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

Volume No.: 13

Subpart A: Content of the Annual Report, the Abbreviated Emission Report, Recordkeeping, and the QAPP

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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 *http://www.regulations.gov* 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 regarding the content of the annual report, abbreviated emission report, recordkeeping requirements, and the quality assurance performance plan (QAPP).

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 the content of the annual report, abbreviated emission report, recordkeeping requirements, and the QAPP 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 the content of the annual report, abbreviated emission report, recordkeeping requirements, and QAPP.

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Commenter Name: Sarah B. King
Commenter Affiliation: The DuPont Company
Document Control Number: EPA-HQ-OAR-2008-0508-0604.1
Comment Excerpt Number: 5

Comment: The reporting rule as proposed would require substantial quantities of detailed data, above and beyond emissions, and supporting documentation to be submitted under §98. For example, in the preamble page 16485 section C.5 (§ 98.36): "the proposed rule would require the reporter to submit certain unit-level data for the stationary combustion units at each affected facility. This additional information would require reporting of the unit type, its maximum rated heat input, the type of fuel combusted in the unit during the report year, the methodology used to calculate CO_2 emissions for each type of fuel combusted, and the total annual GHG emissions from the unit. This represents a significant departure from other EPA programs of either a reporting or permit compliance nature. In programs such as the Toxic Release Inventory (TRI) under 40 CFR §372 or the air emission inventory under 40 CFR §51, Subpart A, EPA and the states require only that the final data be submitted and certified. Facilities are required to maintain all supporting documentation and to make it available to EPA or a state agency upon request. The same is generally true for compliance reporting, such as Discharge Monitoring Reports under 40 CFR §122 (NPDES permitting rules) and such as 40 CFR §70 (CAA Title V permitting rules) and Discharge Monitoring Reports under 40 CFR §122 (NPDES permitting rules). The quantity and type of data, supplemental information and documentation being required to be submitted is more like that required on a one-time basis for regulatory development, such as through a Clean Water Act §308 letter. The Agency should not mix the intent of one-time data gathering for rulemaking purposes with ongoing reporting requirements. By requiring detailed data, above and beyond emission, such information to be reported by an entity, EPA will impose additional burdens on the facility over and above the extensive efforts of generating and collecting the information. Personnel resources will need to gather and report the information in a timely manner, adding cost to the overall rule. In contrast, allowing a facility to provide the supporting data upon request will meet the need for the agency to have access to this information while minimizing the inefficiency of having to send the information to the agency for their storage and handling.

Response: We have not made any major changes in the general content of the annual GHG report since proposal. The level of detail required to be reported is necessary for EPA to carry out emissions verification to ensure the consistency and accuracy of data collected under this rule. For further discussion about our decision to have EPA verify the emissions data reported under the rule, see the preamble section for the response on the emissions verification approach. Verification is important because EPA needs to ensure the quality of reported data for use in analyzing, developing, and implementing potential future market-based control strategies, such as a carbon tax or a cap and trade program. Additionally, the level of detail required to be reported is necessary for EPA develop potential future CAA programs such as NSPS. These data will assist policy makers in understanding: (1) the specific sources of emissions and the amounts emitted by each unit/process to effectively interpret the data, and (2) the effect of different processes, fuels, and feedstocks on emissions. Overall, the data collected will improve the U.S. government's ability to formulate a set of climate change policy options and to assess which facilities and industries would be affected by the options and how they would be affected.

As pointed out by the commenter, this rule requires more process data to be reported than other programs such as TRI. This difference is due to the fact that TRI was not developed with the same purpose as this reporting rule. TRI is a public information program, and the data collected under the program are not used for policy analysis or regulatory compliance. With respect to its focus on data quality, this rule is more similar to California's mandatory reporting rule and the Western Climate Initiative(WCI), both of which require data verification. Reporting under WCI will be used to implement and determine compliance under their market-based cap and trade program. However, California's rule and WCI do not require reporting at the same level of detail as this rule because they require all submitted data to undergo third party verification.

Additionally, as pointed out by commenters, the mandatory reporting rule requires more process data to be reported than what is required to show compliance with other CAA programs such as NSPS and NESHAP. This difference is due to the fact that these programs were not developed with the same focus as this reporting rule. These programs focus on a facility's success in achieving a certain emissions rate using emission control devices. To ensure compliance, these programs require a test of a facility's control system to establish process and control device operating parameters. Tests generally are submitted in advance, and the test may be witnessed by a state or EPA official. Continuous parameter monitoring ensures that equipment is being used and operated correctly. By contrast, this rule focuses on establishing each facility's annual GHG emissions in tons per year. Verifying that all emissions are continuously accounted for requires review of more data than required to verify that a control device is properly designed and operated. Because CO_2e emissions data are verified by EPA, not on-site at the facility or by a third party, facilities are required to report more detailed supporting data under this rule. If EPA were to require that these data were only kept on record and not reported, EPA expects that verification would require extensive auditing onsite. This option is impractical given the large number of sources subject to the rule.

EPA has made efforts to reduce the burden on facilities reporting under the rule. To the extent possible, emissions calculation methods were developed to use data already routinely monitored and recorded by facilities for business reasons. To facilitate the reporting of required emissions and supporting data and to enable effective review of the large volume of data, facilities will submit data electronically in a standard format through a centralized data system. EPA is currently developing this system and will, to the extent possible, work with other programs and systems to develop a reporting scheme that minimizes the burden on reporters. For any concerns about confidentiality of submitted data, please see the discussion of our plans to address CBI and emissions data in the preamble section for the response on CBI. Regarding any comments on the cost associated with the reporting requirements, see EPA's Regulatory Impact Analysis (RIA) for the rule and the preamble for the response on the cost and economic impacts section of the preamble.

Commenter Name: John M. Batt
Commenter Affiliation: Airgas, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0408.1
Comment Excerpt Number: 9

Comment: We feel it is appropriate that the GHG reports require total annual GHG emissions in metric tons of CO_2e aggregated for all source and supply categories by GHG gas. However, EPA should limit the required level of "break down" of the reported information and allow aggregated emissions data and not require reporting of individual units for any source category. The required

activity or other data (e.g. fuel use, feedstock inputs) should only include information which is directly necessary to generate the emissions data. Any required quality assurance/control data should also be limited in scope. Limiting the amount of information required in reports will ease the burden of reporting and will also reduce concerns about protection of business confidential information which is often not directly related to GHG emissions data.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5. Additionally, for many of the source categories covered by the rule, emissions must be calculated at the process or unit level due to differences in feedstocks, products, and process operations that affect emissions. The rule generally requires submission of data at the level that is used to generate the emissions data so that policy makers can analyze factors that influence GHG emissions. The rule does not require submission of quality control/quality assurance (QA/QC) data in the traditional sense. For example, the rule often requires testing of the composition of feedstocks or testing to develop site-specific emission factors. But the test reports and associated QA/QC tests do not have to be submitted as part of the annual report. As another example, the rule requires periodic calibration of fuel flow meters, but the calibration tests are not reported. Some subparts of the rule may require the retention of records of these data but the reported data includes only that data used to calculate GHG emissions and, where appropriate, a general description of the methods used.

