii).EPA should not burden companies with additional regulatory requirements unnecessarily that have minimal value over estimates of annual changes.

**Response:** For the response to the comment on the biennial reporting, see the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3 above. For the response to the comment on sunset provisions, see the response to comment EPA-HQ-OAR-2008-0508-0712.1, excerpt 7 in the document volume titled "Initial Year of Reporting, Duration of the Reporting Program, and Provisions to Cease Reporting".

Commenter Name: Alice Edwards Commenter Affiliation: Alaska Department of Environmental Conservation (ADEC) Document Control Number: EPA-HQ-OAR-2008-0508-0720.1 Comment Excerpt Number: 3

**Comment:** ADEC encourages EPA to harmonize the regulatory reporting time frames for different emission reporting programs within the agency. The proposed rule requires annual GHG reporting by March 31st. The EGU program has quarterly reporting, the Air Emission Reporting Rule requires criteria pollutant data for the NEI to be reported twelve months after the end of the calendar year, and the TRI must be reported annually on July 1st ADEC believes that EPA could harmonize these disparate reporting times and that doing so would result in a stronger program with wider acceptance and less overall burden on reporting entities.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. EPA intends to work with States and others to support harmonization across programs to the extent possible. See the preamble for discussion of the role of States and the relationship of this rule to State programs.

Commenter Name: Jeff A. Myrom Commenter Affiliation: MidAmerican Energy Holdings Company Document Control Number: EPA-HQ-OAR-2008-0508-0581.1 Comment Excerpt Number: 3 **Comment:** MidAmerican supports annual reporting; however, the March 31st annual reporting date is too early for many facilities covered under the proposed rule that have numerous environmental reports due in the first quarter of each year.

**Response:** EPA has retained annual reporting in the final rule. See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Mark Nordheim **Commenter Affiliation:** Western States Petroleum Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0228k **Comment Excerpt Number:** 9

**Comment:** The program here in California has March 31st for power folks, June for the rest of us. We are scrambling, the whole industry, Richard's group, et cetera, to get the data in by June 1 in the first reporting cycle. There is a timing issue. But more importantly, as you go even down the road, we have a huge, huge reporting burden at stake in the national and local level that falls on the first part of every year. And the data requirement you are asking us to submit will quadruple that. There is an execution issue in this for us as well.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Carol E. Whitman Commenter Affiliation: National Rural Electric Cooperative Association (NRECA) Document Control Number: EPA-HQ-OAR-2008-0508-0483.1 Comment Excerpt Number: 7

**Comment:** At the Arlington hearing, it was suggested that the annual March 31 deadline be changed to June 30 to synchronize this reporting with the Toxic Release Inventory (TRI) deadline. Facilities that do not have CEMS rely on process, laboratory, accounting, and flow meter data for the appropriate calculations and emissions accounting systems. This longer timeframe is necessary to complete the collection of data, evaluation, quality assurance checks, and reporting. Moving the deadline to June 30 would also allow reporters the opportunity to integrate their GHG reporting with their existing systems for collecting and assuring the accuracy of the TRI emissions data. Taking advantage of any such synergies could reduce the time and cost of reporting under this program. As a result, we urge EPA to incorporate this suggested change.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Roy Wood **Commenter Affiliation:** Eastman Kodak Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0573.1 **Comment Excerpt Number:** 1 **Comment:** Eastman Kodak Company has reported greenhouse gas (GHG) emissions through several programs. From 2002-2007, Kodak reported all direct and indirect global greenhouse gas emissions to both the California Climate Action Registry (CCAR) and US EPA Climate Leaders. Kodak completed the third party verification of the emissions reported to CCAR and then reported these verified emissions to Climate Leaders. Currently Kodak is developing 2008 data for submission to The Climate Registry (TCR) and Climate Leaders. Through this experience Kodak has developed an appreciation of the time required to submit this data and believes that a March 31 date does not provide adequate time for data collection, aggregation and disaggregation, calculations, quality assessment, and management review. Although reporting of GHG emissions seems quite straight forward on the surface, there are often complications that extend the time required for the reporting process. The use of site-specific laboratory data or emissions factors and vendor data can take time to obtain. Multiple company facilities of different sizes and types create additional complexities that often lead to questions about the proper reporting requirements that are not discovered until the detailed data is obtained. Applicability and ownership changes that occur during the reporting year increase the chances that questions will arise when the data is gathered. CCAR, TCR, and Climate Leaders require initial reporting at the end of June, with an extension process that allows additional time. The third party certification and completion of data submission under TCR and CCAR are not due until December. Under other federal reporting requirements, such as the Toxic Release Inventory, data does not have to be submitted until the end of June. Therefore Kodak suggests that a required reporting date in June is a more appropriate submission date in alignment with other EPA and GHG programs. We believe this later date will allow more time for complete evaluation of the reporting requirements and thorough quality control, resulting in better data. Reporting good data is the most important outcome of the rule and a later reporting date in June will support the achievement of this objective.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Michael W. Stroben Commenter Affiliation: Duke Energy Corporation Document Control Number: EPA-HQ-OAR-2008-0508-0407.1 Comment Excerpt Number: 1

**Comment:** EPA has proposed that existing facilities would begin collecting data on January 1, 2010 and, if the rule applies, submit reports for the prior calendar year by March 31 each year starting in 2011. Duke Energy supports the reporting of data on an annual basis. Reporting on a more frequent basis is not warranted for this program. We urge EPA, however, to move the reporting deadline to June 30 rather than March 31. The data gathering and calculations to prepare the report will be closely coordinated with other state and federal emissions inventory reporting (including TRI) which typically have mid-year deadlines. Moving the deadline will allow for a more efficient process and assure that the data has the benefit of any knowledge gained from the ongoing QA process to develop the final reports for these other inventory reports.

**Response:** EPA has retained annual reporting in the final rule. See the preamble (Section II.J) for the response on the selection of the reporting deadline.

# Commenter Name: James P. Brooks Commenter Affiliation: Maine Department of Environmental Protection Document Control Number: EPA-HQ-OAR-2008-0508-0404.1 Comment Excerpt Number: 1

**Comment:** While we commend EPA for its comprehensive sector-by-sector analysis, the Department recommends that analysis be used to build upon existing programs rather than creating an entirely separate regulatory scheme. GHG emission reporting into existing regulatory schemes by amending the Air Emissions Reporting Requirements (AERR) to include annual reporting of point source GHG emissions and triennial reporting of nonpoint source GHG emissions. This approach would minimize the burden for regulated entities and take advantage of established systems and processes.

**Response:** EPA has retained annual reporting in the final rule. See the preamble (Section II.J) for the response on the selection of the reporting deadline. EPA intends to work with States and others to support harmonization across programs to the extent possible. See the preamble for discussion of the role of States and the relationship of this rule to State programs.

Commenter Name: Robert P. Strieter Commenter Affiliation: The Aluminum Association Document Control Number: EPA-HQ–OAR-2008-0508-0350.1 Comment Excerpt Number: 14

**Comment:** The Aluminum Association supports the proposed annual frequency of GHG emissions reporting. In our view, more frequent quarterly reporting would pose an excessive and unnecessary burden on the reporting community for a level of data unnecessary for effective GHG control requirements in the future.

**Response:** EPA has retained annual reporting in the final rule.

**Commenter Name:** Karyn Andersen **Commenter Affiliation:** RR Donnelley **Document Control Number:** EPA-HQ-OAR-2008-0508-0345.1 **Comment Excerpt Number:** 10

**Comment:** We support the implementation schedule of the Proposed Rule. However, many existing reporting deadlines for other environmental programs fall on dates near the proposed March 31 annual reporting deadline. EPA should consider a reporting deadline in the second half of the year so that environmental compliance officers and departments can give greenhouse gas reporting their full attention. As proposed, the deadline will add to the current burden on environmental managers during the first quarter of each year to meet other numerous reporting deadlines. These reporting tasks typically cannot be performed in advance (i.e. before the end of the year) as a full year of data has yet to be aggregated.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

# Commenter Name: Jerry Call Commenter Affiliation: American Foundry Society (AFS) Document Control Number: EPA-HQ-OAR-2008-0508-0356.2 Comment Excerpt Number: 10

**Comment:** AFS agrees that reporting should be no more frequent than once a year. However, the submission date of March 31st for GHG emission reports is too early in the year, particularly for many facilities that may have numerous reportable units and other reports that are due in the early part of the year. To allow facilities sufficient time to accumulate and evaluate their GHG emissions data, the submission date should be June 30th or July 1st. In addition, this would also be consistent with the submission date for other reporting systems, such as Climate Leaders and Climate Registry.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. EPA has retained annual reporting in the final rule.

**Commenter Name:** Carl H. Batliner **Commenter Affiliation:** AK Steel Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0337.1 **Comment Excerpt Number:** 13

**Comment:** Most facilities in the regulated community have a plethora of compliance reports to submit throughout the year. As this report will undoubtedly be complex, ample time is needed to properly address it like the annual SARA 313 TRI Form R Report (due July 1st each year). Accordingly, AK Steel proposes that EPA consider the report submission date be no sooner than May 31 of each year.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Joseph A. D'Amico **Commenter Affiliation:** Foundation Coal Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0421.2 **Comment Excerpt Number:** 2

**Comment:** Reporting deadlines for any calendar year should be moved to the 2nd quarter of the year. During the first quarter, companies are already under heavy regulation for EIA reports and mandatory state reporting requirements, in addition to compliance with Sarbanes Oxley Act and SEC regulation over annual financial reporting. Requiring a second federal filing within the first quarter will cause additional burden for extensive review and disclosure for the senior management of companies required to comply with the Rule.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

## **Document Control Number:** EPA-HQ-OAR-2008-0508-0276.1 **Comment Excerpt Number:** 1

**Comment:** GMA generally supports the implementation schedule of the Proposed Rule. However, many existing reporting deadlines for other environmental programs fall on dates near the proposed March 31 annual reporting deadline. GMA encourages EPA to consider a reporting deadline in the second half of the year so that environmental compliance officers and departments can give greenhouse gas reporting their full attention. As proposed, the deadline will add to the current burden on environmental managers during the first quarter of each year to meet other numerous reporting deadlines. These reporting tasks typically cannot be performed in advance (i.e. before the end of the year) as a full year of data has yet to be aggregated.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Rechelle Hollowaty **Commenter Affiliation:** Tyson Foods, Inc. **Document Control Number:** EPA-HQ-OAR-2008-0508-0379.1 **Comment Excerpt Number:** 2

**Comment:** For the majority of companies a March 31st is almost an impossible deadline to meet. Much of the year end utility invoices/data comes into the company over a period of 5-7 weeks after the end of the year. This is not specific to Tyson but all companies in that all invoices are dependent upon the utility entity in processing their year end accounts. This process is not something that the consumer of these utilities has much input. Additional time is lost due to different department tracking data for budgetary purposes and account billing. Adding to this deadline are many air emissions inventories that are required to be compiled and submitted during this same time period. Although some of the data used for the GHG reporting is also used for the annual emissions inventories not all facilities required to report annual emissions inventories during this time frame are also required to report GHG emissions. Focusing specifically on Tyson, we have estimated 20+ facilities that will be required to report by the March 31st deadline. The additional reporting will be overly burdensome for as yet an undefined purpose since EPA has not provided any specific reason why they want the data by March 31st. Tyson respectively requests EPA consider moving the deadline to the 3rd calendar year quarter. This will allow facilities time to verify the data through compiling annual emissions inventories. An alternative deadline would be to submit the GHG emissions report along with a facility's mandatory annual air emissions inventory and allow a staggered submittal through the 1st and 2nd quarters of the calendar year.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. For a discussion of why EPA is collecting this data and how the data will be used, see Section I.C of the preamble.

Commenter Name: A. J. Hodlofski Commenter Affiliation: None Document Control Number: EPA-HQ-OAR-2008-0508-0252.1 Comment Excerpt Number: 2 **Comment:** Proposed rule §98.350 should be revised to require reporting of GHG on a quarterly basis rather than a yearly basis Proposed rule §98.350 should be revised to require quarterly reporting of GHG emissions from wastewater treatment systems. Requiring quarterly reporting of GHG to provide information on seasonal fluctuations in all wastewater treatment systems is vitally important when dealing with many of the older "trinity" systems in use in the Northeast United States. Depending on the season of the year, the flow of sewage collected by these trinity systems and the volume of effluent handled by the sewage treatment plants at the terminus of the system varies greatly, sometimes Overwhelming the system or creating inefficiencies in the process. In cities like Philadelphia, runoff from surface streets combines with the human waste and industrial waste in the trinity system and can at times overwhelm municipal domestic treatment facilities. During times of high street runoff flow, the sewage treatment process becomes inefficient. Therefore, the GHG emitted by the anaerobic wastewater treatment processes, which are required to be reported by §98.350.c, fluctuates on a seasonal basis, in relation to the amount of runoff introduced into the system. Collecting data on a quarterly basis will allow for EPA to provide improved feedback to municipalities operating trinity systems. These municipalities will then have the information needed to decided if they need to alter the flow dynamics of the system by constructing additional effluent holding reservoirs to slow the introduction of effluent into anaerobic fermentation tanks during times of high flow. This will allow for the more efficient processing of sewage and will reduce the over production of GHG.

**Response:** Wastewater treatment emissions from municipal wastewater treatment are not included in this rule. Further, at this time, EPA is not going final with the industrial wastewater treatment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

**Commenter Name:** Cindy Parsons **Commenter Affiliation:** Los Angeles Department of Water and Power **Document Control Number:** EPA-HQ-OAR-2008-0508-0228t **Comment Excerpt Number:** 2

**Comment:** Regarding the reporting deadline of March 31st. I would like to request EPA consider the overall reporting burden on regulated entities on how labor intensive the reporting requirements are for each sector. From an electric utility's perspective, this will add one more report to an already long list of reports we have to prepare in the first three, four months of the year. And it will place an additional workload onto our already burdened staff. We would recommend EPA consider a staggered reporting schedule such as CARB has adopted where simple facilities report on April 1st or in your case March 31st, and more complex entities have until June 1st to prepare their reports.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Noor Osman **Commenter Affiliation:** National Petrochemical & Refiners Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0220.1 **Comment Excerpt Number:** 6 **Comment:** We recommend that this rule include provisions for phasing in a quarterly reporting process. This is based on the EPA's indication that the information gathered through this reporting process may be used to develop a cap and trade system. Quarterly and annual reporting methods are used in the  $SO_2$  and NOx emissions trading programs. It has been indicated that "the ability to check for problems at least once per quarter allows for more timely corrections by the source before end of year reconciliation and often allows a source to avoid significant penalties". This principle can be applied to the industry even if there are no current emissions limits, as it will allow them to evaluate their emissions data on a more consistent basis. This will, in turn, allow for industries to begin identifying problematic areas and developing potential cost-effective remediation tactics before a cap-and-trade program is put in place. This would result in a simpler transition for the industry in the event that this type of program is implemented.

Response: See response to comment EPA-HQ-OAR-2008-0508-0252.1, excerpt 2.