Commenter Name: Keith Epperson
Commenter Affiliation: American Feed Industry Association (AFIA)
Document Control Number: EPA-HQ-OAR-2008-0508-0399.1
Comment Excerpt Number: 4

Comment: EPA's proposed rule would require the reporting of GHG emissions data on an ongoing, annual basis. EPA also is proposing that once a facility is subject to the reporting requirement that it would be required to continue to submit reports even if it falls below the reporting thresholds in future years. AFIA generally supports the reporting of GHG emissions data on an annual basis. However, we also believe EPA should provide for a simplified reporting method that would allow facilities to report a "no significant change" in emission levels as measured against a designated baseline year. We propose that eligibility for this concept be based on facility operating data or process information used for the GHG emissions calculations. For example, if facility operating data or process information does not change during a subsequent year as compared to a baseline year, EPA should allow such a facility to report a "no significant change," as an alternative to submitting a complete annual emission report. Such an approach would provide EPA with information necessary to monitor GHG emissions, while, at the same time, minimize the reporting burden on affected facilities. Under the recordkeeping requirements designated within EPA's Toxic Release Inventory regulations, a short form (Form A) has been utilized for several years and has proven effective in regard to reporting data and reduced the burden on the facility reporting data.

Response: The rule does not include any provisions for a simplified report if emissions have not significantly changed. EPA will need detailed data each year to verify data on an annual basis. There could be situations, for example, where a facility shows no significant changes in annual facility-level emissions even though the facility has undergone a process change. In this case, EPA would need to verify the data associated with the process change. Additionally, EPA needs these data to understand and evaluate sources of emissions and the factors influencing their level of emissions. Unchanged emissions from one facility in an industry might be atypical for the

industry as a whole if there is a predominant upward or downward trend. Because the reported data may be used for allocation of allowances in a cap and trade program, all reported data must be verified to ensure equity across all sources. Furthermore, the short form (Form A) allowed under TRI is not appropriate under this rule. TRI data serves a different purpose than this rule as it does not: (1) prescribe specified methods for computing emissions, (2) use data to understand the relationship of emissions to process design and operational variables, or (3) collect data to support policy evaluation or possible regulatory programs. It should not be a significant burden for these facilities to report these data since the facilities must collect the data and make the necessary calculations to determine that their emissions have not significantly changed. Please note that the final rule has removed the requirement to perpetually report emissions once becoming subject to the rule. Provisions have been incorporated in the final rule to allow reporters that no longer meet the applicability requirements of the rule to terminate reporting under certain circumstances. For further explanation, see the preamble for the response on reporting frequency and provisions to cease reporting.

Commenter Name: Geri Kantor and Doug Cogan
Commenter Affiliation: RiskMetrics Group
Document Control Number: EPA-HQ-OAR-2008-0508-0369.1
Comment Excerpt Number: 2

Comment: To improve the value of the reported data to the investor community, RiskMetrics Group offers the following suggestions: (1) Within the Annual Report, the Designated Representative should identify by name the owner(s) of the reporting facility, including the ultimate parent company, whether public or private entities. (2) The Designated Representative should provide one or more commonly used and easily obtainable security identification numbers for the owner(s) and the ultimate parent. (3) Suggested security identifiers include: International Securities Identifying Number (ISIN), Stock Exchange Daily Official List (Sedol), and/or Committee on Uniform Security Identification Procedures (CUSIP). The provision of parent and ultimate parent company names and identifiers should be relatively simple for the Designated Representative and would not unduly add to the reporting burden.

Response: EPA has not included a requirement to report the parent company or any associated security identification numbers because, in the case of various facilities reporting under this rule, the process of identifying the parent company can be complex. As an example, some facilities are owned by multiple parent companies and can have complex operational and control configurations. Requiring reporters to identify their parent company would require that the rule adopt procedures for designating which companies to report as owners. The EPA concludes that this additional burden on reporters and EPA is not reasonable considering that this information is not needed to carry out the purpose of the rule.

Commenter Name: Rhea Hale
Commenter Affiliation: American Forest & Paper Association (AF&PA)
Document Control Number: EPA-HQ-OAR-2008-0508-0909.1
Comment Excerpt Number: 31

Comment: Not withstanding the issues raised above, it is difficult to understand the format that EPA will use to collect this information if reported. The proposed rule does provide specific

details of information that is required to be submitted in addition to emissions, but it is unclear as to manner in which the data will be collected. AF&PA is concerned over this lack of clarity and is unsure how EPA will develop a platform that will cover the potentially different methods facilities use to determine fuel inputs. EPA should, instead, consider a requirement that company records providing detailed descriptions of calculation methodologies and key parameters used in those calculations be maintained on site, but not reported. This would simplify the burden to industry and significantly reduce the burden to EPA to collect, interpret and understand the data it is collecting from thousands of facilities.

Response: The final rule specifies precisely what must be reported. To facilitate the reporting of required emissions and supporting data and to enable effective review of the large volume of data, facilities will submit data electronically in a standard format through a centralized data system. This system, which at this time is under development, will provide the format for the data to be collected under the rule. EPA will, to the extent possible, work with other programs and systems to develop a reporting scheme that minimizes the burden on reporters.

Commenter Name: Linda Farrington
Commenter Affiliation: Eli Lilly and Company (Lilly)
Document Control Number: EPA-HQ-OAR-2008-0508-0680.1
Comment Excerpt Number: 5

Comment: In addition to reporting GHG emissions from the generation of electricity, the proposed rule also requires affected facilities to report the quantity of electricity generated onsite. This requirement should not be included in the final rule because it is goes beyond the purpose and intent set out by congress in the FY2008 Consolidated Appropriations Act, which was to develop a national registry of GHG emissions, not an inventory of electricity generation. The Agency seeks comment on whether this information would be useful to support future climate policy development, given the other data related to GHG emissions from electricity generation which will already be collected under other sections of the proposed rule. Lilly believes that the quantity of electricity generated onsite should not be reported under this rulemaking, regardless of whether or not it would be useful information for future climate policy. The mandatory GHG reporting rule should be limited to the reporting of GHG emission data and information necessary for EPA verification. The quantity of electricity generated from onsite generators, cogeneration, and/or renewable energy sources is additional information that only serves to further increase the complexity of a proposed rule that already surpasses other EPA reporting rules in the level of detail, required monitoring, and volume of information to be reported.

Response: EPA has removed the proposed requirement for reporting electricity generation under proposed 40 CFR 98.3(c)(5). In the preamble to the proposed rule, EPA requested comment on whether this information would be useful to support future climate policy development, given the other data related to GHG emissions from electricity generation already collected under the proposed rule. Commenters supporting this provision pointed to the value of understanding CO_2 generation from biomass, alternative fuels, non-emitting generation, and CHP units. These data could also be useful in determining allowance allocations in a cap and trade program. However, we concluded that reporting total facility generation would have limited value unless generation data was correlated to the type of combustor unit and fuel burned. To require this level of detail in reporting would add significantly to the complexity and cost of reporting. Further, it would be unreasonable to require reporting of non-emitting generation such as solar.

Commenter Name: Kyle Pitsor
Commenter Affiliation: National Electrical Manufacturers Association (NEMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0621.1
Comment Excerpt Number: 6

Comment: Much of the data required to be reported is excessive and not required for EPA to verify the data; for example, requiring a facility with a large number of fuel combustion units, which opts to simplify its GHG emission calculations by aggregating units into group(s), using the Tier 1 or Tier 2 Methods, and taking measurements of fuel consumption from the billing meter on the common supply piping, to also report to EPA the identification and input heat rating of each aggregated unit included in this simple calculation. This is unnecessarily burdensome on the facility when this information is not specifically needed for EPA to verify the data. The NEMA Carbon/Manufactured Graphite EHS Committee requests that EPA eliminate such overly burdensome recordkeeping and reporting requirements from the Final Rule, when it cannot reasonably demonstrate that it needs this level of detail to either verify submitted data or that will be needed for future GHG legislation.