**Commenter Name:** Greg Scott **Commenter Affiliation:** National Petrochemical & Refiners Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0212w **Comment Excerpt Number:** 3

**Comment:** Timetables. Reporting of the GHG emissions each year by the March 31st reporting deadline are too soon in each calendar year. A more suitable deadline would be June 30th of each year, which would be similar to the TRI reporting deadline.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Lauren Trevisan **Commenter Affiliation:** Sierra Club **Document Control Number:** EPA-HQ-OAR-2008-0508-0212u **Comment Excerpt Number:** 2

**Comment:** The frequent data collection that EPA has proposed keeps the registry useful. To sensitively regulate, EPA must know how industry is responding. So frequently updating the registry will keep regulators nimble and effective. EPA's decision to require reports at least annually is the right one. More frequent data collection may be appropriate for some sectors, particularly as we gain more experience with this system, but annual reporting, at a minimum, is a great place to start.

**Response:** EPA agrees with the commenter.

Commenter Name: Jeffrey Stacey Commenter Affiliation: Drexel University Document Control Number: EPA-HQ-OAR-2008-0508-0221 Comment Excerpt Number: 2

**Comment:** Despite the novelty of the regulations and the anticipated onslaught of lawsuits in the near future, I would suggest that sources above threshold levels report on a quarterly basis to the

Agency. The "rationale" section hits the nail on the head: "For example, under future programs or policy initiatives, particularly if regulatory in nature (e.g., a cap-and-trade program similar to the ARP) it may be more appropriate require quarterly reporting." See FR Doc E9-5711 at 16472. My particular rationale for requiring quarterly reporting is thus: if there is the possibility (and in our current political climate a strong possibility) that a future regulatory program will require a certain frequency of reporting, that should be the goal of whatever proposed regulations are currently being contemplated. Assuming, arguendo, that a new Cap-and-Trade program will be handed down from Congress by 2012 and require quarterly reporting, the Agency charged with promulgating the rules of the program will be faced with changing the scheme in these proposed rules to mimic the new scheme. In order to better facilitate the implementation of the new system, it would be beneficial to already have facilities reporting at the new system's intervals. Under the current proposed rules, facilities would not be reporting until 2011, at a yearly interval. If facilities were required to report at a quarterly interval starting in 2011, they would already be prepared for the new law without any changes. This is a commonsense approach. Yet it would also be beneficial at another level; fewer changes will result in fewer lawsuits delaying the implementation of the new scheme. Additionally, it would better facilitate a future program if the Designated Representative had experience with data collection and reporting at frequencies that the future program required. Whereas the current proposed scheme is "support" for future policy, the current proposed scheme can also be practice for a real application. Encouraging reporting at frequencies likely to be required by a new regulation is likely to facilitate ease of transition between the non-regulation and direct regulation of GHG emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0521.1, excerpt 7.

**Commenter Name:** Greg Scott **Commenter Affiliation:** National Petrochemical & Refiners Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0212w **Comment Excerpt Number:** 2

**Comment:** Reporting frequency. We agree with the proposal that the reporting of GHG emissions should occur no more often than once per year. Efforts should be made to coordinate reporting deadlines with any State or regional programs that may exist and to provide ample time to perform and verify the calculations needed for these reports.

**Response:** EPA has retained annual reporting in the final rule. For the response to the comment on allowing ample time to perform and verify the calculations, see the preamble (Section II.J) for the response on the selection of the reporting deadline. EPA intends to work with States and others to support harmonization across programs to the extent possible. See the preamble for discussion of the role of States and the relationship of this rule to State programs.

Commenter Name: J. Southerland Commenter Affiliation: None Document Control Number: EPA-HQ-OAR-2008-0508-0165 Comment Excerpt Number: 25

**Comment:** Don't even think about quarterly reporting unless there is a well defined ultra high priority use for such data.

**Response:** EPA has retained annual reporting in the final rule. For the response to the comment on the frequency of reporting, see the response to comment EPA-HQ-OAR-2008-0508-0252.1, excerpt 2.

## Commenter Name: Leslie Sue Ritts Commenter Affiliation: National Environmental Development Association Document Control Number: EPA-HQ-OAR-2008-0508-0504.1 Comment Excerpt Number: 16

**Comment:** The Notice solicits opinions about whether reporting should be quarterly, akin to current CEMs  $CO_2$  reporting under the acid rain program. Quarterly reporting is too frequent for purposes of GHG reporting. RATA and quarterly acid rain reporting has a basis in both assuring compliance with continuous emission requirements based on 6 minute averages and making absolutely certain that an affected acid rain source "holds" the necessary SO2 and NOx allocations that are required for a source's emissions at the end of the year. In addition, market allocations are saleable commodities that may require close tracking. In contrast to  $SO_x$  and NOx or even CO emissions, GHG emissions have long-term residence times in the environment and there is no evidence of local or short-term climatological effects that would make quarterly reports reasonable, meaningful, or necessary, even under a market-based system sometime in the future.

**Response:** EPA has retained annual reporting in the final rule. See the response to comment EPA-HQ-OAR-2008-0508-0252.1, excerpt 2.

Commenter Name: J. Southerland Commenter Affiliation: None Document Control Number: EPA-HQ-OAR-2008-0508-0165 Comment Excerpt Number: 24

**Comment:** I would dispute that data are likely to be dependably submitted within three months of the end of the calendar year. Facilities tend to do all such calculations for all programs at the same time to meet all EPA and state requirements. They will claim that they do not have invoices, final fuel use totals, etc. that are required to respond properly. They will likely argue that it is disruptive to normal business. Probably the standard excuse of having EPA's TRI data reported on July 1, so why is that not adequate? In reality, it would be appropriate for all EPA and state reporting requirements for all media to be harmonized on the same date (Earth Day?). If this is done, perhaps an earlier date can become a more realistic reporting date, still with difficulty.

**Response:** For the response to the comment on allowing ample time to perform and verify the calculations, see the preamble (Section II.J) for the response on the selection of the reporting deadline. EPA intends to work with States and others to support harmonization across programs to the extent possible. See the preamble for discussion of the role of States and the relationship of this rule to State programs.

# Commenter Name: Stephen Lippy Commenter Affiliation: None Document Control Number: EPA-HQ-OAR-2008-0508-0320 Comment Excerpt Number: 1

**Comment:** As an operator of a municipal sanitary landfill, we already have innumerable monthly, quarterly, semi-annual, and annual reports that are due to the various regulatory agencies by specific times in the calendar year per our permits (e.g., 30-90 days after the close of the reporting period). Probably, many of the other proposed regulated industries that this rule would apply to are in a similar situation. The proposed mandatory greenhouse gas (GHG) reporting rule is another burden on our industry (as well as others); it states a due date of March 31 for the annual report. Since quarterly, semi-annual, and annual reports are not due in May and in an effort to minimize this reporting burden somewhat, we are respectfully requesting that the due date for the annual GHS report be postponed two months to May 30. This would spread the regulatory report workload on in-house and consultant staff who would be compiling the report and would make it easier for us to comply with the GHS rule.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: John L. Wittenborn et al. Commenter Affiliation: Steel Manufacturers Association (SMA) and Specialty Steel Industry of North America (SSINA) Document Control Number: EPA-HQ-OAR-2008-0508-0518.1 Comment Excerpt Number: 5

**Comment:** SMA/SSINA also believe that the yearly reporting date should be extended to later in the year in order to provide ample time to collect the necessary data and prepare accurate reports. We anticipate GHG reporting to be at least as burdensome as Toxic Release Inventory reporting, which has an annual July 1 deadline. Accordingly, we support a reporting deadline that would be no sooner than July 1 of each calendar year.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: See Table 2 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0367.1 Comment Excerpt Number: 7

**Comment:** We also request that EPA change the reporting date to June 30 following the previous calendar year. Emissions calculations for many oil and gas facilities will require accurate throughput information which is often not available until three months later. Moreover, most other air program emissions inventories are also due on March 31 of each year, and it would overload the staff that will be responsible for preparing both sets of emission inventories.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

# **Commenter Name:** Alison A. Keane **Commenter Affiliation:** National Paint & Coatings Association, Inc. (NPCA/FSCT) **Document Control Number:** EPA-HQ-OAR-2008-0508-0593.1 **Comment Excerpt Number:** 5

**Comment:** We support EPA's assertion that GHG emissions data should be reported on an annual basis, since this comports with many other existing mandatory and voluntary GHG reporting programs at the State and Federal levels. However, the proposed rule requires that GHG emissions for a reporting year be submitted by March 31st of the following year, which corresponds with reporting due under various other EPA as well as state reporting requirements, including Toxic Release Inventory (TRI) and Tier II reports. Thus, NPCA requests that the reporting date be September 30th of the following year in order to avoid the hectic spring and summer months that already have heavy reporting obligations.

**Response:** EPA has retained annual reporting in the final rule. See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Thomas W. Easterly Commenter Affiliation: Indiana Department of Environmental Management (IDEM) Document Control Number: EPA-HQ-OAR-2008-0508-0525.1 Comment Excerpt Number: 7

**Comment:** U.S. EPA should consider having facilities report their emissions consistent with criteria reporting requirements under the Consolidated Emission Reporting Rule (CERR). Reporting dates should be changed from March 31st to June 1st to be consistent with the CERR reporting requirements. This would be less burdensome on American industry.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Robert J. Martineau, Jr Commenter Affiliation: Counsel, Waller Lansden Dortch & Davis, LLP Document Control Number: EPA-HQ-OAR-2008-0508-0414.1 Comment Excerpt Number: 7

**Comment:** Facilities that will be subject to this proposed rule, such as Nissan's, already have numerous reporting deadlines in the first quarter of the year under other environmental programs. EPA needs to not view this reporting rule under the Clean Air Act in a vacuum. In these difficult economic times, companies operate on very lean staffing, trying always to do more with less. While convenient to require calendar year reports, yet another reporting obligation in the first quarter of the year is an unnecessary additional burden on industry. Nissan suggests the reporting deadline be moved to July 1 for the previous year's emission report. The slight delay in the date for reporting will not adversely impact EPA's goal of using the information to inform policy discussions, but will reduce the burden on many industrial sources.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Helen A. Howes **Commenter Affiliation:** Exelon Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0373.1 **Comment Excerpt Number:** 6

**Comment:** Exelon supports the proposed annual reporting schedule. This frequency will allow EPA to receive timely data without being overly burdensome on reporters.

**Response:** EPA has retained annual reporting in the final rule.

**Commenter Name:** Mike Aire **Commenter Affiliation:** Newmont Mining Corporation (NMC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0378.1 **Comment Excerpt Number:** 6

**Comment:** Newmont supports the extension of the schedule for reporting beyond March 31 of the following year for submission of reports for the previous calendar year. Newmont believes that more time will be required to completely and accurately compile reports in the required format. This is particularly a concern for the initial years of reporting and in light of the self verification requirements. Newmont requests that the schedule for reporting be extended to June 30 of the following year.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Barbara A. Walz **Commenter Affiliation:** Tri-State Generation and Transmission Association, Inc. **Document Control Number:** EPA-HQ-OAR-2008-0508-0495.1 **Comment Excerpt Number:** 6

**Comment:** At the Arlington hearing, it was suggested that the proposed annual March 30 deadline be moved to June 30 to synchronize this reporting with the Toxic Release Inventory (TRI) deadline. Moving the deadline to June 30 would allow reporters the opportunity to integrate their GHG reporting with their existing systems for collecting, and assuring the accuracy of the TRI emissions. Taking advantage of any such synergies could reduce the time and cost of reporting under this program. As a result, Tri-State urges EPA to incorporate this suggested change.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

## **Commenter Name:** John M. Batt **Commenter Affiliation:** Airgas, Inc. **Document Control Number:** EPA-HQ-OAR-2008-0508-0408.1 **Comment Excerpt Number:** 6

**Comment:** We recommend that the annual report due-date be June 1. The efforts to complete collecting, compiling, analyzing, and performing Q/A reviews on GHG emissions and related data typically requires more than three months of time. We feel that at least five months of time is needed to provide EPA with accurate, valid GHG emissions data for the previous year. A June 1 submission date is also consistent with the existing Carbon Disclosure Project voluntary reporting program that many companies have been involved with. This due date also helps avoid conflicts with other EPA or State environmental reporting program due dates for EPCRA Chemical Inventory Reporting (March 1), Hazardous Waste Biennial Reporting (March 1), State Air Emissions Inventories (often May 1), and the EPCRA Toxic Release Inventory Reporting (July 1), which already require substantial compliance focus, time, and effort by many companies.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Kevin Fay Commenter Affiliation: International Climate Change Partnership (ICCP) Document Control Number: EPA-HQ-OAR-2008-0508-0490.1 Comment Excerpt Number: 1

**Comment:** An annual reporting period is the appropriate time frame for submission of data, except for those entities already submitting quarterly reports under other regulations.

**Response:** EPA agrees with the commenter.

**Commenter Name:** Michael Bradley **Commenter Affiliation:** The Clean Energy Group (CEG) **Document Control Number:** EPA-HQ-OAR-2008-0508-0479.1 **Comment Excerpt Number:** 5

**Comment:** The Clean Energy Group does not believe an annual reporting deadline of March 31 allows adequate time to collect and verify data. The Clean Energy Group proposes moving the reporting deadline to June 30 of the year following the reporting year to ensure reporting entities have adequate time to collect and verify quality data. While several of the proposed greenhouse gas emissions reporting requirements build off existing programs for which methodologies and data gathering procedures are in place, several areas of the proposed rule that directly affect the Clean Energy Group companies (especially reporting SF<sub>6</sub> emissions from electric power systems, as well as reporting emissions from the oil and natural gas source categories) will require the development of new operating procedures and staff training in order to collect the data in the manner that EPA is proposing. Even within the electric sector, with its historically robust reporting, there are several new areas subject to reporting, which will require the development of new methodologies and training of staff. A few months, or even weeks, from

publication of the final rule to full implementation is simply not enough time to implement new procedures for obtaining the high quality data EPA seeks.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.. For the response to the comment regarding the initial reporting year, see the preamble for the response on the selection of the initial reporting year. Also, EPA is not going final with subpart W (Oil and Natural Gas Systems) and Subpart DD (Sulfur Hexafluoride (SF<sub>6</sub>) from Electrical Equipment). As we consider next steps we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on these subparts at this time.

#### **Commenter Name:** David Thornton **Commenter Affiliation:** National Association of Clean Air Agencies (NACAA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0563 **Comment Excerpt Number:** 5

**Comment:** We had anticipated that this proposal would have given greater weight to the needs and experiences of state and local air pollution control agencies. Key choices regarding the process and time frames for reporting and the level of reporting appear to have been made by EPA without substantive consultation with states and localities. The agency states in its Regulatory Impact Analysis that it wished to make use of existing cooperative efforts with facilities, and that, therefore, "some reporting requirements of the proposed rule are different from other federal and state programs." These differences, however, are not insignificant. A hodgepodge of regulatory reporting time frames for different programs will be exacerbated by the proposal unless harmonized. Specifically, the proposed rule requires annual reporting for data from most industrial sources on March 31, but requires data from EGUs to be reported quarterly. Criteria pollutant data for the NEI must be reported 12 months after the end of the calendar year. or December 31, under the Air Emissions Reporting Rule. TRI data must be reported to EPA annually on July 1. States and localities believe that these disparate reporting times can and should be harmonized, and that agencies should be consulted about the best, most efficient way to do so. Although NACAA is mindful that EPA's proposal was developed on a fast track in order to meet Congressional requirements, a stronger proposal having wider acceptance would have emerged – and still could emerge – from a more collaborative, inclusive process.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. EPA intends to work with States and others to support harmonization across programs to the extent possible. See the preamble for discussion of the role of States and the relationship of this rule to State programs.