Response: The identification and input heat rating of each aggregated unit are identifiers that are needed if a facility is audited to confirm that emissions from all units have been reported using the appropriate methods specified in the rule. Regarding the level of detail required in the annual emissions report, see the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5. Regarding the specific case raised by the commenter, a change has been made in the final rule to allow more units to be aggregated, therefore reducing the overall reporting burden. Reporters may aggregate units if each unit has a maximum rated heat input capacity of 250 mmBtu/hr or less provided that the use of the Tier 4 Method is not required or elected for any of the units and the units use the same tier for any common fuels combusted.

Commenter Name: Brad Bateman
Commenter Affiliation: Western States Dairy Producers Trade Association
Document Control Number: EPA-HQ-OAR-2008-0508-0365.1
Comment Excerpt Number: 10

Comment: The EPA’s proposal is burdensome and directly violates the Paperwork Reduction Act, 44 USC Section 3501, et seq. First, the EPA requires that once a source reports, it must continue to report even if conditions change (page 114). Information is to be reported annually to EPA into the "foreseeable future." (page 114). This seemingly perpetual reporting is arbitrary and needlessly burdensome. If reporting is required, a single report is all that is necessary. The "source" can then report any major changes on an annual basis.

Response: In developing the proposed and final rule, EPA has fully complied with the requirements of the Paperwork Reduction Act, as documented in "Statutory and Executive Orders Review" section of the preamble. The final rule has removed the requirement to perpetually report emissions once becoming subject to the rule. Provisions have been incorporated in the final rule to allow reporters that no longer meet the applicability requirements of the rule to terminate reporting under certain circumstances. For further explanation, see the preamble for the response on reporting frequency and provisions to cease reporting. The suggestion for a single GHG report is not technically sufficient because it would not allow assessment of emissions in relation to changes in fuels, feedstocks, and process operation.

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: 16

Comment: The NPRM fails to address the format for the annual emission reports. As a result, there will be no opportunity to comment on the format of the reports included in the final rule. RMA recommends that the reporting be done to two significant digits to simplify reporting and to avoid over-inflating the accuracy of the information.

Response: The rule specifies that emissions must be calculated by following the calculation methodologies specified in each applicable subpart. No additional specification is appropriate at this time. Specifying a general rounding convention by rule could complicate the emission verification process of relating the input data to the estimated emissions, especially where multiple equations are involved in estimating emissions for a process. The electronic data system for reporting emissions under this rule is currently under development. A rounding convention is best considered in the context of the design of the data system and the emission verification processes. A specification for rounding, if appropriate, will be provided later as implementation guidance.

Commenter Name: Dr. John A. Lory
Commenter Affiliation: University of Missouri et al.
Document Control Number: EPA-HQ-OAR-2008-0508-0672.1
Comment Excerpt Number: 10

Comment: The current wording (98.3 (c)(4)) suggests that the annual report should include "Annual emissions of CO_2, CH_4, N_2O and each fluorinated GHG." For some GHG sources CO_2 emissions are not required to be reported. For example, in manure management systems CO_2 emissions are not considered to be derived from anthropogenic sources so do not require reporting under the rule. Consider rewording this requirement as "Annual emissions from anthropogenic sources of CO_2, CH_4, N_2O and each fluorinated GHG."

Response: For each applicable source category, facilities are required to report emissions of only those GHGs specified in the relevant subpart. Some subparts require reporting of biogenic emissions to provide data to inform future policy. In such cases, biogenic emissions are reported separately. Emissions of biogenic CO2 may be anthropogenic or naturally occurring. In the case of manure management, consistent with the IPCC Guidelines, anthropogenic emissions of CO2 would not be tracked where the emissions actually occur, but rather as a comprehensive accounting of carbon in growing biomass that ultimately ends up in livestock feed. Carbon in non-woody crops used for livestock feed is assumed to cycle annually so that no net CO2 emission occur. Therefore, CO2 is not counted from manure management because overall anthropogenic emissions are assumed to be zero, not because the emissions are considered to be natural (i.e., not anthropogenic).

Commenter Name: Bill Herz
Commenter Affiliation: The Fertilizer Institute
Document Control Number: EPA-HQ-OAR-2008-0508-0212f
Comment Excerpt Number: 1

Comment: EPA has called for reporting of percentages of nitrogen within nitrogen-based fertilizer products, and TFI would like to request in the technical documents or otherwise related to our industry that EPA provide the technical basis in which they are going to use this information. It is assumed that the information is related to nitrous oxide emissions coming from field application of fertilizer. However, urea has over a thousand different uses within the TOSCA IURA database, and field application of urea, although a primary use, is only one of the many uses. TFI would like to point out that we have promoted and developed a stewardship system. For field application of nitrogen products, it involves using the right product at the right place, time, and amount, and that fertilizer emissions, including nitrous oxide, are very much tied to practice-based and best management-based approaches. So, again, the technical basis would be very important by which EPA plans to use this information, and we would also point out that the modeling of any field emissions are very complex. The DACENT model is currently used for emissions estimates within the Draft or Final Greenhouse Gas Inventory, and this is a mainframe computer program that needs to run for a week or two to arrive at any estimates. Finally, I would point out that almost 60 percent of all nitrogen fertilizer is imported into the United States. So EPA getting an estimate of the percentage of domestically produced fertilizer would represent less than half of all the product brought into the country.

Response: In the manufacture of ammonia, diatomic (atmospheric) nitrogen is reacted with methane at high pressure and temperature (in addition to the GHG emissions associated with the high temperatures and pressure, this transforms methane into CO_2 that is released as well. Altogether, about 33,000 cu ft of natural gas are used for each ton of fertilizer. About 85% of the ammonia produced in this way is used as fertilizer directly. Ammonia is a form of “reactive nitrogen”. Nitrous oxide can only be produced from a reactive nitrogen species. (Atmospheric, i.e., diatomic nitrogen is extremely stable, reactive nitrogen (just about everything other than N2) is extremely labile. It is true that any of the minor non-fertilizer uses of ammonia can also produce nitrous oxide: explosives, pharmaceuticals, plastics, etc. However, 1) the transition to nitrous oxide will be much delayed because these products are not released immediately to the environment the way fertilizer is, so they will not quickly enter the nitrogen cascade, as fertilizer will, and 2) Fertilizer is responsible for 85 Pg of the ~100 Pg produced. To illustrate the significance of this amount, it’s about equivalent to all the reactive nitrogen produced in nature from lightning, fires and (non-cultivated) nitrogen fixing microorganisms. In summary, the only species nitrous oxide can be produced from is reactive nitrogen. Fertilizer accounts for almost half of the new reactive nitrogen released into the environment each year. The other, minor, uses of ammonia are not immediately applied to land where they would be available for transformation into other forms including, nitrous oxide and some indirect GHGs. The production of ammonia (a feedstock for urea) itself emits considerable amounts of GHGs. So it is critical to know how much new reactive nitrogen in the form of ammonia is produced and released into the environment each year, because of the upstream and downstream GHGs. Without question, growers and everyone associated with the fertilizer production and use strives to use it efficiently. However, this misses the point. All the nitrogen applied, including the 5-15% that ends up on the table in meat and produce, eventually enters the nitrogen cascade and is available for transformation into nitrous oxide. So, using it efficiently is a good thing, and it means that less need be produced for fertilizer than if were used profligately, but is unrelated to why the EPA needs estimates of the ammonia that is produced (with its embedded GHGs) and

applied (with the potential to form nitrous oxide and indirect GHGs like NO and PAN.) Regarding modeling of nitrous oxide field emissions, we concur that the technical basis is always important. Modeling the nitrogen cascade is difficult and some computational models have long run times. However, the quality of the inputs into such a modeling exercise is of paramount importance. Collecting these data will help EPA to improve the quality of its inputs into any modeling exercise. Without an estimate of how much nitrogen is in fertilizer, modeling the effect from fertilizer application is impossible. Regarding imports of nitrogen, the EPA intends to model all nitrogen inputs.