# **Commenter Name:** James P. Brooks **Commenter Affiliation:** Maine Department of Environmental Protection **Document Control Number:** EPA-HQ-OAR-2008-0508-0404.1 **Comment Excerpt Number:** 5

**Comment:** The Department also recommends that EPA establish a reporting deadline consistent with existing reporting deadlines. Although owners and operators should track their emission levels throughout the year, many companies rely on annual consumption and production reports, testing and monitoring results, and consultants to generate annual emission estimates. The

proposed March 31 deadline will limit the ability of sources to ensure that their emission estimates are comprehensive and accurate.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Rechelle Hollowaty Commenter Affiliation: Tyson Foods, Inc. Document Control Number: EPA-HQ-OAR-2008-0508-0379.1 Comment Excerpt Number: 5

**Comment:** We strongly urge EPA to rethink their position for the Meat Processing Industry and allow a much slower transition into reporting as well as limit the number of years from 2-3 years of required reporting. Thereafter, a facility should only have report if there are significant changes made to the that location dramatically increasing the GHG emissions.

**Response:** EPA is not going final with subpart M (Food Processing). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on the Food Processing subpart at this time. For the response to the comment on reducing the frequency of reporting, see the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3. EPA decided not to phase in reporting for different source categories as recommended by the commenter because comprehensive data are critical to the timely development of future GHG policy and regulatory programs. As explained in Section II.G of the preamble, 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 2010 is a priority. For more information on why EPA needs to collect data in 2010, see Section I.G of the preamble. However, EPA agrees that some facilities may need additional time to install monitoring devices and the final rule includes provisions allowing best available data to be used during the first quarter of 2010. For more information on the use of best available data, see Section II.G of the preamble.

Commenter Name: See Table 11 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0395.1 Comment Excerpt Number: 5

**Comment:** The proposed rule would require "annual" reports and development of a Quality Assurance Project Plan (QAPP). We recommend that EPA remove the requirement for annual reporting for those facilities where estimates of GHGs will not significantly change from one year to the next. EPA could establish a provision whereby a facility that is initially subject to this rule is only required to submit follow-up reports in cases where there have been a significant increase in GHG emissions (i.e., greater than a 25% increase in annual emissions).

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3.

## **Document Control Number:** EPA-HQ-OAR-2008-0508-0562 **Comment Excerpt Number:** 4

**Comment:** Dow Corning already has many regulatory reports that are required in the first quarter of each year. We request that the deadline for submitting this emission data falls in line with the timeline of the TRI report which is July 1st.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: David Fairfield Commenter Affiliation: National Grain and Feed Association (NGFA) Document Control Number: EPA-HQ-OAR-2008-0508-0463.1 Comment Excerpt Number: 4

**Comment:** The NGFA generally supports the reporting of GHG emissions data on an annual basis.

**Response:** EPA has retained annual reporting in the final rule.

Commenter Name: Allen Kacenjar Commenter Affiliation: Squire Sanders Document Control Number: EPA-HQ-OAR-2008-0508-0492.1 Comment Excerpt Number: 4

**Comment:** We support request for deferral of the proposed March 31 deadline for annual GHG monitoring reports. AMP-Ohio's generating members are SBREFA small entities with small environmental staffs and limited ability to hire additional compliance personnel. Requiring GHG reporting on March 31 would impose significant additional obligations on our environmental managers during the busiest period of their year – when they are already working overtime to prepare quarterly and annual Title V reports and certifications. One logical deadline for reporting under the Proposed Rule would be July 1, which coincides with the requirement to submit annual reports under CERCLA's Toxic Release Inventory (TRI) program. That deadline seems particularly appropriate because TRI reporting involves the compilation of much data that would be useful when preparing GHG reports.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Curt DeMille Commenter Affiliation: Titanium Dioxide Stewardship Council (TDSC) Document Control Number: EPA-HQ-OAR-2008-0508-0486.1 Comment Excerpt Number: 3

**Comment:** The TDSC believes that the annual date for reporting, which is listed as March 31, should be moved to July 1. The TDSC agrees with EPA that GHG emissions data should be reported on an annual basis. The proposed rule requires that GHG emissions for a reporting year

be submitted by March 31 of the following year, however. The TDSC suggests that this due date be moved to later in the year to coincide better with other reporting requirements. Many States and local regulatory agencies require submittal of a significant number of reports between March and July of each year, which require facility resources. For example, the Climate Registry requires data be submitted by June 30, EPA's Climate Leaders has a June 30 deadline, and California's Mandatory GHG emissions reporting program has a June 1 deadline for some source categories. Many companies established reporting systems to meet these existing timelines and this earlier reporting timeframe would require additional reporting resources to complete the calculation and reports. A suggested reporting deadline is July 1, which coincides with the deadline for submitting TRI data.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Paul R. Pike Commenter Affiliation: Ameren Corporation Document Control Number: EPA-HQ-OAR-2008-0508-0487.1 Comment Excerpt Number: 3

**Comment:** In the proposal (§ 98.3(b)), existing facilities would begin collecting data on January 1, 2010 and, if the rule applies, submit reports for the prior calendar year by March 31 each year starting in 2011. Because this rule does not replace the reporting required under the Acid Rain Program ("ARP"), facilities with units that are subject to the ARP would continue to report  $CO_2$  mass emissions quarterly under Part 75, in addition to providing the annual GHG emissions reports under this rule. We do not support the repeating of the reporting of the mass emissions submitted quarterly. We would also suggest allowing a later reporting date of June 30th that would allow for the integration of reporting with other reporting programs.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.For the response to the comment on the content of the annual report required from facilities subject to ARP, see the comment response document for subpart D - Electricity Generation. EPA has retained annual reporting in the final rule.

Commenter Name: Angela Burckhalter Commenter Affiliation: Oklahoma Independent Petroleum Association (OIPA) Document Control Number: EPA-HQ-OAR-2008-0508-0386.1 Comment Excerpt Number: 10

**Comment:** EPA proposes annual GHG emission reports. If EPA proceeds with a multiple year collection effort, we think annual reporting is too frequent. Industry will be reporting one data set at the same time it will be preparing to submit data for the following year. EPA has proposed a number of requirements that will most likely require the hiring of consultants to conduct specialized monitoring/measurement that is not normally done. We think there will be a shortage of qualified consultants and equipment to conduct such efforts. In addition, EPA will be receiving a significant amount of data to review, verify, and summarize before they will receive another large data set to evaluate. We think reports should be submitted every 2 years.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3.

# **Commenter Name:** Joseph A. D'Amico **Commenter Affiliation:** Foundation Coal Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0421.1 **Comment Excerpt Number:** 6

**Comment:** Reporting deadlines for any calendar year should be moved to the 2nd quarter of the year. During the first quarter, public companies are already under heavy regulation by the Securities and Exchange Commission for Annual Reporting of 10-K Forms, Proxy Statements and Annual Meetings. Requiring a second federal filing within the first quarter will cause additional burden on companies required to comply with the Rule.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Robert N. Fielding Commenter Affiliation: Freescale Semicondutor, Inc. Document Control Number: EPA-HQ-OAR-2008-0508-1137.1 Comment Excerpt Number: 6

**Comment:** Provide A Six Month (not a three month) Reporting Time frame : The Proposed Rule's requirement for prior year reporting in the first three months after-end year provides insufficient time to collect, analyze, prepare and certify data for submission to U.S. EPA. Notably, other reporting programs with less complexity, such as the Toxic Release Inventory Program, allow a six month timeframe. Freescale urges the EPA to adopt this same six month timeframe.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Patrick J. Nugent **Commenter Affiliation:** Texas Pipeline Association (TPA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0460.1 **Comment Excerpt Number:** 3

**Comment:** The annual reporting deadline should be moved from March 31 to June 30; alternatively, the rules should provide for an annual 90-day automatic extension of time to file the GHG emissions report. EPA has not demonstrated why it has established March 31 as the deadline for reporting emissions of GHG. There is no justification for the selection of that date in the docket for this rulemaking. A first-quarter deadline such as March 31 would create a reporting burden on the oil and gas industry as it would stack on top of the filing deadlines of other major reports by this industry. Regulated entities operating major sources must file an emissions inventory with state air regulatory entities on or before March 31. Other major first-quarter reports for this industry include an annual report to the Texas Railroad Commission, a DOT pipeline safety report, and an EPCRA Tier II report (due annually by March 1). In addition, a March 31 deadline would not allow sufficient time for the preparation and submission of reports from the prior year's activity. Prior-year fugitive fuel use or fuel throughput data and

production reports are often not even available until three months into the new year, and additional time beyond that would be necessary in order to perform the various calculations, quality assurance checks, reviews, and certifications that would be required for the HG emission reports. Accordingly, TPA urges EPA either to move the annual reporting deadline from March 31 to June 30, or to allow covered facilities each year to request a 90-day extension of time to file its GHG emission report, that would be automatically granted if timely requested.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.. A 90-day extension of the reporting deadline would delay the collection, verification, and public dissemination of data critical to informing ongoing policy decisions. It would also result in unnecessary addition burden to both the reporter who would have to submit a request to EPA detailing their reasons for needing the extension and to EPA who would have to review and respond to each request. Also, EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information.

Commenter Name: Caroline Choi Commenter Affiliation: Progress Energy Document Control Number: EPA-HQ-OAR-2008-0508-0439.1 Comment Excerpt Number: 8

**Comment:** Under proposed 98.3(b), existing facilities would begin collecting data on January 1, 2010 and, if the rule applies, submit reports for the prior calendar year by March 31 each year starting in 2011. Because this rule does not replace the reporting required under the ARP, facilities with units that are subject to the ARP would continue to report  $CO_2$  mass emissions quarterly under Part 75, in addition to providing the annual GHG emissions reports under this rule. Progress Energy supports the reporting of annual data. The Company believes that reporting on a more frequent basis is not warranted for this program.

**Response:** EPA has retained annual reporting in the final rule.

# **Commenter Name:** See Table 3 **Commenter Affiliation: Document Control Number:** EPA-HQ-OAR-2008-0508-0433.2 **Comment Excerpt Number:** 8

**Comment:** Proposed §98.3(b) requires facilities to submit annual GHG emissions reports no later than March 31 of each calendar year for GHG emissions in the previous calendar year. For large complex facilities, a three-month period is not sufficient time to compile all of the activity data needed to calculate emissions, perform the emission calculations, conduct the necessary quality assurance checks, complete the certification by designated representative, and submit the reports to EPA. The need for an extended reporting schedule was recognized in the California AB-32 rule which allows petroleum refineries and certain other sources up to five months to report. In addition, the TRI program, another nationwide reporting rule, allows facilities up to six months to submit their reports. EPA should allow submittal of GHG emissions reports no later than July 31 of each reporting year. This would provide facilities with sufficient time to complete the reporting process outlined above, and would avoid direct overlap with reporting schedules for other routine reports, such as the following, which are often prepared by the same facility

personnel: State Emissions Inventory, typically due on March 31; SARA 311, due within 3 months of addition of chemical over reporting threshold; SARA 312, due on March 1; and the annual TRI, due on July 1.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Geoffrey Cullen **Commenter Affiliation:** Can Manufacturers Institute (CMI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0703.1 **Comment Excerpt Number:** 7

**Comment:** The first report, which may only cover a partial year depending on when EPA finalizes the rule, should be due July 1, 2011 (and subsequent reports on July 1st every year thereafter). The July 1st reporting date would be consistent with the reporting timeframe provided for the Toxic Release Inventory. Given the complexity of the GHG reporting requirements, data collection starting 180 days after the final rule is issued seems reasonable.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. The final rule requires collection of data for year 2010 to be reported in 2011

Commenter Name: See Table 6 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0530.1 Comment Excerpt Number: 7

**Comment:** A second-quarter reporting deadline will be more consistent with existing state greenhouse gas reporting programs, and will avoid interfering with the extensive first-quarter environmental data reporting requirements that apply to many industries.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Juanita M. Bursley Commenter Affiliation: GrafTech International Holdings Inc. Company (GrafTech) Document Control Number: EPA-HQ-OAR-2008-0508-0686.1 Comment Excerpt Number: 7

**Comment:** GrafTech requests that EPA consider changing the reporting requirement contained in §98.3(b) Schedule that requires annual reporting of GHG emissions no later than March 31 of each calendar year for GHG emissions in the previous calendar year. EPA's proposed March 31st due date unfortunately is very close to the March 1st reporting deadline for Superfund Amendments and Reauthorization Act (SARA) Tier II reports. Likewise, many Title V permit biannual compliance reports are due March 15th . For most facilities, the same resources for environmental compliance programs will be responsible for SARA, Title V and GHG reporting obligations. By assigning a March 31, 2011 deadline for facilities and suppliers to report GHG emissions, EPA will be creating an unnecessary burden for those facilities which are obligated to timely complete and submit the other required environmental reports. For this reason, GrafTech respectfully requests that EPA delay by one or two months the reporting due date for the new GHG emissions reports until the end of April or preferably May 31st.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** David R. Case **Commenter Affiliation:** Environmental Technology Council (ETC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0664.1 **Comment Excerpt Number:** 7

**Comment:** We also do not believe that March 1 of each year is a realistic reporting date. EPA flatly asserts that 3 months is a reasonable time to compile a year's worth of information, make all the necessary calculations of emissions, quality assure the data, and prepare a report in a manner that would allow a responsible corporate officer to make the necessary certification. At least for hazardous waste incinerators, a 3 month period is not sufficient given the likely volume of data, the complexity of the calculations, the challenge of quality assurance, and the pressing demands of other reporting obligations under other EPA regulations (e.g., MACT, RCRA annual reports, TRI, etc.). The ETC again strongly urges EPA to adopt a more realistic and reasonable reporting date of July 1.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Lauren E. Freeman Commenter Affiliation: Hunton & Williams LLP Document Control Number: EPA-HQ-OAR-2008-0508-0493.1 Comment Excerpt Number: 9

**Comment:** UARG supports the reporting of annual data. Reporting on a more frequent basis is not warranted for this program. UARG requests, however, that the rule allow up to June 30 for submission of annual reports. Many units and sources reporting under this rule will be using data (e.g., records of fuel consumption and fuel analysis) that also are used by companies for Toxic Release Inventory ("TRI") reporting or other reporting to state agencies that generally have a June 30 deadline. Harmonizing these deadlines would allow companies to integrate GHG reporting into their existing systems for reviewing and quality assuring such data, thereby decreasing burdens under this rule.

**Response:** EPA has retained annual reporting in the final rule. See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Myron Hafele Commenter Affiliation: Kohler Co. Document Control Number: EPA-HQ-OAR-2008-0508-0761.1 Comment Excerpt Number: 6 **Comment:** We request that the first annual report be due no sooner than 180 days after the reporting software becomes available to affected facilities.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. EPA plans to make the reporting software available to reporters as soon as possible after the promulgation of the final rule. EPA will conduct outreach and provide opportunities for stakeholder feedback on the specific reporting format and reporting system. We also plan to provide training on the electronic reporting system. For additional information on the reporting system, see Section V of the preamble and Volume 11 of this document.