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: 5

Comment: The NGFA believes EPA should provide for a simplified reporting method that would allow facilities to report a "no significant change" in emission levels as measured against a designated baseline year. We propose that eligibility for this concept be based on facility operating data or process information used for the GHG emissions calculations. For example, if facility operating data or process information does not change during a subsequent year as compared to an established baseline year, EPA should allow such a facility to report a "no significant change," as an alternative to submitting a complete annual emission report. Such an approach would provide EPA with information necessary to monitor GHG emissions, while, at the same time, minimize the reporting burden on affected facilities. The concept of providing for a streamlined reporting option to meet EPA regulatory obligations is not new. For example, under the recordkeeping requirements designated within EPA's Toxic Release Inventory regulations, the agency has provided for a simplified reporting method – the option to submit an abbreviated form (Form A) under specified conditions - for several years that has proven to be effective in collecting reporting data and reducing the reporting burden on affected facilities.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0399.1, excerpt 4.

Commenter Name: See Table 6
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0635
Comment Excerpt Number: 12

Comment: It is highly likely that Congress will include in new legislation a system of output-based rebates for energy-intensive, trade-exposed industries. For this reason, EPA should include in the rule the reporting requirements that will be necessary to implement such a system. For example, the American Clean Energy and Security Act currently before Congress provides for EPA to determine the eligible industries by June 30, 2011. Most of these industries have already been identified. For each eligible industry, EPA will have to determine the average emissions rate per unit output on a sectoral basis. Anticipating the likelihood of these new provisions, the reporting rule should require firms in the likely eligible industries to report the necessary information on emissions rates and outputs from these industries. Reporting requirements necessary to implement the output-based rebate requirement should apply to all facilities that

may be eligible for rebates, irrespective of whether such facilities emit more or less than 25,000 tons Mt CO_2e annually.

Response: The final rule was developed to comport with the legislative mandate, which is to collect accurate and consistent GHG emissions data of sufficient quality to inform future policy decisions. To minimize reporting burden, we did not require reporting of data based on data needs to support every possible program that could be legislated in the future. As future policies are developed, EPA will develop the required reporting requirements.

Commenter Name: W. Walter Tyler
Commenter Affiliation: INVISTA S.à r.l
Document Control Number: EPA-HQ-OAR-2008-0508-0506.2
Comment Excerpt Number: 6

Comment: Section 98.30 of the proposed rule specifies source-specific reporting for Stationary Fuel Combustion Sources including, but not limited to "boilers, combustion turbines, engines, incinerators, and process heaters." Reporting of emissions from combustion sources is also included in other specific subparts:

Subpart D – Electricity Generation. Per section 98.43(b) for units not subject to the Acid Rain Program, "emissions shall be calculated using the methods specified in §98.33 for stationary fuel combustion units."

Subpart E – Adipic Acid Production. Per section 98.52(b), facilities must report GHG emissions from "each stationary combustion unit that uses a carbon-based fuel, following the requirements of subpart C of this part."

Subpart V – Nitric Acid Production. Per section 98.222(b), facilities must report GHG emissions from "each stationary combustion unit. You must follow the requirements of subpart C of this part." INVISTA's facilities are subject to both subpart C and other subparts. The rule should be clarified to ensure that combustion emissions from a given unit at a site are to be reported only once, that is, under only one of the applicable subparts. Otherwise, certain facilities may be subject to double counting of emissions that would serve no stated purpose in the rule, nor would it lead to any increased accuracy in emissions estimates and reporting. Accordingly, INVISTA requests that the reporting requirement in subpart C be clarified to ensure reporting of emissions only once from sources covered by more than one subpart. INVISTA suggests the following modification to section 98.32 (in bold, italics): You must report CO_2, CH_4, and N_2O mass emissions from each stationary fuel combustion unit. Combustion emissions reported under other source specific categories (e.g. Electricity Generation, Adipic Acid Production, Nitric Acid Production, etc.) should not be included in combustion emissions reported in the General Stationary Fuel Combustion category.

Response: It was EPA's intent in the proposed rule to require CO_2, CH_4, and N_2O emission from each stationary combustion unit to be reported under one subpart only. EPA agrees with the commenter that the proposed rule is not clear on this point, and EPA has added clarifying text to the final rule of each subpart to provide this clarification. In the "GHGs to report" section of each applicable subpart, EPA specifies if combustion emissions are to be reported under that particular subpart or under subpart C (General Stationary Fuel Combustion Sources.)

Commenter Name: Anonymous
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0166
Comment Excerpt Number: 2

Comment: Insure the rule is clear that emissions reported (if required) are based on actual emissions, NOT potential to emit.

Response: The rule is clear on this point. Actual emissions from downstream reporters are used for determining applicability and calculating emissions (except for municipal solid waste landfills for which applicability is based on methane generation.)

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: 10

Comment: Requiring facilities to report both the total annual GHG emissions in metric tons of CO_2e (MMT CO_2e) and separately reporting GHG emissions individually is redundant and burdensome. Therefore, U.S. EPA should exclude the annual reporting of total emissions.

Response: The EPA has concluded that the requirement to report total facility CO_2e emissions in addition to emissions for each GHG will not add a significant burden for facilities. Emissions must be calculated separately for each GHG using the methods prescribed in each applicable subpart of the rule. These emissions must be reported separately to allow verification. We envision that with the electronic reporting tool under development, a reporter will report the data for each pollutant and source category, and the electronic reporting tool will complete the calculation of total CO_2e emissions. Additionally, the reporting of individual greenhouse gases adds transparency, helps stakeholders that are interested in emissions of individual species, and allows for changes in the application of GWPs at a later date. For additional discussion of the need for these data, see Section I.E. of the preamble to the proposed rule (74 FR 16488, April 10, 2009.)

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 86

Comment: Marathon requests that product emissions from suppliers be reported separately from direct emissions from facilities and labeled as such in both the report submitted to EPA and the information released to the public.

Response: Data on direct emitters of GHG and suppliers will be reported and compiled by EPA separately. Any information released to the public will be presented so as to not infer that supplier data represents direct emissions by a facility.

Commenter Name: J. Southerland
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0165
Comment Excerpt Number: 7

Comment: CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, and other specified fluorinated compounds (e.g., HFEs) are identified as the greenhouse gases to be reported. However, the HFCs PFCs and others such as HFEs must each be specifically identified and measured or estimated and reported before a carbon dioxide equivalence can be calculated. Thus the final official list must be much longer containing all the identified compounds and make this requirement clear. Omission of this level of detail can not be reconstituted after the fact by any reasonable means. It should also be clearly stated that actual mass of each compound emitted is what is required. Though this is discussed partially, it does not seem to be carried through to recognizing the necessity to report each separately so the calculation of equivalence can be done before adding up to the group.