**Commenter Name:** Jeffrey A. Sitler **Commenter Affiliation:** University of Virginia (UVA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0675.1 **Comment Excerpt Number:** 10

**Comment:** Preamble Section IV.E., Rationale for Selecting the Reporting Year – EPA proposes that the annual GHG emissions reports would be submitted no later than March 31 for the previous calendar year's reporting period. The preamble comments that three months should be sufficient time to complete the report. This would be true if the GHG emissions report were the only report needing preparation at this time of the year. Most of the facilities that are going to be tasked with this reporting have many other permit reports due in the same timeframe. As an example, for our university, under our Title V Permit and other related permits, we already have to submit seven reports over this timeframe ending with our Title V Emissions Inventory due on April 15. We request the reporting deadline be extended to April 15 to submit the GHG emissions report to be in line with our Title V Emissions Inventory, which incorporates some of the same data.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Catherine H. Reheis-Boyd Commenter Affiliation: Western States Petroleum Association (WSPA) Document Control Number: EPA-HQ-OAR-2008-0508-0983.1 Comment Excerpt Number: 6

**Comment:** EPA proposes a reporting system that is based on annual emissions by facilities and reporting separately by suppliers, importers and exporters of fuels and specified gases. The reports will be submitted annually on March 31st of each year for emissions from the previous calendar year and would start January 1, 2010. There is little likelihood that industry can feasibly comply with a January 1,2010 start date especially if the rule is not finalized until late in 2009. Our experience with implementing the California reporting program shows that despite being more than 18 months into the program, reporters are still struggling to get their first year's data submitted even though the program only requires the use of best available data for the first year. In addition, the ARB has had to postpone, or effectively extend, the reporting deadline at least twice to deal with start-up Issues. EPA's March 31 date for submittal of the data is problematic because a March, 2011 report would be expected to include data from calendar year 2010. However, the three month period from January to March is insufficient to collect all activity data that would be required to calculate emissions, conduct internal reviews and quality assurance

checks of the data, certify the data by a designated company representative, and submit it to EPA. Other reporting programs allow longer time intervals for reporting (e.g., six months for the Toxics Release Inventory (TRI), and five months for California's mandatory GHG reporting). Recommendation: Submit data on a calendar year basis, with reports due 6-12 months after the close of each reporting year. We also recommend that EPA adopt a phase-in approach using best available data as in the CARB regulation.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. For the response to the comment on changing the initial reporting year, see Section II.G of the preamble.

**Commenter Name:** Gregory A. Wilkins **Commenter Affiliation:** Marathon Oil Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0712.1 **Comment Excerpt Number:** 6

**Comment:** Marathon proposes that biannual reporting be used for this rule and if this is not accepted that nothing more frequent than annual reporting be required. Marathon has estimated Greenhouse Gas emissions according to methods from the 2004 API Compendium Looking back to 1998, and over the past four years, has found that there is little fluctuation between each year's emissions for facilities that will be subject to the proposed rule. When looking at Marathon's combined downstream (refining) emissions and including the increases in throughput due to plant expansions, emissions have changed by less than 2 percent per year. To reduce burden for both industry and the EPA, Marathon proposes that the reporting data as required by this reporting rule be submitted every other year on the submission date provided in the above comment.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3.

Commenter Name: Marc J. Meteyer Commenter Affiliation: Compressed Gas Association (CGA) Document Control Number: EPA-HQ-OAR-2008-0508-0981.1 Comment Excerpt Number: 6

**Comment:** The CGA recommends that the annual report due date be June 1. A number of our members have been involved with voluntary GHG reporting programs or with the European Union Emissions Trading Scheme. This experience has demonstrated that the efforts to complete collecting, compiling, analyzing, and performing Q/A reviews on GHG emissions and related data typically requires more than three months of time. In most cases, these efforts have been limited to  $CO_2$  emissions, and have not considered some of the other GHGs in this proposal. As a result, we believe at least five months of time is needed to provide EPA with accurate, valid, and certified GHG emissions data for the previous year. A June 1 submission date is consistent. With the existing Carbon Disclosure Project voluntary reporting program that a number of our members have been involved with. This due date also helps avoid conflicts with most other EPA or State environmental reporting program due dates for EPCRA Chemical Inventory Reporting (March 1), Hazardous Waste Biennial Reporting (March 1), State Air Emissions Inventories (often May 1), and the EPCRA Toxic Release Inventory Reporting (July 1), which already require substantial compliance focus, time, and effort by many companies.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

# **Commenter Name:** Gregory A. Wilkins **Commenter Affiliation:** Marathon Oil Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0712.1 **Comment Excerpt Number:** 5

**Comment:** Marathon opposes the annual submission deadline of March 31st. Marathon proposes that the reporting deadline be moved to July 31s1 to allow adequate time for the data and records to be compiled and formatted for submission, and for the designated representative to view the submissions prior to certifying them. EPA states on page 74 FR 16472 of the preamble that, ...three months is sufficient time to calculate emissions, quality-assure, certify, and submit the data." This reporting deadline is far too short to allow for accurate compilation, calculation, and quality assurance on the data. Additionally it is not enough time to ensure that the data has been consistently compiled and interpreted by our various facilities, while also gathering other records for reporting and certifying the process and information as being accurate and true. The data collection, complex methodologies, and calculations required are comparable or even more detailed than those required by Toxics Release Inventory (TRI) reporting. However, the TRI is due mid year. In addition, numerous other reports are required to be submitted by facilities affected by this rule in the first three months of the year. Several of these reports are quite detailed and require significant resource allocation during this time. Therefore, a reporting date of July 31st will also prevent overloading of staff at facilities by allowing submissions of reports to EPA to be staggered. This will improve the accuracy and completeness of all reports. In addition other current GHG reporting programs allow a much longer time period to report. For instance, both The Climate Registry and the California Climate Action Registry require initial submission prior to verification by June 30, 2009 for 2008 emission estimates.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** [name not given] **Commenter Affiliation:** Graphic Arts Coalition (GAC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0701.1 **Comment Excerpt Number:** 5

**Comment:** The proposed rule requires that GHG emissions for a reporting year be submitted by March 31 of the following year. We agree with the annual reporting period because it comports with many other existing mandatory and voluntary GHG reporting programs at the State and Federal levels.

**Response:** EPA has retained annual reporting in the final rule. See the preamble (Section II.J) for the response on the selection of the reporting deadline.

# **Commenter Name:** Marcelle Shoop **Commenter Affiliation:** Rio Tinto Services, Inc. **Document Control Number:** EPA-HQ-OAR-2008-0508-0636.1 **Comment Excerpt Number:** 5

**Comment:** EPA seeks comment on possible alternatives to annual reporting, including a commitment to review the continued need for the information at a specific later date, or a sunset provision. (74 Fed. Reg. at 16462) Comment: Rio Tinto agrees that annual greenhouse gas reporting, which also is the current accepted practice for most registries, 2 is adequate and supports this approach. [Footnote: EPA indicates that EGUs subject to the acid rain provisions of the Clean Air Act that report on a quarterly basis would continue to report on a quarterly rather than annual basis. Our comments do not address that aspect of EPA's proposal] However, EPA proposes a reporting compliance date of March 31. We request that EPA reconsider this date and instead adopt a later reporting deadline no earlier than June 1. A later reporting date provides a reasonable balance among the various existing or proposed mandatory GHG reporting deadlines: RGGI: April 15; verification due December 1 TCR: June 30; verification due December 15 WCI:April 1; verification due September 1 ARB: Two reporting I verification schedules based on source type: Stationary Combustion, Electricity Generators & Cogen Units: April 1; verification due October 1 Electricity Marketers & Retail, Cement, Petroleum Refineries June 1; verification due December 1 New Mexico: July 1 Oregon: March 15 Washington: October 31 At a minimum, we request that EPA provide the later reporting date (June 1) for those entities that utilize third party verification of their GHG emissions reporting.

**Response:** EPA has retained annual reporting in the final rule. See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** J. P. Blackford **Commenter Affiliation:** American Public Power Association (APPA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0661.1 **Comment Excerpt Number:** 4

**Comment:** APPA understands and appreciates EPA's desire to begin collecting accurate data on GHG emissions as soon as possible. The proposed deadline of March 1 for annual reports poses significant challenges for APPA utility members. Several of our utilities say they are already swamped getting out other governmental reports to state and federal agencies in the first quarter of each year. Some of these reports include allowance trading reports, Title V Operating Fees, SO2 and NOx reports, Tier II hazardous and chemical inventories, which are all due during the first quarter for many utilities. Many APPA members are very small utilities that have limited staff resources. The burden would be more significant to these smaller utility members. Therefore, APPA requests that EPA revise the due date for the annual reports to no earlier than June 30. This would be especially helpful to these smaller utilities and would allow their limited staff sufficient time to prepare other required reports and ensure the accuracy of the GHG emissions report submitted to EPA. A June 30 deadline would also be more consistent with some State reporting deadlines. For example, Missouri's State Emissions Inventory Report is due in June, and it would seem reasonable and consistent to include the data for this program in that report. There are also many state reports that are due in the first quarter, so having until June 30 would again make the GHG reporting process easier for APPA's utility members. Coordination of the reporting after June 30 will reduce regulatory impacts on public power utilities.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Karen St. John Commenter Affiliation: BP America Inc. (BP) Document Control Number: EPA-HQ-OAR-2008-0508-0631.1 Comment Excerpt Number: 4

**Comment:** EPA's proposal to require the submission of annual reports on February 28 for fuel suppliers and March 31 for facilities would be challenging given the amount of information that would need to be collected, assembled, reviewed and certified internally prior to reporting. BP recommends that EPA set the deadline for the report submissions as June 30, which would be consistent with EPA's Toxics Release Inventory (TRI).

**Response:** EPA did not propose to require the submission of annual reports on February 28, but instead sought comment on this option. See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Alexander D. Menotti Commenter Affiliation: Kelley Drye & Warren et. al LLP on behalf of the Steel Manufacturers Association (SMA) and Specialty Steel Industry of North America (SSINA) Document Control Number: EPA-HQ-OAR-2008-0508-0656.1 Comment Excerpt Number: 5

**Comment:** SMA/SSINA believe that the yearly reporting date should be extended to later in the year in order to provide ample time to collect the necessary data and prepare accurate reports. We anticipate GHG reporting to be at least as burdensome as Toxic Release Inventory reporting, which has an annual July 1 deadline. Accordingly, we support a reporting deadline that would be no sooner than July 1 of each calendar year.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Matthew Frank Commenter Affiliation: Wisconsin Department of Natural Resources Document Control Number: EPA-HQ-OAR-2008-0508-1062.1 Comment Excerpt Number: 6

**Comment:** The reporting requirements listed in 40 CFR 98.3(c) could be difficult to complete in the required reporting deadline allowed under the proposed rule. Of particular concern is (4) because it requires the calculation of emissions from each applicable source category. The Department recommends that the date for reporters to submit their emissions data be extended, at a minimum, to six months (or June 30 of each year).

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

# **Commenter Name:** Thomas Diamond **Commenter Affiliation:** Semiconductor Industry Association (SIA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0498.1 **Comment Excerpt Number:** 34

**Comment:** EPA should allow facilities more time than the current three (3) months to report prior calendar year data. That period is insufficient to collect, analyze, prepare, and certify data for submission to EPA. Other reporting programs allow longer time intervals for reporting – EPA's Toxic Release Inventory allows six (6) months and California's mandatory GHG reporting program allows five (5) months. Reporting timeframe should be six months.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Pamela F. Faggert Commenter Affiliation: Dominion Document Control Number: EPA-HQ-OAR-2008-0508-1741 Comment Excerpt Number: 15

**Comment:** We support annual reporting. Reporting on a more frequent basis is not warranted under this program.

Response: EPA has retained annual reporting in the final rule

**Commenter Name:** Shannon Broome **Commenter Affiliation:** Air Permitting Forum **Document Control Number:** EPA-HQ-OAR-2008-0508-0524.1 **Comment Excerpt Number:** 12

**Comment:** The proposed rule would impose a reporting date of March 31st of each year. Given the scope of the proposal and the need to consolidate emissions information across complex plants to prepare reports, the date should be set at July 1st instead. This date is consistent with the TRI due date when similar types of records are being compiled and submitted.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Robert D. Bessette Commenter Affiliation: Council of Industrial Boiler Owners (CIBO) Document Control Number: EPA-HQ-OAR-2008-0508-0513.1 Comment Excerpt Number: 12

**Comment:** The required submission date of March 31 is too early in the year for so many reportable units and poses an unreasonable burden with other reporting obligations during this same timeframe, such as Title V quarterly, annual or semi-annual certification, deviation

reporting and annual state emission inventory reporting. CIBO strongly recommends moving the submission date to July 31, after sources file Toxic Release Inventory (TRI) reports on July 1.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** John Robitaille **Commenter Affiliation:** Petroleum Association of Wyoming (PAW) **Document Control Number:** EPA-HQ-OAR-2008-0508-1603 **Comment Excerpt Number:** 8

**Comment:** Emissions inventories for most states are due on March 31 each year. Since the EPA is requiring different calculation methodologies than what is currently being used to determine emissions inventories for permits coupled with the extensive metering, monitoring, recordkeeping and QA/QC requirements of this rule, PAW requests that a later due be proposed which is no earlier than June 30th of each year. Furthermore, moving the deadline allows companies time to more accurately estimate the emission for future climate change regulations.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Chris Hobson Commenter Affiliation: Southern Company Document Control Number: EPA-HQ-OAR-2008-0508-1645.2 Comment Excerpt Number: 2

**Comment:** Although a reporting date of March 31 each year should, in theory, provide adequate time for collecting and quality-checking data, continuous emission monitoring systems (CEMs) data, EPA should consider June 30 as the reporting deadline. Southern Company supports an annual reporting deadline of June 30 instead of March 31. This later deadline will allow time to gather data and perform calculations for reporting points that do not have CEMs. This later deadline also coincides with reporting under EPA's Toxics Release Inventory (TRI).