Response: EPA is specific in the rule about which fluorinated GHGs are covered under the rule. In all applicable subparts of the rule, EPA specifies that emissions of "fluorinated GHGs" be measured and reported, and EPA defines "fluorinated GHGs" is section 98.6, making it clear that all fluorinated GHGs must be reported, not just those compounds listed in Table A-1, Global Warming Potentials (100-Year Time Horizon). The rule does not limit reporting to a finite list of the fluorinated GHGs because EPA does not want to exclude any new fluorinated GHGs whose GWPs have not yet been evaluated. The rule requires reporting of mass emissions of each fluorinated GHG. This requirement has been clarified in the final rule.

Commenter Name: Joseph A. D'Amico
Commenter Affiliation: Foundation Coal Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0421.2
Comment Excerpt Number: 5

Comment: Under the proposed procedures in the Preamble measurements from a sampling of monitoring systems for each individual supplier are then combined with measurements from samplings of monitoring systems from other suppliers within the U.S. Here is where requiring such precise measurements would not benefit the industry as a whole. Once combined, the measurements are rounded up numerous times, diluting the accuracy of the trailing divisor. Once these “truncated” measurements are allowed, the measurement is artificially inflated and inaccurate. Add that with the population sample widening every year (“once in, always in”) with new suppliers and curve of the standard deviation flattens, becoming unreliable. Thusly, comparison between years with the diluted population now becomes meaningless as the numbers will produce an artificial increase year-over-year when rounded up at each measurement interval in lieu of allowing an overall measurement by the regulating entity.

Response: EPA agrees with the commenter that collecting accurate data of GHG emissions is important to the future value of the data for informing policy decisions and designing new regulatory programs. However, EPA disagrees with the commenter that rounding errors will introduce significant over-estimation or error in the GHG emission data. Facilities will submit data electronically in a standard format through a centralized data system. The policy for rounding will be specified by the data system and will be commensurate with the level of accuracy of the calculation methods in the rule. EPA has made changes to the "once-in-always-

in" provisions in the proposed rule. For a description of these changes, see the preamble response on frequency of reporting and provisions to cease reporting.

Commenter Name: Steven J. Rowlan
Commenter Affiliation: Nucor Corporation (Nucor)
Document Control Number: EPA-HQ-OAR-2008-0508-0605.1
Comment Excerpt Number: 24

Comment: In 98.3(c)(4), what is the basis for requiring "emissions must be calculated assuming no capture of CO_2"? If this is an emissions reporting rule, then only CO_2 emitted should be calculated. Carbon sequestration technologies are under development, if not already active, so it is only a matter of time until CO_2 is captured. This also raises problems with CO_2 that is emitted, but then converted back into another carbon form and captured in a product. Do the amounts in the product then need to be disaggregated for purposes of reporting? The answer to this question is "no" because the CO_2 is not emitted.

Response: Response: CO_2 that is captured is reported under Subpart PP of today's rule. For a description of the facilities that are required to report under Subpart PP, see the EPA-HQ-OAR-2008-0508 Preamble, Section III.PP.

Today's rule does not require CO_2 transport, injection, or storage facilities to report under Subpart PP. Given the comments received on the Subpart PP proposal, EPA plans to issue a new proposal on geologic sequestration. See the EPA-HQ-OAR-2008-0508 Preamble, Section III.PP for a discussion of this planned new proposal in Definition of Source Category. EPA will consider this comment in developing the new proposal.

Commenter Name: Lisa D. Schmidt
Commenter Affiliation: Dow Corning Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0562
Comment Excerpt Number: 1

Comment: As proposed, the rule is too prescriptive and will impose a significant administrative burden and costs on Dow Corning manufacturing sites. The proposed rule requires detailed reporting and recordkeeping that exceeds existing regulations such as the Toxic Release Inventory and Clean Air Act. We request that the EPA follow these regulations in that only emission data are required, and that detailed calculations, and methodology be submitted only upon request from the EPA. QA/QC of monitoring data should not be in excess of other regulations derived from the Clean Air Act.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: See Table 3
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 47

Comment: API supports EPA's decision not to require reporting of electricity generated onsite or electricity generation by fuel type. API sees very little value in this information and the burdens of tracking and reporting are certainly significant.

Response: See response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

Commenter Name: P. Arora, et al.
Commenter Affiliation: none
Document Control Number: EPA-HQ-OAR-2008-0508-0415.1
Comment Excerpt Number: 1

Comment: We urge EPA to consider adding a requirement that facilities subject to reporting under the proposed Greenhouse Gas Reporting Rule identify their parent company. Company identification is a critical requirement for researchers as well as the investment community interested in understanding the impact, risks, and opportunities that companies face due to climate change. Corporate headquarters have a significant influence on facility-level environmental activities. Many voluntary environmental initiatives are initiated at the corporate level. For instance, more than half of ISO 14001 certified facilities in the U.S. sought certification because of a corporate mandate. Research has also shown that environmental performance varies by location of parent, whether a facility is part of a multi-plant firm or a single entity, and by the financial health of the parent company. Thus, studies that seek to understand facility-level environmental performance often include information on the parent company. Corporate level Greenhouse Gas data are also important to investors who seek to identify risks and opportunities. The ability to assess material information affecting future firm profitability is critical for investor decision making and market efficiency. It is also important to NGOs who are interested in assessing corporate sustainability performance. Corporate identifiers would also assist rating firms and NGOs to verify voluntary disclosures of corporate-level data such as the Carbon Disclosure Project, Global Reporting Initiative, or emerging carbon footprint efforts. This is particularly important since these voluntary programs do not generally have mandatory third-party certification requirements. Without an explicit EPA-mandated field identifying the corporate parent, researchers, NGOs and the investment community are forced to spend considerable time and money matching up facility level data with corporate parents – a task that is not only redundant and wasteful, but also subject to error. The additional reporting burden for individual facilities would be trivial, but it would save users considerable mapping effort. One researcher has reported spending six months to carefully match-up EPA data from thousands of facilities to over 700 parent companies. As a result of these significant barriers, fewer studies on corporate environmental performance are conducted than we would otherwise observe. The matching work that is done is not only wasteful (due to redundancy), but there is no assurance that datasets compiled by different researchers or different organizations will be comparable. Indeed, when different researchers reach contradictory conclusions, it is possible that some of these differences can be explained simply due to errors in identifying parent companies. There is precedent for EPA requiring corporate parent identifiers in other reporting programs, such as the Risk Management Plan Rule in Section 112(r) of the CAA Amendments. Thus, adding this new requirement should not burden EPA or facilities who must report under the Greenhouse Gas Reporting Rule.

Response: The final rule does not require reporting of parent companies. See the response to comment EPA-HQ-OAR-2008-0508-0369.1, excerpt 2. In addition, this rule is not designed to provide data to assess corporate environmental performance or investment strategies. Individual

companies have numerous guidance documents (e.g., WRI/WBCSD protocols, The Climate Registry etc.) that they can use for self-reporting their own corporate level inventory assessments.

Commenter Name: James Salo
Commenter Affiliation: Trucost Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0984.1
Comment Excerpt Number: 4

Comment: The EPA should add a requirement that facilities subject to reporting under the proposed rule clearly identify their parent company and the proportion of the facility the parent/holding company own. Without this information it is very difficult to consolidate facility level data to company level data that stakeholders are interested in. This recommendation is informed by Trucost's past experience. Trucost conducted similar research on behalf of the UK Environment Agency and could not find a sensible way of aggregating the data without very considerable work. Trucost had the same experience working with the EPA's Toxic Release Inventory (TRI) data.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0369.1, excerpt 2.

Commenter Name: Laurie Burt
Commenter Affiliation: Massachusetts Department of Environmental Protection
Document Control Number: EPA-HQ-OAR-2008-0508-0453.1
Comment Excerpt Number: 12

Comment: Under Section IV G of the Preamble, Rationale for the Emissions Information to Report, Subsection 1: General Content of Reports, EPA seeks comment on whether the separate reporting of onsite electricity generation by generation source type would be useful. Massachusetts encourages EPA to require the separate reporting of onsite electricity generation by generation source type, including kilowatt-hour information. This information is important to evaluate the total contribution of various energy sources to the nation's energy systems and climate change, and would be particularly useful for tracking the success of policies and programs designed to encourage electricity generation from biomass, alternative and renewable energy sources. It also will enable a full comparison of the energy-efficiency and climate-efficiency of the various types of fuels and energy supplies used to generate electricity, as well as providing information on the use of combined heat and power.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

Commenter Name: Ron Downey
Commenter Affiliation: LWB Refractories
Document Control Number: EPA-HQ-OAR-2008-0508-0719.1
Comment Excerpt Number: 1

Comment: Preamble G. 1, p 130. EPA requested comments on the whether the onsite electricity generation should be reported and if so should reporting be categorized as renewable and non-renewable sources. We recommend that EPA include reporting since waste heat recovery for

cogeneration would be a strategy to reduce facilities emissions by reducing indirect emissions from purchased electricity. These sources of onsite electricity generation should be classified as renewable or non-renewable.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

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: 3

Comment: EPA requests comment on whether facilities and supply operations affected by the NPRM should also report the quantity of electricity generated onsite. RMA suggests that electricity generated from renewable sources and from portable and emergency generators be excluded from any reporting provisions. Reporting the quantity of electricity generated from renewable sources will likely discourage their use. In addition, requiring these data seems contrary to the purpose of the proposed rule. The NPRM seeks reporting of greenhouse gases; yet renewable sources for electricity do not generate anthropogenic greenhouse gases. The collection of these data are opposed by RMA.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5. Portable equipment and emergency generators are not required to report combustion emissions.

Commenter Name: Michael Carlson
Commenter Affiliation: MEC Environnemental Consulting
Document Control Number: EPA-HQ-OAR-2008-0508-0615
Comment Excerpt Number: 7

Comment: We see little to no benefit of collecting the quantity of electricity generated on-site (16472) given the GHG emissions reporting required under proposed Subpart D.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

Commenter Name: Jeffrey L. Clark
Commenter Affiliation: Environmental Coordinator, Teck Alaska Incorporated
Document Control Number: EPA-HQ-OAR-2008-0508-0142
Comment Excerpt Number: 8

Comment: I also have a reservation on the reporting of the quantity of electricity produced as that number is not a GHG emission. How would the EPA use this number if part of a facilities electrical production was from both fossil fuel and from wind or solar power?

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

Commenter Name: Dan F. Hunter
Commenter Affiliation: ConocoPhillips Company

Document Control Number: EPA-HQ-OAR-2008-0508-0515.1
Comment Excerpt Number: 11

Comment: ConocoPhillips disagrees with reporting total electricity generated onsite. The GHG emissions are already reported under the combustion sources. Reporting electricity generated onsite is an additional unnecessary data collection and reporting burden. ConocoPhillips recommends deleting 98.3(c)(5) from the final rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

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: 5

Comment: EPA should not require the reporting of onsite generated electricity as GHG emissions from this activity will already be reported under other activities.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

Commenter Name: David A. Buff
Commenter Affiliation: Florida Sugar Industry (FSI)
Document Control Number: EPA-HQ-OAR-2008-0508-0500.1
Comment Excerpt Number: 6

Comment: The FSI believes it may be important to account for and report the amount of electricity generated on-site by a facility using renewable, biomass fuels. This reporting may help EPA make future policy decisions (e.g., to identify those operations that are carbon-neutral and therefore not subject to further GHG controls or reductions). In most cases involving cogeneration facilities, the electrical generation is not creating any additional fuel usage, but is only using the fuel in the most efficient manner. As a practical matter, however, the FSI believes sugar mills and other facilities using biomass fuels should be exempt from all reporting requirements because their operations are carbon neutral.

Response: Regarding EPA's final decision on the reporting requirement for electricity generated on-site, see the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5. Regarding the commenter's contention that sugar mills and other facilities using biomass fuels should be exempt from all reporting requirements, emissions from the combustion of biomass are not counted in determining applicability. If required to report because of other processes on site, the facility must report biomass emissions. EPA is not making assessments of carbon neutrality as part of this rule.

Commenter Name: Jeff A. Myrom
Commenter Affiliation: MidAmerican Energy Holdings Company
Document Control Number: EPA-HQ-OAR-2008-0508-0581.1
Comment Excerpt Number: 23

Comment: The proposed rule is intended to be an emissions inventory, not an electrical generation inventory, and thus electric generation should not be reported. Other sources for this information exist, such as data collected by the Energy Information Administration, and should not be redundantly duplicated in a GHG emissions mandatory reporting rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

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: 18

Comment: We agree with this additional requirement to report electricity generated on site, and that these data would be useful to discern the quantity of electricity being generated from renewable and non-renewable sources. It would also be useful in assessing the changes in fuel types and production levels. However, this provision may present confusion for peak-shaving generators located at a facility but whose operation is controlled by a power company. It should be clear regarding who reports the emissions and address the situation in which this peak-shaving generator pushes the facility at which it is located over the reporting threshold.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5. Regarding emissions from peak-shaving units, the rule is clear. If a facility has any ownership interest in the unit or has any role in operating the unit, then emissions are considered part of the facility.

Commenter Name: Jeff A. Myrom
Commenter Affiliation: MidAmerican Energy Holdings Company
Document Control Number: EPA-HQ-OAR-2008-0508-0581.1
Comment Excerpt Number: 22

Comment: Given that this is an emissions inventory, the only need for these data appears to be the independent, rapid verification of reports from electric generating units by EPA. However, the amount of electricity generated on-site is only useful for comparing emissions metrics between like electric generating units, as even then the type of unit (e.g. mass burn, supercritical, etc.), fuels utilized (e.g. nuclear, natural gas, biomass co-firing, coal, etc.), and pollution control technologies (e.g. scrubbers) must be identified to determine outliers via comparison of electric generating units utilizing the same fuel type and technology. This would be an extremely tedious and time consuming task for EPA when all related emissions will already be captured in the annual reports. In conclusion, MidAmerican does not believe that these data are useful to EPA for emissions inventory and policy decisions, and recommends that it not be included in the annual report.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

Commenter Name: Traylor Champion
Commenter Affiliation: Georgia-Pacific, LLC (GP)