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: William C. Herz Commenter Affiliation: The Fertilizer Institute (TFI) Document Control Number: EPA-HQ-OAR-2008-0508-0952.1 Comment Excerpt Number: 68

**Comment:** The NPRM requires a reporting deadline of March 31. 74 Fed. Reg. at 16462. The March 31 deadline for reporting falls in the same date range as many other environmental reporting deadlines. Thus, an alternative deadline might reduce the burden on both industry and EPA. For example, inventory reporting under EPCRA is due on March 1st each year. 40 CFR 370.25. Also, biennial reports under RCRA are due March 1st every even numbered year per 40 CFR 262.41.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

## Commenter Name: See Table 7 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0679.1 Comment Excerpt Number: 50

**Comment:** §98.3(b) requires reporters to submit annual GHG emission reports no later than March 31 of each calendar year for GHG emissions in the previous calendar year. API requests that emissions reports be submitted no earlier than June 30 of each calendar year for the previous year. For emission data that rely on production data, companies do not have finalized production numbers until at least 45 days after the end of each month. For example, December data would not be available until February 15. Due to the volume of information requested, and the fact that key inputs to the calculations are not immediately available after the end of the year, submission of QA/QC'd and certified reports prior to June 30 is not reasonable.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Ron Downey Commenter Affiliation: LWB Refractories Document Control Number: EPA-HQ-OAR-2008-0508-0719.1 Comment Excerpt Number: 40

**Comment:** The March reporting deadline coincides with other environmental reporting deadlines, which may require sources to hire third parties to help them meet this additional reporting obligation. LWB proposes a May 31 reporting deadline so that those who best know their operations, not third parties, have time to prepare submissions required by this Rule.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Caroline Choi Commenter Affiliation: Progress Energy Document Control Number: EPA-HQ-OAR-2008-0508-0439.1 Comment Excerpt Number: 9

**Comment:** In addition, the Company encourages EPA to provide additional time in which to compile each annual report. March 31 does not provide sufficient time to assemble complete information. Progress Energy recommends a reporting deadline of June 30, which will assure that enough time for report compilation is allowed while providing EPA with the data it needs in a timely manner.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Michael Carlson **Commenter Affiliation:** MEC Environmental Consulting **Document Control Number:** EPA-HQ-OAR-2008-0508-0615 **Comment Excerpt Number:** 35

**Comment:** Reporting of GHG data should be no more frequent than annually (16595) to minimize the regulatory burden on industrial and commercial establishments.

**Response:** EPA has retained annual reporting in the final rule.

**Commenter Name:** Chris Greissing **Commenter Affiliation:** Industrial Minerals Association - North America (IMA-NA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0705.1 **Comment Excerpt Number:** 3

**Comment:** Section 98.3(b) requires submittal of annual reports by March 31 of each year. IMA-NA proposes that EPA push back the reporting deadline to June 30. This would allow facilities sufficient time to gather and carefully review emissions data prior to submittal. A June 30 reporting deadline would also ease the administrative burden with regard to report submittal since numerous other federal and state regulatory programs already have March 31 deadlines.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Lawrence W. Kavanagh Commenter Affiliation: American Iron and Steel Institute (AISI) Document Control Number: EPA-HQ-OAR-2008-0508-0695.1 Comment Excerpt Number: 31

**Comment:** AISI and ACCCI support the proposed requirement for annual reporting and agree with EPA's claim that "annual reporting is sufficient for policy development." 74 FR 16472.

**Response:** EPA has retained annual reporting in the final rule.

Commenter Name: See Table 7 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0679.1 Comment Excerpt Number: 23

**Comment:** EPA proposes a reporting system that is based on annual emissions by facility, and reporting separately by suppliers, importers and exporters of fuels and specified gases. The reports will be submitted annually on March 31st of each year for emissions from the previous calendar year. EPA is interested in receiving input regarding the frequency and schedule of

reporting: "However, as future policies develop it may be necessary to reconsider the reporting frequency and require more or less frequent reporting (e.g., quarterly or every few years)." (74 FR 86, page 16472) API comments As outlined above, and during preliminary discussions with the EPA, API supports annual reports on a calendar year basis, with reports due 6-12 months after the close of each reporting year, for an initial program that is of finite duration and is designed to collect data for policy development. The current proposal of having all calendar year data submitted to EPA by March 31st of the following year is not realistic. Three months is insufficient to collect all activity data that would be required to calculate emissions, conduct internal reviews and quality assurance checks of the data, and certify the data by a designated company representative, and submit to EPA. Other reporting programs allow longer time intervals for reporting (e.g., six months for the Toxics Release Inventory (TRI), and five months for California's mandatory GHG reporting). API recommends that the report date be no earlier than June 30th of each year. API is concerned about the EPA proposed deadlines for reporting of February 28th for fuel supply and March 31st for facility emissions. These deadlines are not realistic given the large amount of data and supporting information that needs to be collected, assembled, reviewed and certified internally by companies prior to reporting. API recommends that the report date be no earlier than June 30th.

**Response:** EPA has retained annual reporting in the final rule. See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Michael Garvin Commenter Affiliation: Pharmaceutical Research and Manufacturers of America (PhRMA) Document Control Number: EPA-HQ-OAR-2008-0508-0959.1 Comment Excerpt Number: 21

**Comment:** PhRMA requests that EPA amend the deadline for submission of the GHG emissions reports required under the proposed rule from March 31Pst of each year to May 31stP of each year. This change is to better align the GHG reporting preparation and submittal processes with the processes that are in place for other required reports such SARA TRI reports, which are due on July 1Pst P and state air emissions reports, which are generally due in mid-April.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Fiji George **Commenter Affiliation:** El Paso Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0398.1 **Comment Excerpt Number:** 17

**Comment:** Even after the necessary process optimization and experience, computation of emissions from El Paso facilities, especially those subject to proposed Subpart W, cannot be completed in one quarter after the end of the calendar year, for the above mentioned reasons. We therefore request that EPA consider a June 30 submittal deadline for all emission reports. The June 30th deadline is consistent with TCR's deadline for submittal of reports. TCR's deadline underwent considerable review and input from stakeholders. The Board members of TCR are essentially Administrators of GHG programs in 42 states and we believe that TCR adopted the

June 30th deadline with the understanding that it takes time to download, organize, correct, and analyze emission data, as well as prepare inventories in a format suitable for submission.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. EPA is not going final with subpart W (Oil and Natural Gas Systems). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart W at this time.

**Commenter Name:** Sam Chamberlain **Commenter Affiliation:** Murphy Oil Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0625 **Comment Excerpt Number:** 15

**Comment:** Murphy recommends to EPA that they consider a phased in 5 year reporting period, reporting every other year. The EPA would minimize the reporting burden of the regulated community by allowing less initial standards of reporting the first year and then require biennial reporting thereafter. The first year should be reported in 2011 for 2010 emissions based on best professional judgment (BPJ) and readily available data, similar to the reporting criteria for the TRI. For 2011 data, reporting would be only if emissions increased greater than 20% over the 2010 reporting period. For 2012 data, the QAPP plan would go into effect for reporting of emissions. For 2013 data, only increases above 10% would be reported. Then for 2014 emissions data, the QAPP plan would apply. When considering reporting frequency one has to be cognizant of the need for completeness as compared to reporting burden. Reporting frequency and report content should be designed to meet current needs, and should be amended as new regulatory mandates are promulgated. In the case of an interim reporting program, of a finite duration, annual reporting would provide needed emission data information on variability due to fluctuations of the business cycle. For the proposal cited, Murphy believes the program could rely on less frequent reports, which would be augmented in the intervening years by incremental reports that reflect significant operational changes and more accurate data. The program would then sunset after 2014 emissions data are reported.

**Response:** See the responses to comments EPA-HQ-OAR-2008-0508-433.1, excerpt 3 and EPA-HQ-OAR-2008-0508-0379.1, excerpt 5. For the response to the comment regarding the initial reporting year, see Section II.G of the preamble.

Commenter Name: Matthew Frank Commenter Affiliation: Wisconsin Department of Natural Resources Document Control Number: EPA-HQ-OAR-2008-0508-1062.1 Comment Excerpt Number: 15

**Comment:** The reporting requirements for this subpart could be difficult to achieve by March 31 of each year. The Department recommends that the date for reporters to submit their emissions data be extended, at a minimum, to six months (or June 30 of each year).

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

# Commenter Name: See Table 5 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0480.1 Comment Excerpt Number: 14

Comment: The annual emissions reports should be due June 30th, which marks the end of the second financial quarter. A second-quarter deadline would be more consistent with existing state GHG reporting programs, and avoid adding to the already heavy first-quarter environmental reporting obligations that many industries face. The June 30th deadline is consistent with The Climate Registry's (TCR) deadline for submittal of reports that underwent considerable review and input from stakeholders. The Board members of TCR, who are essentially the Administrators of GHG programs in 42 states, determined that TCR reports would be due June 30th after giving due consideration of the time it takes time to download, organize, correct, and analyze emission data, as well as prepare inventories in a format suitable for submission. Moving the reporting deadline is particularly important for INGAA's members. Natural gas transmission companies are already obligated to submit several data-intensive reports to various agencies, including EPA, in the first quarter of the year. These include Title V semiannual monitoring reports and annual certifications under the Clean Air Act; quarterly deviation reports under the Clean Air Act; Discharge Monitoring Reports under the Clean Water Act; and Tier II reports under the Emergency Preparedness and Community Right-to-Know Act. A June 30th submission deadline would help prevent GHG reporting obligations from interfering with these existing reporting requirements.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Sam Chamberlain **Commenter Affiliation:** Murphy Oil Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0625 **Comment Excerpt Number:** 11

**Comment:** EPA is proposing a reporting system that is based on annual emission by facilities and separately by suppliers, importer and exporters of fuels and specified gases. The reports will be submitted annually on March 31st of the year for emissions during the previous calendar year. EPA is interested in receiving input regarding the frequency and schedule of reporting: "However, as future policies develop it may be necessary to reconsider the reporting frequency and require more or less frequent reporting (e.g., quarterly or every few years)." (74 FR 86, page 16472) Murphy has been conducting GHG inventories for the last 8 years. Typically we start our inventory process in March/April and conclude around September/ October. The justification for starting the process in second quarter is due to the significant amount of year end reports required at all of our facilities and for the corporate office. This reporting burden requires cross functional disciplines to work together not only in the USA, but worldwide. Uniformity and accuracy of data is extremely critical for repots to our stockholders, our Board of Directors, SEC and other governmental agencies, as well as other EPA mandated annual reports. We recognize that although the Agency plans to issue the final rule in sufficient time to begin monitoring on January 1, 2010, we may be unable to meet that goal. Therefore, we are interested in receiving comments on alternative effective dates, including the following two options: Report 2010 data in 2011 using best available data and submit the first reports to EPA on September 1, 2011 or; Report 2011 data in 2012. Under this scenario, the rule would require that affected facilities

begin collecting data January 1, 2011 and submit the first reports to EPA on September 1, 2012. The methods in the proposed rule would remain unchanged and the only difference is that this option would delay implementation of the rule by one year. With the final rule scheduled to be published later this year, GHG monitoring is proposed to begin only a few weeks later which will not allow enough time for operating companies to digest the final rule and implement monitoring requirements. Considering the complexity of this proposed rule and since EPA is obligated to completely review all comments submitted, consideration should be given to time needed to fully comprehend the comments and issuing a more appropriate and reasonable final rule. Murphy recommends the reporting of the annual report to the EPA be submitted to EPA by March 31st of the following year is not realistic at all. Three months are not are not sufficient to collect all activity data that would be required to calculate emissions; conduct internal reviews and quality assurance checks of the data; present the data and have it reviewed and certified by a designated company representative; and submitted to EPA.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. EPA acknowledges that some facilities may need additional time to install and calibrate all monitoring devices and had included provisions in the final rule allowing the use of best available data in the first quarter of the year. For additional information on the best available data provisions, see Section II.G of the preamble.

Commenter Name: Dan Elwell Commenter Affiliation: Aerospace Industries Association (AIA) Document Control Number: EPA-HQ-OAR-2008-0508-1140.1 Comment Excerpt Number: 11

**Comment:** AIA members believe that quarterly reporting, to parallel requisite reporting for the acid rain program, is too frequent. Because of the intent of the proposed reporting requirement, and duration of GHG emissions, annual reporting is sufficient and effective.

**Response:** EPA has retained annual reporting in the final rule.

Commenter Name: Matthew Frank Commenter Affiliation: Wisconsin Department of Natural Resources Document Control Number: EPA-HQ-OAR-2008-0508-1062.1 Comment Excerpt Number: 36

**Comment:** The Department recommends that the reporting window for suppliers of petroleum products (Subpart MM) be extended at a minimum to 6 months. This section could be difficult for sources to provide the detailed information required by EPA within the three month reporting window.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline. EPA does not agree that suppliers of petroleum products need additional time to prepare and submit their annual report. Suppliers of petroleum products are required to report only their  $CO_2$  from the combustion of their product and therefore, they do not have to calculate and report emissions of other GHGs as required for many of the other source categories. Furthermore, the products that must be reported should be readily available to suppliers of

petroleum products since they are already tracking these materials as part of their normal business operation.

**Commenter Name:** J. Michael Kennedy **Commenter Affiliation:** Florida Electric Power Coordinating Group **Document Control Number:** EPA-HQ-OAR-2008-0508-0473.1 **Comment Excerpt Number:** 7

**Comment:** EPA should provide additional time in which to compile each annual report. March 31 may not provide sufficient time to assemble complete information. Progress Energy recommends a reporting deadline of June 30, which will assure that enough time for report compilation is allowed while providing EPA with the data it needs in a timely manner.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: See Table 3 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0433.2 Comment Excerpt Number: 4

**Comment:** NPRA recommends that calculation and reporting of emissions should be biennial (every two years). The "Mandatory Reporting of Greenhouse Gases" rule proposes an annual reporting mechanism. The following are justifications for a biennial reporting frequency instead: 1. GHG reporting should never be more frequent than annually, matching the frequency of state programs on GHG reporting. 2. The stated reason for this rulemaking is to obtain "economywide data.... on GHG emissions,... informing future climate change policy decisions" (page 16445). Emissions from refineries are not likely to change significantly year to year, unless there are permitted expansions. Climate policy decisions regarding a grand and gradually changing issue do not require up-to-the-minute data. 3. The proposed rule states that the total U.S. GHG emissions inventory is approximately seven billion metric tons of CO<sub>2</sub>e in 2006. GHG emissions will not change substantially enough from year to year to affect materially that level of emissions. 4. EPA states its rationale for not choosing a 10,000 metric ton of CO<sub>2</sub>e threshold by stating, "The extra data that would result from a 10,000 metric ton threshold would do little to further the objectives of the program." We believe the same principle applies to the proposed annual reporting requirement. 5. It currently takes EPA at least 2 years to QA/QC emissions data from States. Therefore, once validated, official inventory numbers are outdated by at least 2 to 3 years. The same would be true of the large number of GHG emissions reports that would be submitted to EPA under the proposed rule. State Implementation Plans require data collection, analysis, and reporting cycles no less frequently than annually. These efforts are in support of NAAQS criteria pollutant attainment demonstrations where acute health impacts are a concern. Considering NAAQS standards have not been set and that EPA established that GHGs are limited to matters involving climate change, less frequent reporting is warranted. 6. A model and, indeed, a precedent for biennial reporting already exists in the RCRA rules (40 CFR 262.41) for hazardous waste reporting. 7. Rather than expending agency and company resources on annual reports in which emissions changes from year to year will not significantly impact the overall inventory numbers, the resources would be better spent on identifying and implementing ways to collect more accurate data. A biennial report should allow the agency time to OA/OC the

emissions data while also allowing the company time to collect the best data possible. 8. GHG emissions data are not critical in evaluating the short term impacts on human health and the environment. Therefore biennial reporting of emissions should be sufficient for the long term analyses and modeling being performed.

**Response:** EPA has retained annual reporting in the final rule. For the response to the comments on reducing the frequency of reporting to biennial reporting (items 1 through 4, and 7), see the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3.