Document Control Number: EPA-HQ-OAR-2008-0508-0380.1
Comment Excerpt Number: 9

Comment: GP believes EPA should alter the current proposal for reporting on-site electricity generation to include reporting based on type of generation source (e.g., CHP or condensing) and fuel (e.g., renewable or fossil-based). [FR 16472-16473 (Preamble), FR 16614 – §98.3(c)(5)] EPA's proposal would require the reporting of total electricity generated on-site in kilowatt-hours, but would not require that reporters distinguish the electricity generated by type or fuel. GP recommends requiring further differentiation of self-generated electricity by generating type, such as combined heat and power (CHP, also referred to as "cogeneration") or condensing, as well as by fuel source, such as renewable-based and/or fossil-based using commonly accepted best practices in the industry. CHP systems are inherently more efficient than processes that generate electricity via condensing turbines. This efficiency benefit results in decreased amounts of GHG emissions to the atmosphere during the electricity generation process. EPA, through its voluntary Combined Heat and Power Partnership program, encourages CHP generation for its "efficient, clean, and reliable approach to generating power and thermal energy." [Footnote: EPA's Combined Heat and Power Partnership website: http://www.epa.gov/chp/]. CHP, specifically CHP from renewable fuels, should be recognized in the reporting rule to set the foundation for credits in a future cap-and trade program. State, regional, and/or international reporting and emission trading programs have provisions for reporting of CHP. Within the U.S., California is requiring reporting of cogeneration under its mandatory GHG emissions reporting program and the Western Climate Initiative identifies separate reporting for cogeneration units. Internationally, European countries operating within the European Union Emissions Trading Scheme have implemented specific protocols to give credit to operators of CHP. Germany has recently promoted the doubling of CHP generation by 2020; and the Canadian Province of Alberta is designing CHP recognition, which would benefit Oil Sands operators. Similarly, use of renewable versus fossil fuels in the generation process results in lower amounts of anthropogenic GHG emitted to the atmosphere. The use of biomass to generate renewable electricity is an important mechanism to satisfy potential renewable portfolio standards (RPS) and/or renewable electricity standards (RES). Both the use of CHP and renewable fuels for electricity generation offer reduced GHG emissions and should be captured in the proposed mandatory reporting rule by further specifying on-site electricity generation by generation type and fuel.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5. In addition, EPA determined that reporting data needed to effectively characterize CHP generation would be excessively burdensome in the context of this rule.

Commenter Name: Marcelle Shoop
Commenter Affiliation: Rio Tinto Services, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0636.1
Comment Excerpt Number: 26

Comment: EPA is proposing that all facilities and supply operations affected by this rule would also report the quantity of electricity generated onsite, recognizing that the generation of on site electricity can represent a relatively significant fraction of onsite fuel use. EPA seeks comment on whether this information would be useful to support future dimate policy development, given the other data related to GHG emissions from electricity generation already collected under other sections of this proposed rule. Comment: EPA needs to have a dear and justifiable policy reason

under the CM for collecting this information, particular1y where much of the data may already be collected by other agencies and given that the emissions data associated with such power generation also will be duplicative of emissions data reported under the supplier and emitter provisions.[Footnote: See for example, DOElEIA Fonn-923 - Power Plant Operations Report and Form EIA-860 Annual Electric Generator Report. http://www.eia.doe.gov/cneaf/electricity/2OO8formsiconsolidate.htJnl] Additionally, EPA would need to consider and discuss how it manages the data, both from a confidentiality point of view and how the details concerning co-generation or combined heat and power need to be treated in a reporting context.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

Commenter Name: Robert Rouse
Commenter Affiliation: The Dow Chemical Company
Document Control Number: EPA-HQ-OAR-2008-0508-0533.1
Comment Excerpt Number: 11

Comment: In the preamble to the proposed rule, EPA requested comment on the merits of reporting generated and purchased electricity. Since some facilities generate all or some of their own power while others purchase all of their needs, reporting the amount of electricity used could provide meaningful information when evaluating individual sectors. Such reporting may also provide a basis for any potential allocation of emission allowances relative to power usage.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5. See the preamble section 3(b) for the response to comment on purchased electricity.

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 25

Comment: EPA seeks comment, “on whether [reporting the quantity of electricity generated onsite] would be useful to support future climate policy development, given the other data related to GHG emissions from electricity generation already collected under other sections of this proposed rule.” In specific, EPA seeks comment on “the value of collecting these data; and if it is collected, whether there is a need to separately report the kilowatt-hours by type of generation source.” (p. 16473) BP supports EPA’s decision not to require reporting of electricity generated onsite or electricity generation by fuel type. BP sees very little value in this information and the burdens of tracking and reporting are certainly significant.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

Commenter Name: Kevin Fay
Commenter Affiliation: International Climate Change Partnership (ICCP)
Document Control Number: EPA-HQ-OAR-2008-0508-0490.1
Comment Excerpt Number: 12

Comment: For purposes of simplicity, ICCP supports not having to breakdown generation of onsite electricity by source. Future determinations may need to be made, however, of the size of this category, or whether this information becomes relevant for a future regulatory program such as cap and trade.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

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: 11

Comment: EPA proposes to require facilities with onsite electricity generation to report how much energy was produced. This is in addition to the reporting that would be required for GHG emissions from the generation process. EPA proposes to require reporting from all generators, even renewable, non-GHG emitting generators. This requirement seems unreasonable and out-of-place in a regulation on mandatory reporting of GHGs. EPA should only require facilities emitting GHGs to report, rather than requiring reporting simply based on the type of facility. EPA should not require onsite generators to report their electricity production as part of the regulations on mandatory reporting of GHG. If GHG are emitted as part of the production of electricity, this information should be reported. Conversely, if no GHG is emitted from electricity production, i.e., renewable generation such as wind, solar, or hydroelectric, there should be no burden of reporting the amount of energy produced. Utilities are incentivizing their customers to install renewable generation on the customer's property in an effort to reduce GHG. These customers and other non-emitting entities should not be burdened with the proposed mandatory reporting requirement.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

Commenter Name: Edgar O. Morris
Commenter Affiliation: Mosaic Fertilizer Company LLC
Document Control Number: EPA-HQ-OAR-2008-0508-0687.1
Comment Excerpt Number: 8

Comment: The NPRM also requires reporting of on-site electricity generation. See proposed 40 C.F.R. § 98.3(c)(5). It is important to clarify this requirement to ensure that facilities also report the source of such on-site generation, to enable EPA to understand GHG emissions associated with such generation, including facilities and industries that generate electricity without GHG emissions. For example, normal chemical processes in phosphoric acid production generate heat that can be captured and converted into electricity. Specifically, at Mosaic's sulfuric acid plants the oxidation (combustion) of sulfur involves an exothermic reaction creating energy that Mosaic uses to generate electricity that is both used on-site and may be returned to the grid. EPA's reporting requirements should capture this kind of clean cogeneration information. EPA is seeking comment on whether to require reporting on-site generation by source. See 74 Fed. Reg. at 16,473. Mosaic believes that this information would be useful for EPA to understand fully the GHG impacts of different on-site electricity generation.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

Commenter Name: Sarah B. King
Commenter Affiliation: The DuPont Company
Document Control Number: EPA-HQ-OAR-2008-0508-0604.1
Comment Excerpt Number: 18

Comment: §98.3(c)(5) requires facilities to report all electricity generated on site in KWH. There is no justification for these data for non-electric utility sources. It is not pertinent to CO_2 emissions. This reporting requirement is not even limited to electric generation collectively emitting >25MTe/yr. This could actually require reporting solar panel electricity generation quantity on a site. The requirement for electricity generation quantity should be deleted. If EPA wants that data for electric utility units, they can get it from data already reported, since they have it as part of their eGRID data which is derived from EIA data. This change would significantly reduce the burden on reporting entities and eliminate one source of confidential information issues.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

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: 13

Comment: There is no justification for these data for non-electric utility sources. It is not pertinent to CO_2 emissions. This reporting requirement is not even limited to electric generation collectively emitting >25,000 MT CO_2e /yr. This could actually require reporting solar panel electricity generation quantity on a site. The requirement for electricity generation quantity should be deleted or revised to clarify that only net sales to the grid need be reported by co-generation facilities. If EPA wants that data for electric utility units, it is available from data already reported – it is part of the eGRID data which is derived from EIA data. This change would significantly reduce the burden on reporting entities and eliminate one source of confidential business information issues.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 5.