With regard to item 8 (short term need to collect data), EPA is collecting the data for the purpose of informing future policy decisions and developing regulations, and not for evaluating the short term impacts on human health and the environment. For a discussion of how EPA will use the data, see Section I.D of the preamble and Volume 9 (Legal Issues) of this document.

With regard to item 5 (time required to validate data), EPA plans to use an electronic reporting system with an automatic QA/QC system capable of performing an initial review of the submitted data. This system should reduce the amount of time required for validating data. EPA will provide public access to the data by posting electronic data on a Web site. The data collected will be released as soon as possible after the March 31 reporting deadline. EPA believes this level of transparency is important to public participation in future policy development and for building public confidence in the quality of the data collected.

Commenter Name: Ram K. Singhal Commenter Affiliation: Rubber Manufacturers Association (RMA) Document Control Number: EPA-HQ-OAR-2008-0508-0600 Comment Excerpt Number: 10

**Comment:** The NPRM proposes annual reporting, but RMA submits that emissions will not change that much, relative to overall national emissions of GHG over a year. Therefore, biannual reporting would make sense and lessen the burden on individual facilities. Of course, if these emissions inventories become the basis for annual emissions fees, as for instance if the inventory requirement becomes an "applicable requirement" under Title V, sources must have the ability to report annually so that they will not be disadvantaged by economic downturns. We also submit that requiring such information to be verified and certified by designated officials through the processes that the proposed rule creates would be difficult annually. Currently, "major" Clean Air Act sources submit emissions inventories every two years to states that are then submitted every two years or at longer intervals by states to EPA as part of the National Emission Inventory. The proposed rule adds a layer of certification and personal knowledge on the part of the designated official that signs these reports. Biannual reporting would be sufficient to provide the type of general GHG emissions information that EPA wants to gather for future regulatory and policy decision-making.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3. For the response to the comment regarding the burden on the designated representative, see Section V.B of the preamble for the discussion on designating an alternate representative and use of agents to prepare and submit annual reports.

# **Commenter Affiliation:** Miltner Law Firm, LLC **Document Control Number:** EPA-HQ-OAR-2008-0508-0508.1 **Comment Excerpt Number:** 9

**Comment:** While DPNM remains unequivocally opposed to the mandatory reporting of GHG by dairy farms, DPNM endorses the annual reporting of emissions rather than a more frequent schedule.

**Response:** EPA has retained annual reporting in the final rule.

**Commenter Name:** Scott Davis **Commenter Affiliation:** Arizona Public Service (APS) **Document Control Number:** EPA-HQ-OAR-2008-0508-0639.1 **Comment Excerpt Number:** 8

**Comment:** EPA is proposing that all facilities subject to this rule submit GHG emission reports on an annual basis with the exception of facilities that have equipment subject to the Acid Rain Program. Facilities with equipment subject to the Acid Rain Program would be required to report CO, emission data to EPA on a quarterly basis in accordance with what is currently required under 40 CFR 75. APS supports this position and agrees with EPA's assessment that "... annual reporting is sufficient for policy development," and is "... consistent with other existing mandatory and voluntary GHG reporting programs at the State and Federal levels."

**Response:** EPA has retained annual reporting in the final rule.

**Commenter Name:** Meg Voorhes **Commenter Affiliation:** Social Investment Forum **Document Control Number:** EPA-HQ-OAR-2008-0508-0657.1 **Comment Excerpt Number:** 8

**Comment:** We support the requirement of annual reporting, as investors typically look to analyze company performance data on an annual basis.

**Response:** EPA has retained annual reporting in the final rule.

Commenter Name: Michael A. Palazzolo Commenter Affiliation: Alcoa, Inc. Document Control Number: EPA-HQ-OAR-2008-0508-0650.1 Comment Excerpt Number: 7

**Comment:** The proposed rule requires GHG reporting on March 31 of each calendar year. Reporting within the three months will be difficult for many facilities because they will rely on documentation from fuel purchase invoices to calculate GHG emissions and final invoices may not be available in time for March reporting. March 31 also coincides with the reporting date for many other Clean Air Act reporting requirements. We request EPA to consider June 30th as an alternate, more workable date for the mandatory GHG reporting. **Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Gary F. Lindgren Commenter Affiliation: Calumet Specialty Products Partner, L.P. Document Control Number: EPA-HQ-OAR-2008-0508-0626.1 Comment Excerpt Number: 7

**Comment:** EPA needs to move the reporting deadline to July 30, rather than March I. The requirements for data validation under the proposed rule are significant, and other EPA reports are due March 1 and July 1. The administrative staff required to prepare and submit Title V and EPCRA and RCRA reports are the same people that will now be required to prepare the GHG emission reports.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Claire Olson **Commenter Affiliation:** Basin Electric Power Cooperative **Document Control Number:** EPA-HQ-OAR-2008-0508-0637.1 **Comment Excerpt Number:** 7

**Comment:** At the Arlington hearing, one of the speakers suggested that the annual March 30 deadline be extended to June 30 to synchronize this reporting with the Toxic Release Inventory (TRI) deadline. Moving the deadline to June 30 would allow reporters the opportunity to integrate their GHG reporting with their existing systems for collecting and assuring the accuracy of the TRI emissions Taking advantage of any such synergies could reduce the time and cost of reporting under this program. As a result, Basin Electric urges EPA to incorporate this suggested change. Facilities that do not have CEMS, rely on process, laboratory, and accounting/flow meter data for the appropriate calculations and accounting systems. This revised/extended timeframe is necessary to complete the collection of data, evaluation, QA checks, and reporting.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Paul Glader Commenter Affiliation: Hecla Mining Company Document Control Number: EPA-HQ-OAR-2008-0508-0579.1 Comment Excerpt Number: 11

**Comment:** Hecla also agrees that annual reporting is an appropriate frequency. More frequent reporting would be unreasonably burdensome on regulated industries and have no added value.

**Response:** EPA has retained annual reporting in the final rule.

# **Commenter Name:** David Rich **Commenter Affiliation:** World Resources Institute (WRI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0642.1 **Comment Excerpt Number:** 7

**Comment:** EPA should consider quarterly reporting for covered sources beyond EGUs to support future policy applications. For sources likely to be subject to an emissions trading program, quarterly reporting should be required to ensure necessary transparency and liquidity. For example, the Waxman-Markey "American Clean Energy and Security Act of 2009' (as approved by the US House Energy and Commerce Committee in May 2009) requires reporting on a quarterly basis from all reporting entities beginning in 2011. In the preamble to the proposed rule, EPA acknowledges that "under future programs or policy initiatives, particularly if regulatory in nature (e.g., a cap-and-trade program similar to the ARP) it may be more appropriate require quarterly reporting." EPA should consider a cap-and-trade program as one of the primary near-term policies that will use the emissions data resulting from this regulation, and therefore should require quarterly reporting from sources likely to be covered by a trading program. Quarterly data yield a higher level of granularity for ensuring compliance, identifying irregularities in data collection, providing necessary data to market participants, and documenting emissions trends. More frequent data would especially benefit an emissions trading program, because of the benefits to market participants of more granular data, as evidenced by the Acid Rain Program (ARP), which collects hourly data from regulated units on a quarterly basis. For smaller sources, or sources subject to policies other than an emissions trading program, semi-annual or annual reporting may be sufficient. The early price volatility of the EU Emissions Trading Scheme demonstrates that for an emissions trading program to function smoothly, emissions data must be collected, reported, and published on a frequent basis to provide transparent and up-to-date information to market participants. Sixteen months of trading occurred in the EU-ETS before the first release of verified emissions data. When these data were released, the price of emissions allowances fell dramatically, as market participants first learned that allowances were over-allocated. [See DCN:EPA-HQ-OAR-2008-0508-0642.1 for figure showing historical EU-ETS allowance prices.] Such volatility would be mediated by the more frequent collection and dissemination of emissions data.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0521.1, excerpt 7.

Commenter Name: Christina T. Wisdom Commenter Affiliation: Texas Chemical Council (TCC) Document Control Number: EPA-HQ-OAR-2008-0508-0638.1 Comment Excerpt Number: 11

**Comment:** With regard to the March 31 submission date, TCC requests that EPA move the annual reporting date from March 31 to July 1 of each year. Most companies currently go through a lengthy and rigorous process of preparing and validating emissions data for emissions reporting. For example, TCC member companies are required to submit to the Texas Commission on Environmental Quality (TCEQ) an Emissions Inventory (EI) in the first half of the year, and entities located in the Houston area are required to submit a nitrogen oxides (N0x) emission report by March 31 of each year. Because additional time will be required to prepare and submit the annual greenhouse gas emissions report, TCC suggests a submittal date of July 1. A July 1 reporting date is also consistent with other federal reporting programs, such as the Toxic Release Inventory (TRI).

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Deborah Seligman **Commenter Affiliation:** New Mexico Oil and Gas Association (NMOGA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0603.1 **Comment Excerpt Number:** 6

**Comment:** NMOGA members are also concerned with the EPA proposed deadline for reporting GHG emissions, i.e. February 28th for fuel supply and March 31st for facility emissions. These deadlines are not realistic given the large amount of data and supporting information that needs to be collected, assembled, reviewed and certified internally by companies prior to reporting. Additionally, other emissions inventories are due on March 31 each year. Because EPA proposed different calculation methodologies than what is currently being used to determine emissions inventories for permits, and proposed extensive metering, monitoring, recordkeeping and QA/QC requirements in this rule, NMOGA requests a later due date of no earlier than June 30 of each year.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: John R. Evans Commenter Affiliation: LyondellBasell Industries Document Control Number: EPA-HQ-OAR-2008-0508-0718.1 Comment Excerpt Number: 6

**Comment:** In the preamble to the proposed rule, EPA states that "three months is sufficient time to calculate emissions, perform quality-assurance, certify, and submit the annual GHG emissions report." (74 Fed. Reg. 16472). LyondellBasell believes that three months is not sufficient time to complete the required activities as prescribed in the proposed rule. If viewed as a stand-alone reporting requirement, LyondellBasell believes that three months might be sufficient, however, due to the complexity of existing regulatory programs and the abundance of regulatory reports required by local, state, and federal regulatory programs, LyondellBasell does not believe three months is sufficient time to submit the annual GHG emissions report. As a result, LyondellBasell requests that the submittal date for the annual GHG emissions report be revised to be consistent with the annual Toxic Release Inventory (TRI) report submittal deadline of July 1. EPA acknowledges that "...the TRI program is similar to the proposed GHG reporting rule in that it requires direct emissions reporting from a large number of facilities (roughly 23,000) across all major industrial sectors. Therefore, EPA reviewed the TRI program for ideas regarding program structure and implementation." (74 Fed. Reg. 16459). EPA further states that the "reports would be submitted electronically...to the extent practicable, we plan to adapt existing facility reporting programs to accept GHG emissions data" (74 Fed. Reg. 16463). If the annual GHG emissions report is submitted electronically, the July 1 deadline should not hamper efforts by EPA to review and distribute the data in a timely manner.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Gary F. Lindgren **Commenter Affiliation:** Calumet Specialty Products Partner, L.P. **Document Control Number:** EPA-HQ-OAR-2008-0508-0626.1 **Comment Excerpt Number:** 6

**Comment:** EPA needs to adjust the calculation and reporting frequency to once every other year (Biennial), rather than annually as proposed. The levels of GHG emissions are not going to significantly change year over year, except for those businesses in severe decline. Reporting every other year lessens the burdens and allows the regulated community to plan for more efficient and effective means of collecting and reporting data.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3.

**Commenter Name:** J. Michael Kennedy **Commenter Affiliation:** Florida Electric Power Coordinating Group **Document Control Number:** EPA-HQ-OAR-2008-0508-0473.1 **Comment Excerpt Number:** 6

**Comment:** FCC supports the reporting of annual data and believes that reporting on a more frequent basis is not warranted for this program.

**Response:** EPA has retained annual reporting in the final rule.

**Commenter Name:** Dan F. Hunter **Commenter Affiliation:** ConocoPhillips Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0515.1 **Comment Excerpt Number:** 6

**Comment:** The annual reporting deadline should be changed to sometime after July 31st . This will avoid the heavy reporting burdens currently existing during the first half of the year for other programs, such as: 1. emission inventories, 2. Benzene Waste Operations NESHAPs 3. EPA 114 Consent Decree Reports 4. Title V Certifications, 5. SARA 312 Tier II Report 6. SARA 313 Toxic Release Inventory (TRI (July 1st)) 7. NSPS Subpart Db Semi-annual report 8. NSPS Subpart J Semi-annual report 9. NSPS Subpart QQQ Report 10.Refinery MACT I Compliance Report 11.Refinery MACT II Semi-annual report 12.Heater/Boiler MACT Semi-annual report 13.RCRA Large Quantity Generator Report

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Sally V. Allen **Commenter Affiliation:** Gary-Williams Energy Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0982.1

#### **Comment Excerpt Number:** 5

**Comment:** The reporting process should be greatly simplified by requiring the submission of data every two or three years rather than annually. Annual data reports increase the level of effort required by SBRs but provide little benefit given the long range GHG modeling being performed. In addition, we believe the EPA should mandate reports only on direct emissions (rather than including "phantom" emissions such as those resulting from electric generation) and excluding crude oil composition calculations. Crude oil composition calculations may provide a significant additional burden to SBRs due to the fact that feedstocks may change more frequently than for large refiners who have upstream production. Less frequent reporting is reasonable considering the fact that direct refinery GHG emissions do not normally vary significantly from one year to the next. Note that SBRs already face significant added record-keeping obligations which will take effect at the end of 2010. Under the final Renewable Fuel Standard Rule (effective September 2007), small refiners and small refineries had the option of electing to be exempt from the RFS for a little more than three years. The majority of SBRs elected the exemption and have not opted to become obligated parties. Thus they are not now participating in RINs trading programs. They will, therefore, have to develop, implement and monitor the complicated RINS tracking and reporting requirements at approximately the same time as they will be required to comply with EPA's GHG mandatory reporting provisions. These overlapping obligations will be cumbersome and very costly. Compliance will be extraordinarily complex and difficult.

**Response:** For the response to the comment on the frequency of reporting, see the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3. For the response to the comment regarding the reporting of electricity purchases, see the comment response document titled "Electricity Purchases". For the response to the comment on reporting crude oil composition data, see the comment response document titled "Subpart MM - Suppliers of Petroleum Products". For the response to the comment regarding the initial reporting year, see the preamble response on the selection of the initial reporting year.

**Commenter Name:** Keith Adams **Commenter Affiliation:** Air Products and Chemicals, Inc. **Document Control Number:** EPA-HQ-OAR-2008-0508-1142.1 **Comment Excerpt Number:** 5

**Comment:** Air Products supports the proposed annual frequency of reporting. This is consistent with most other environmental reporting and GHG emission reporting, in particular. Air Products does not believe reporting more frequently than annual serves the agency's purposes, and would be very burdensome for the regulated community.

Response: EPA has retained annual reporting in the final rule

Commenter Name: Pamela F. Faggert Commenter Affiliation: Dominion Document Control Number: EPA-HQ-OAR-2008-0508-1741 Comment Excerpt Number: 16 **Comment:** In order to avoid adding to the many first-quarter environmental reporting obligations that many industries face, EPA should consider changing its proposed March 31 deadline for annual reporting to June 30. Many industries are already obligated to submit several data-intensive reports to various agencies, including EPA, in the first quarter of the year. These include Title V semiannual monitoring reports and annual certifications under the Clean Air Act; quarterly deviation reports under the Clean Air Act; Discharge Monitoring Reports under the Clean Water Act; and Tier II reports under the Emergency Preparedness and Community Right-to-Know Act. A June 30th submission deadline would help prevent GHG reporting obligations from interfering with these existing reporting requirements.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Jeff A. Myrom **Commenter Affiliation:** MidAmerican Energy Holdings Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0581.1 **Comment Excerpt Number:** 5

**Comment:** It is unlikely that EPA can adequately process the significant amount of information generated as a result of this reporting rule within the first quarter of the year. Thus, facilities with numerous environmental reports due in the first quarter of each year should be given a reporting date later than March 31st of each year (beginning in 2011) to facilitate report finalization and EPA reviews.

**Response:** See the preamble response on the selection of the reporting deadline.

Commenter Name: Chris Korleski Commenter Affiliation: State of Ohio Environmental Protection Agency Document Control Number: EPA-HQ-OAR-2008-0508-0598.1 Comment Excerpt Number: 7

**Comment:** In terms of reporting schedule, U.S. EPA is proposing to require annual GHG emissions submissions, except for EGUs subject to the Acid Rain Program that already report quarterly through 40 CFR Part 75. Reporting would be mandatory on an ongoing basis with no sunset period, and once a source is subject to the reporting rule it will continue to be required to submit reports even if the source falls below the reporting thresholds in future years. Ohio EPA agrees with the annual submission requirements.

**Response:** EPA has retained annual reporting in the final rule.

Commenter Name: Joseph J. Hoagland Commenter Affiliation: Tennessee Valley Authority (TVA) Document Control Number: EPA-HQ-OAR-2008-0508-0722.1 Comment Excerpt Number: 1

**Comment:** In Section III. B. of the proposed rule (pg 16462), existing facilities would begin collecting data on January 1, 2010 and submit reports for the prior calendar year by March 31

each year starting in 2011. In contrast, July 1 is the deadline for reporting criteria pollutant emissions for fee purposes and for submitting the Toxic Release Inventory (TRI). As in the proposed rule for GHG, TRI criteria pollutant emissions are based on continuous emissions monitoring (CEMs) data that must be validated by March 31, 90 days after the end of the fourth quarter of the previous calendar year. Carbon dioxide emissions are normally CEMs-based; however, not all combustion sources have CEMs: e.g., some of the smaller CTs, auxiliary boilers, and generators. For TRI and emission fee estimates, these input data are typically received in the middle of February and the quality checks would not be completed until late April. As a case in point, TVA is currently performing the quality checks of our TRI reports and is finishing up the criteria pollutant emissions inventory for our final two coal burning plants, Shawnee and Widows Creek, this month. Completing the calculations and the quality checking of the GHG emissions by March 31 for CEMs-based (and non-CEMs-based) facilities would strain limited resources of many of the facilities that must comply with the TRI reporting process. Unifying the reporting timeframes of these interrelated reporting programs would allow process checks that would ensure public confidence in the program. For these reasons, it is suggested that the GHG reporting schedule coincide with the schedule for TRI and emission fee estimates of July 1.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

### Commenter Name: Kyle Pitsor Commenter Affiliation: National Electrical Manufacturers Association (NEMA) Document Control Number: EPA-HQ-OAR-2008-0508-0621.1 Comment Excerpt Number: 3

**Comment:** The NEMA Carbon/Manufactured Graphite EHS Committee requests that EPA consider changing the reporting requirement contained in §98.3(b) Schedule that requires annual reporting of GHG emissions no later than March 31 of each calendar year for GHG emissions in the previous calendar year. EPA's proposed March 31st due date unfortunately is very close to the March 1st reporting deadline for Superfund Amendments and Reauthorization Act (SARA) Tier II reports. Likewise, many Title V permit biannual compliance reports are due March 15th. For most facilities, the same resources for environmental compliance programs will be responsible for SARA, Title V and GHG reporting obligations. By assigning a March 31, 2011 deadline for facilities and suppliers to report GHG emissions, EPA will be creating an unnecessary burden for those facilities which are obligated to timely complete and submit the other required environmental reports. For this reason, the NEMA Carbon/Manufactured Graphite EHS Committee respectfully requests that EPA delay by one or two months the reporting due date for the new GHG emissions reports until the end of April or preferably May 31st.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Jennifer Reed-Harry **Commenter Affiliation:** PennAg Industries Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0948.1 **Comment Excerpt Number:** 3 **Comment:** We are supportive of quarterly tracking with annual reporting as listed in the proposed rule.

**Response:** EPA has retained annual reporting in the final rule.

Commenter Name: Delaine W. Shane Commenter Affiliation: Metropolitan Water District of Southern California (MWD) Document Control Number: EPA-HQ-OAR-2008-0508-0551.1 Comment Excerpt Number: 3

**Comment:** We agree with the use of an annual reporting cycle and with report deadlines of March 31 each year, starting in 2011 for the previous calendar year. Three months will provide sufficient time to compile and check data for the previous year—an additional month or two would be even better.

**Response:** EPA has retained annual reporting in the final rule

Commenter Name: Sarah B. King Commenter Affiliation: DuPont Company Document Control Number: EPA-HQ-OAR-2008-0508-0604.1 Comment Excerpt Number: 2

**Comment:** DuPont agrees with EPA that GHG emissions data should be reported on an annual basis. However, the proposed rule requires that GHG emissions for a reporting year be submitted by March 31 of the following year. It is recommended that this due date be moved to later in the year to better coincide with other reporting requirements. Many States and local regulatory agencies require submittal of a significant number or reports between March and July of each year, which require facility resources. In addition, final fuel usage data for the previous year is often not available until late February, and is a key component in calculating GHG emissions. The Climate Registry requires data be submitted by June 30, EPA's Climate Leaders has a June 30 deadline, and California's Mandatory GHG emissions reporting program has a June 1 deadline for some source categories. Many companies already have reporting systems set up to meet these existing timelines and this earlier reporting timeframe would require additional reporting resources in order to complete the calculation and reports. A suggested reporting deadline is July 1, which coincides with the deadline for data submittal to TRI.

**Response:** EPA has retained annual reporting in the final rule. See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Michael G. Cashin **Commenter Affiliation:** Minnesota Power **Document Control Number:** EPA-HQ-OAR-2008-0508-1139.1 **Comment Excerpt Number:** 2

**Comment:** MP notes that the sort of greenhouse gas reporting proposed by EPA will require modifications and augmentation of current utility emission reporting for purposes such as Acid Rain Program reporting and Toxic Release Inventory (TRI) reporting. MP requests that the

annual reporting deadline be established at June 30, not March 31st, to coincide with the TRI reporting deadline, since some of the same information may be needed for development of both reports.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Robert Rouse **Commenter Affiliation:** The Dow Chemical Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0533.1 **Comment Excerpt Number:** 2

**Comment:** The proposed rule requires that GHG emissions for a reporting year be submitted by March 31 of the following year. Dow currently has a comprehensive program in place to collect and report all emissions and other environmental data. This program is designed to ensure that the company collects complete and accurate data. After submission by the individual manufacturing units, the data goes through internal review at the site, business and corporate level to ensure we have the best data possible. With this process, the data is finalized in mid to late April. Additionally, this proposed rule includes significant reporting requirements in addition to the emission values. As such, preparation, review and certification of the report will take considerable time and effort for each facility. Dow currently participates is a few US voluntary reporting programs, such as CCAR and EPA Climate Leaders. These two programs have annual reporting dates of June 30. As Dow and other companies already have existing reporting processes developed, EPA should work to fit this rule into those processes. A reporting date of July 1 is suggested as it is similar to other GHG reporting programs and the TRI.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Kim Dang **Commenter Affiliation:** Kinder Morgan Energy Partners, L.P. **Document Control Number:** EPA-HQ-OAR-2008-0508-0370.1 **Comment Excerpt Number:** 2

**Comment:** The Proposed Rule requires the annual emission report to be filed by the end of the first quarter. Kinder Morgan supports deferring the annual deadline for emissions reporting until June 30, which marks the end of the second calendar quarter. A June 30 deadline would be more consistent with existing state GHG reporting programs, many of which do not require the submission of data until the second quarter of the year. States adopted this deadline with the understanding that it takes time to collect, organize, assure and control quality, correct, and analyze emission data and required metadata, as well as prepare inventories in a format suitable for submission. In addition, stationary sources are already obligated to submit several data-intensive reports to various agencies, including EPA, in the first quarter of the year. These include Title V semiannual monitoring reports and annual certifications under the Clean Air Act; quarterly deviation reports under the Clean Air Act; Discharge Monitoring Reports under the Clean Water Act; and Tier II reports under the Emergency Preparedness and Community Right-to Know Act. A June 30 second-quarter submission deadline would provide a more reasonable

amount of time and help prevent GHG reporting obligations from interfering with these existing reporting requirements.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: James Sims Commenter Affiliation: Western Business Roundtable Document Control Number: EPA-HQ-OAR-2008-0508-1038.1 Comment Excerpt Number: 2

**Comment:** We support the recommendation that the annual reporting deadline be set for June 30th, to synchronize this reporting with the Toxic Release Inventory (TRI) deadline. This would allow reporting entities to integrate reporting internally, thus reducing the time and costs of reporting under the program.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Darren Smith **Commenter Affiliation:** Devon Energy Corporation (Devon) **Document Control Number:** EPA-HQ-OAR-2008-0508-0485.1 **Comment Excerpt Number:** 10

**Comment:** Devon request that EPA change the reporting date to June 30 following the previous calendar year. Emissions calculations for many oil and gas facilities will require accurate production throughput information which often lags up to three months. The proposed March 31st reporting deadline is not feasible because, apart from the production data not being available, not enough time exists to compile the data from facilities and contractors , calculate emissions, QA/QC the data, prepare the report, upload data into EPA's electronic tool (that has not been seen yet) and get the report certified by the appropriate person.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Matthew Frank Commenter Affiliation: Wisconsin Department of Natural Resources Document Control Number: EPA-HQ-OAR-2008-0508-1062.1 Comment Excerpt Number: 1

**Comment:** The Wisconsin Department of Natural Resources recommends increasing the time provided to reporters for submitting required emission data. The Department recommends a minimum of six to a maximum of twelve months rather than the proposed three months.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

#### **Commenter Name:** J. Southerland **Commenter Affiliation:** None **Document Control Number:** EPA-HQ-OAR-2008-0508-0165 **Comment Excerpt Number:** 16

**Comment:** Reporting frequency should be the same as the NIF; i.e. on a 3-year cycle of 2008, 2011, etc. It is not necessary to have annual reports to track a slow moving event such as the reductions in greenhouse gases. However, annually should be considered if an annual cap and trade program would demand it for proper accounting purposes.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3.

**Commenter Name:** Leslie Bellas **Commenter Affiliation:** National Lime Association (NLA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0520.1 **Comment Excerpt Number:** 46

**Comment:** The March reporting deadline coincides with other environmental reporting deadlines, which may require sources to hire third parties to help them meet this additional reporting obligation. NLA proposes a May reporting deadline so that those who best know their operations, not third parties, have time to prepare submissions required by this Rule.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Edward N. Saccoccia Commenter Affiliation: Praxair Inc. Document Control Number: EPA-HQ-OAR-2008-0508-0977.1 Comment Excerpt Number: 22

**Comment:** Praxair suggests that the annual report due date be June 1. A June 1 submission date is consistent with the existing Carbon Disclosure Project voluntary reporting program and helps avoid conflicts with most other EPA or State environmental reporting program due dates, including EPCRA Chemical Inventory Reporting (March 1), Hazardous Waste Biennial Reporting (March 1), State Air Emissions Inventories (often May 1), and the EPCRA Toxic Release Inventory Reporting (July 1), which already require substantial compliance focus, time, and effort.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

Commenter Name: Thomas M. Ward Commenter Affiliation: Novelis Corporation Document Control Number: EPA-HQ-OAR-2008-0508-0561.1 Comment Excerpt Number: 20 **Comment:** Annual reporting vs. quarterly - Novelis supports the proposed annual frequency of GHG emissions reporting. In our view, more frequent quarterly reporting would pose an excessive and unnecessary burden on the reporting community for a level of data unnecessary for effective GHG control requirements in the future.

**Response:** EPA has retained annual reporting in the final rule

**Commenter Name:** Matthew G. Paulson **Commenter Affiliation:** LLP on behalf of BCCA Appeal Group **Document Control Number:** EPA-HQ-OAR-2008-0508-0649.1 **Comment Excerpt Number:** 16

**Comment:** The proposal contemplates annual reporting of GHG emissions. EPA should instead consider biennial (every other year) reporting. Based on the past growth rate in GHG emissions, it is unlikely that emissions will change significantly enough from year to year to justify annual reporting. Because emissions differences from year to year will be relatively small, EPA should not require annual reporting, but rather, should focus its efforts on ensuring that the data collected is the most accurate it can be.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 3.

Commenter Name: Steven J. Rowlan Commenter Affiliation: Nucor Corporation (Nucor) Document Control Number: EPA-HQ-OAR-2008-0508-0605.1 Comment Excerpt Number: 16

**Comment:** Except for the ARP facilities, which already report more frequently under an existing regulatory program, Nucor does not believe that more frequent than annual reporting is helpful or beneficial. As EPA has found, GHGs are long-lived in the atmosphere, globally mixed, and without localized air toxic effects. Thus, there is no need to track emissions on a shorter than annual time frame. An annual report gives an adequate metric for tracking GHG emission trends. If Congress or the Administration choose to adopt a GHG cap-and-trade program, at that time additional reporting could be developed, if necessary. In the interim, it is not necessary to impose that level of burden on regulated entities.

**Response:** EPA has retained annual reporting in the final rule.

**Commenter Name:** Benjamin Brandes **Commenter Affiliation:** National Mining Association (NMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0466.1 **Comment Excerpt Number:** 16

**Comment:** NMA agrees with EPA's determination that annual reporting is an appropriate frequency. More frequent reporting would not add any value to the process, and would not provide more accurate information since the annual report would simply be the summary of several reports on shorter periods. Additionally, it would be unduly burdensome on regulated industries.

**Commenter Name:** Linda Farrington **Commenter Affiliation:** Eli Lilly and Company (Lilly) **Document Control Number:** EPA-HQ-OAR-2008-0508-0680.1 **Comment Excerpt Number:** 13

**Comment:** Lilly recommends a reporting due date of May 31 each year instead of March 31. It will be extremely difficult for facilities that rely on fuel supplier invoices (which may not be available until late February) to complete the emission calculations, enter all verification data into the electronic reporting format, and complete designated representative review by March 31 each year. Therefore, Lilly suggests an alternate due date of May 31.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Matthew G. Paulson **Commenter Affiliation:** LLP on behalf of BCCA Appeal Group **Document Control Number:** EPA-HQ-OAR-2008-0508-0649.1 **Comment Excerpt Number:** 12

**Comment:** EPA should allow facilities and suppliers more time than the current three (3) months to report prior calendar year data. That period is insufficient to collect, analyze, prepare, and certify data for submission to EPA. Other reporting programs allow longer time intervals for reporting – EPA's Toxics Release Inventory ("TRI") allows six (6) months and California's mandatory GHG reporting program allows five (5) months.

**Response:** See the preamble (Section II.J) for the response on the selection of the reporting deadline.

**Commenter Name:** Ram K. Singhal **Commenter Affiliation:** Rubber Manufacturers Association (RMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0600 **Comment Excerpt Number:** 11

**Comment:** The Notice solicits opinions about whether reporting should be quarterly, akin to current CEMs  $CO_2$  reporting under the acid rain program. Quarterly reporting is too frequent for purposes of GHG reporting. RATA reporting on a quarterly basis in tied to CEMS for multiple pollutants regulated under the acid rain program to meet compliance with regulatory requirements. Therefore, it may make sense for quarterly reporting of  $CO_2$  emissions for electric generating sources that are concurrently collecting and reporting compliance information on short-term (6 minute average) emission limits from CEMs to EPA and states for regulatory compliance purposes. No such basis exists here, and further, given the residence times of most GHGs in the environment, more frequent reporting would not be justified.

**Response:** EPA has retained annual reporting in the final rule. For the response to the comment on quarterly reporting, see the response to comment EPA-HQ-OAR-2008-0508-0252.1, excerpt 2.

**Commenter Name:** Patricia A. Meehan **Commenter Affiliation:** New York Power Authority (NYPA) **Document Control Number:** EPA-HQ-OAR-2008-0508-1569 **Comment Excerpt Number:** 1

**Comment:** Since the emissions of sulfur hexafluoride is based on a mass balance, we concur with EPA's proposal that the GHG emission reports be submitted on an annual basis. Requiring the mass balance to be calculated more frequently could cause errors in the data due to emergency maintenance activities, delays on the part of vendors to provide data, and uncertainty as to the delivery date of new  $SF_6$  equipment.

**Response:** EPA has retained annual reporting in the final rule. EPA is not going final with subpart DD (Sufur Hexafluoridefluoride (SF<sub>6</sub>) from Electrical Equipment). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart DD at this time.

Commenter Name: Pamela F. Faggert Commenter Affiliation: Dominion Document Control Number: EPA-HQ-OAR-2008-0508-1741 Comment Excerpt Number: 17

**Comment:** As proposed, the rule requires new facilities that begin operation after January 1, 2010 and facilities that become subject to the rule due to "operation changes" to report emissions starting with the first calendar year in which they operate or in which the change was made "beginning with the first operating month" or "month of the change". Since some facilities may be required by the rule to install and certify monitoring equipment that will be used to estimate emissions under this rule, EPA should require reporting beginning the later of the first operating month (or month of the change) or the month following the deadline for installation and certification of any monitoring equipment used to report emissions under methodology specified in this rule.

**Response:** EPA has retained annual reporting in the final rule. Upon review of this comment, we concluded that it is reasonable to require reporting of emissions starting the first month of operation for a new or changed source. Whenever a facility plans to add new processes or equipment, or make operational changes that would increase GHG emissions, then that decision would be made through the corporate capital acquisition process or similar process regarding future business planning (typically, an annual process). Because such decisions involve the allocation of corporate resources, these decisions are made well in advance of the date at which the physical or operational change is implemented. A part of this business planning process necessarily involves consideration of any new environmental requirements that would be applicable because of the change. For example, under new source performance standards and other Clean Air Act emission regulations, emission control requirements for new or modified sources that are triggered as a result of a change must be complied with at the time that the change commences operation. Therefore, environmental considerations and timing of

compliance requirements is routinely considered in the business planning processes. The implications of a change on the applicability of GHG reporting is one additional consideration in this process. As such, we conclude that additional lead time for the installation of monitoring equipment is not needed for this rule.

# Commenter Name: Lauren E. Freeman Commenter Affiliation: Hunton & Williams LLP Document Control Number: EPA-HQ-OAR-2008-0508-0493.1 Comment Excerpt Number: 10

**Comment:** New facilities that commence operation after January 1, 2010, and facilities that become subject to the rule because of an "operational change," would be required to report emissions starting with the first calendar year in which they operate or in which the change was made, "beginning with the first operating month" or "month of the change" and ending on December 31 of that year. Proposed § 98.3(b)(2) and (3). Because some facilities may be required to install and certify the monitoring equipment that will be used to estimate emissions, UARG believes the rule must provide an alternative start date for reporting by such units. Specifically, the rule should require reporting beginning the later of the first operating month (or month of the change) and the month following the deadline for installation and certification of any monitoring equipment used to report emissions under the methodology specified in this rule. ARP affected units subject to Part 75 and units subject to 40 C.F.R. Part 60 under the New Source Performance Standards ("NSPS") have specific deadlines under those rules for installation and certification of equipment that would be used under Subparts C and D of this rule to report CO<sub>2</sub> emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1741, excerpt 17 above.

**Commenter Name:** Patrick J. Nugent **Commenter Affiliation:** Texas Pipeline Association (TPA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0460.1 **Comment Excerpt Number:** 9

**Comment:** Proposed § 9830), regarding physical changes to facilities, is onerous and unclear. This section would require any facility or supplier that becomes subject to this rule because of a physical or operational change to begin reporting when the change occurs. This would be an onerous requirement because it would require calculations to be reevaluated after every change made to a site. In addition, the proposed rule is unclear. Would a site be required to report emissions, due to the mid-year addition of equipment that will cause a site to exceed the metric ton / year threshold when in operation for a full 12 months or in the year of the addition? Or would reporting be required only after the equipment had operated a full 12 months causing the site to exceed the 25,000 metric tons/year threshold in a calendar year? TPA respectfully requests EPA to clarify the intent and language of this proposed section.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-1741, excerpt 17 and EPA-HQ-OAR-2008-0508-0513.1 excerpt 10 above.

We agree that the proposed rule was somewhat unclear about the date upon which an operational change would trigger reporting. To clarify the requirement, we added a definition of

"operational change" and a provision to specify how to determine if an operational change made during a year would trigger the need to report GHG emissions for that year. The final rule definition reads as follows: "Operational change means, for purposes of §98.3(b), a change in the type of feedstock or fuel used, a change in operating hours, or a change in process production rate." Section 98.3 of the rule was amended to clarify that for a facility or supplier that becomes subject to the rule solely because of an increase in hours of operation or level of production, the first month of the change is the month in which the increased hours of operation or level of production, if maintained for the remainder of the year, would cause the facility or supplier to exceed the applicable threshold for that year.

Commenter Name: Charlie Burd and Nicholas DeMarco Commenter Affiliation: Independent Oil and Gas Association of West Virginia (IOGA-WV) and West Virginia and Natural Gas Association (WVONGA) Document Control Number: EPA-HQ-OAR-2008-0508-0516.1 Comment Excerpt Number: 14

**Comment:** The rule requires new facilities that begin operation after January 1, 2010 and facilities that become subject to the rule due to "operation changes" to report emissions starting with the first calendar year in which they operate or in which the change was made "beginning with the first operating month" or "month of the change". Since some facilities may be required by the rule to install and certify monitoring equipment that will be used to estimate emissions under this rule, EPA should require reporting beginning the latter of the first operating month (or month of the change) or the month following the deadline for installation and certification of any monitoring equipment used to report emissions under methodology specified in this rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1741, excerpt 17 above.

Commenter Name: See Table 1 Commenter Affiliation: Document Control Number: EPA-HQ-OAR-2008-0508-0440.1 Comment Excerpt Number: 20

**Comment:** The proposal also would require new facilities to report GHG emissions starting with the first month of operation. Such a requirement is inappropriate for two reasons. First, many new facilities initially operate at a low production rate and "ramp up" over several months until the facility reaches a normal production rate. The data associated with this start-up period will not provide any beneficial information for that reporting year. Second, the start-up period of a new facility involves development of a productive work force, management team, and management information system. Therefore, the facility needs sufficient time to put in place data collection and reporting protocols. For these reasons, a regulation should allow new facilities to: 1. Delay annual reporting to the next calendar year; and 2. Delay annual reporting to the second calendar year following the start-up year if the facility start-up occurs in the last quarter of the calendar year.

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-1741, excerpt 17 above. New facilities that contain source categories listed in §98.2(a)(1) would begin reporting GHG emissions beginning on the month the facility commenced operation. EPA has determined that it is necessary to collect the partial year data for new facilities that contain one or more of the source categories listed in §98.2(a)(1), because these source categories are known to be large emitters of GHGs. New facilities that do not contain any of the source categories listed in §98.2(a)(1) would report GHG emissions only if their actual CO<sub>2</sub>e emissions exceed the 25,000 metric ton threshold during the first year of operation. Therefore, if a new facility does not contain any of the source categories in §98.2(a)(1) and the actual emissions for the first partial calendar year of operation do not exceed 25,000 metric tons CO<sub>2</sub>e, then the facility is not subject to this rule during that first calendar year and would not have to report for that year. But they would have to report for subsequent years if their emissions would exceed the threshold for an entire calendar year of operations.

# Commenter Name: Michael DiMauro Commenter Affiliation: Massachusetts Municipal Wholesale Electric Company (MMWEC) Document Control Number: EPA-HQ-OAR-2008-0508-0580 Comment Excerpt Number: 1

**Comment:** It is suggested that the Initial Date for the Reporting of GHG Emissions by New Units correspond to: (a) the completion of CEMS Certification; or (b) the completion of Unit Compliance/Performance testing, whichever happens sooner, rather than the Date on which the Unit commences operation. Initiating reporting at the time that a New Unit completes CEMS Certification or Performance Testing would be more consistent with monitoring provisions in other federal rules, and would avoid reporting unrepresentative emission data that occurred during unit startup/shakedown activities

**Response:** See the response to comment EPA-HQ-OAR-2008-0508-1741, excerpt 17 above. Since the data is reported at the completion of the year and testing of CEMS units must be completed at regular intervals to ensure the data are accurate, EPA disagrees that collecting and reporting data for CEMS should be delayed.

**Commenter Name:** Michael Carlson **Commenter Affiliation:** MEC Environmental Consulting **Document Control Number:** EPA-HQ-OAR-2008-0508-0615 **Comment Excerpt Number:** 6

**Comment:** Regarding new facilities, the agency's proposal to require monitoring the first month that the facility is operational is puzzling (16471). How would such a new facility know if a source category threshold was triggered and the reporting rule was even applicable if the facility was not subject to an "all in" source category, e.g., coal suppliers?

**Response:** See the responses to comments EPA-HQ-OAR-2008-0508-1741, excerpt 17 in section 2 and EPA-HQ-OAR-2008-0508-0439.1, excerpt 6 in section 1 (Applicability Determination) of this volume.

**Commenter Name:** Richard A. Leopold **Commenter Affiliation:** State of Iowa Department of Natural Resources **Document Control Number:** EPA-HQ-OAR-2008-0508-0336.1 **Comment Excerpt Number:** 6 **Comment:** 40 CFR §98.3(b)(3) allows any facility or supplier that becomes subject to this rule because of a mid-year physical or operational change to begin reporting emissions beginning with the month that the change occurred and to submit an abbreviated emission report under 40 CFR§98.3(d). This section of the proposed rule is confusing and overly complex. The Department believes that if a facility or supplier emitted greater than or equal to 25,000 mtCO<sub>2</sub>e during a year, the facility should report emissions from the entire year.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0440.1, excerpt 20.

#### Table 1

COMMENTER	AFFILIATE	DCN
Mark Dopp	American Meat Institute (AMI)	EPA-HQ-OAR-2008-0508-0440.1
Stewart T. Leeth	Smithfield Foods, Inc.	EPA-HQ-OAR-2008-0508-0553

#### Table 2

COMMENTER	AFFILIATE	DCN
Bruce Thompson	American Exploration and Production Council	EPA-HQ-OAR-2008-0508-0367.1
William W. Grygar II	Anadarko Petroleum Corporation	EPA-HQ-OAR-2008-0508-0459.1

#### Table 3

COMMENTER	AFFILIATE	DCN
James Greenwood	Valero Energy Corporation	EPA-HQ-OAR-2008-0508-0571.1
Charles T. Drevna	National Petrochemical and Refiners	EPA-HQ-OAR-2008-0508-0433.1
	Association	EPA-HQ-OAR-2008-0508-0433.2

#### Table 4

COMMENTER	AFFILIATE	DCN
Olon Plunk	Xcel Energy Inc.	EPA-HQ-OAR-2008-0508-0444
Debra J. Jezouit	Class of '85 Regulatory Response Group	EPA-HQ-OAR-2008-0508-0455.1

#### Table 5

COMMENTER	AFFILIATE	DCN
Lisa Beal	Interstate Natural Gas Association of America (INGAA)	EPA-HQ-OAR-2008-0508-0480.1
Richard Bye	CenterPoint Energy, Inc.	EPA-HQ-OAR-2008-0508-2124.1
Brianne Metzger	Spectra Energy Corporation	EPA-HQ-OAR-2008-0508-0364.1

#### Table 6

COMMENTER	AFFILIATE	DCN
Olon Plunk	Xcel Energy Inc.	EPA-HQ-OAR-2008-0508-0444
R. Skip Horvath	Natural Gas Council (NGC)	EPA-HQ-OAR-2008-0508-0530.1

#### Table 7

COMMENTER	AFFILIATE	DCN
Karin Ritter	American Petroleum Institute (API)	EPA-HQ-OAR-2008-0508-0679.1
James Greenwood	Valero Energy Corporation	EPA-HQ-OAR-2008-0508-0571.1
William W. Grygar II	Anadarko Petroleum Corporation	EPA-HQ-OAR-2008-0508-0459.1

#### Table 8

COMMENTER	AFFILIATE	DCN
Johnny R. Dreyer	Gas Processors Association (GPA)	EPA-HQ-OAR-2008-0508-0412.1
William W. Grygar II	Anadarko Petroleum Corporation	EPA-HQ-OAR-2008-0508-0459.1

Table 9

COMMENTER	AFFILIATE	DCN
Pamela A. Lacey	American Gas Association (AGA)	EPA-HQ-OAR-2008-0508-0709.1
Richard Bye	CenterPoint Energy, Inc.	EPA-HQ-OAR-2008-0508-2124.1

Table 10

COMMENTER	AFFILIATE	DCN
Craig Holt Segall	Sierra Club	EPA-HQ-OAR-2008-0508-0635.1
Melissa Thrailkill	Center for Biological Diversity	EPA-HQ-OAR-2008-0508-0430.1

Table 11

COMMENTER	AFFILIATE	DCN
Burton Eller	National Cattleman's Beef Association (NCBA)	EPA-HQ-OAR-2008-0508-0418.1
Rick Stott	Agri Beef Co.	EPA-HQ-OAR-2008-0508-0371.1
Todd Schroeder	Nebraska Cattlemen, Inc. (NC)	EPA-HQ-OAR-2008-0508-0416.1
William Hammerich	Colorado Livestock Association	EPA-HQ-OAR-2008-0508-0393.1
Ross Wilson	Texas Cattle Feeders Association (TCFA)	EPA-HQ-OAR-2008-0508-0395.1
William Hammerich	Colorado Livestock Association (CLA)	EPA-HQ-OAR-2008-0508-0425.1