Commenter Name: See Table 3
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 30

Comment: In addition to reporting GHG emissions from applicable facilities, EPA proposes a long list of additional informational items that would have to be reported by all facilities. EPA contends that the information proposed for reporting is needed to support the analyses of GHG emissions for future policy development and ensure that data are accurate and comparable across source categories: “Besides total facility emissions, it benefits policymakers to understand the specific sources of the emissions and the amounts emitted by each unit/process to effectively interpret the data, and the effect of different processes, fuels, and feedstocks on emissions”. (74

FR 68, page 16472) API comments API does not agree with EPA's contention that this level of reporting would not be overly burdensome since many of these data are already routinely recorded by facilities for business reasons. The information requested is of such a detailed nature - and of such a set format - that would probably not be compatible with what all facilities track and record as part of their day-to-day business operations. Even for data already collected, entities have to organize, format, review and certify internally, prior to reporting to EPA, which would be a major undertaking. In addition, reporting such a large volume of data would probably overwhelm the EPA reviewers and would increase the potential for mishandling of confidential business information.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5. Furthermore, unit level reporting is required only where facility emissions are calculated at the unit level. The impact of unit level reporting was taken into account in the cost burden estimates supporting the rule.

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 20

Comment: Marathon opposes the requirement to report activity data (e.g. fuel use, feedstock inputs) that are used to generate emissions data. No other reporting program, including emissions inventory or TRI, requires reporting of activity data. Therefore there is no precedence for reporting activity information. EPA would significantly reduce the reporting burden by removing this requirement. As required with other programs, records of supplemental activity data will be maintained at the facility for agency review. Marathon proposes that this reporting requirement he removed and that only actual emissions he required to be reported.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 19

Comment: Marathon opposes reporting emissions for individual units. This requirement presents unneeded burden, and it, at times, is extremely difficult to completely segregate emissions by unit. Facilities should be allowed the flexibility to determine the most accurate method of calculating emissions by any combination of individual units. Additionally, there is no benefit from identifying emissions from particular units. Because science shows no health effects from CO 2 in the concentrations at the levels refineries emit, unit level reporting is of no value for modeling. In addition, unit level emissions would not be necessary for emissions trading or other types of policy that is completed and tracked on a facility basis. Marathon proposes that facility level reporting be allowed and that reporting be no more detailed than by source type (for example, all fuel gas combustion, all natural gas combustion, all other fuel combustion, coke on catalyst by facility).

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5. Additionally, existing EPA programs such as the Acid Rain Program, and the NOx Budget Program require detailed reporting of activity data.

Commenter Name: [name not given]
Commenter Affiliation: Graphic Arts Coalition (GAC)
Document Control Number: EPA-HQ-OAR-2008-0508-0701.1
Comment Excerpt Number: 10

Comment: The GAC strongly supports self-implementation. Under current RCRA, TRI and various other EPA statutes, facilities need only maintain supporting documentation and submit final data along with verification. This self-implementing approach should continue to be used. Maintaining supporting documentation downstream eliminates the need for the overseeing agency to maintain this information, particularly that which is confidential, and correctly places the burden upon the facility to do so. There are significant penalties in place for not maintaining appropriate documentation and for non-certification. There is no justification to alter this scheme in any final rulemaking under this Proposed Rule. EPA should follow existing practice, a scheme that is very well known to the regulated community, and require only final emissions data to be submitted. As is the current practice, EPA should require that the supporting data be maintained onsite and made available upon request.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5 and the section in the final rule preamble on emissions verification.

Commenter Name: Marc J. Meteyer
Commenter Affiliation: Compressed Gas Association (CGA)
Document Control Number: EPA-HQ-OAR-2008-0508-0981.1
Comment Excerpt Number: 9

Comment: It is appropriate that the GHG reports require total annual GHG emissions in metric tons of CO_2e aggregated for all source and supply categories by GHG gas. However, EPA should limit the required level of "break down" of the reported information and allow aggregated emissions data and not require reporting of individual units for any source category. The required activity or other data (e.g. fuel use, feedstock inputs) should only include information which is directly necessary to generate the emissions data. Any required quality assurance/control data should also be limited in scope. Limiting the amount of information required in reports will ease the burden of reporting and will also reduce concerns about protection of business confidential information which is often not directly related to GHG emissions data. More specific CGA comments on reporting requirements are provided for each source category addressed later in this document.

Response: Regarding the level of detail required in the annual emission report, see the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5. Additionally, the rule does not require submission of quality control/quality assurance (QA/QC) data in the traditional sense. For example, the rule often requires testing of the composition of feedstocks or testing to develop site-specific emission factors. But the test reports and associated QA/QC tests do not have to be submitted as part of the annual report. As another example, the rule requires periodic calibration of fuel flow meters, but the calibration tests are not reported. Some subparts of the rule may

require the retention of records of these data but the reported data include only that data used to calculate GHG emissions and, where appropriate, a general description of the methods used.

Commenter Name: Jeffry C. Muffat
Commenter Affiliation: 3M Company
Document Control Number: EPA-HQ-OAR-2008-0508-0793.1
Comment Excerpt Number: 6

Comment: The Rule Should Require Reporting of GHG Actual Emissions, But Not Background Data. 3M shares the concerns raised by other commenters that the amount of information required to be reported under the proposed rule is far more excessive than is submitted under other rules. Facilities should be required to report only the actual final emissions of greenhouse gases. This approach would be consistent with the reporting and recordkeeping requirements of another significant reporting regulation, the Toxics Release Inventory (TRI) under 40 CFR Section 372, where EPA only requires that final actual emission data (or ranges) be submitted and certified. EPA provides no explanation in the proposed rule as to why it seeks to deviate from this accepted approach and require the submission of additional background data. EPA should follow its existing practice to require that facilities submit only the actual final GHG emission data. EPA should require that the additional background data be maintained onsite and made available to the agency upon request. Alternatively, EPA could use the process it has used for purposes of other air rules, and not request background data unless and until EPA has possible future rulemakings, as part of the data collection for background information documents. For example, EPA indicates that it will be using emission data to determine whether and how to use Section 111 to establish NSPS. 74 Fed. Reg. 16454. Delaying the request for detailed information would help avoid unnecessary and burdensome reporting. It also would help avoid inadvertent release of highly confidential information.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: See Table 2
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0433.2
Comment Excerpt Number: 1

Comment: NPRA supports the proposed EPA GHG Reporting Rule in facility-level reporting for refineries under Subpart Y and Subpart C. The rule states, however, that unit-level calculations are required, and unit-level reporting of those calculations is required. This means that each furnace/boiler/heater is reported under Subpart C, as are each of the listed refinery process unit types under Subpart Y. The reporting requirements for each unit go much further than this, requiring details on each unit. NPRA believes the proposed rule should only require facility level summary reporting, with all other unit level data not reported (but available for the verification process). The reasons for excluding unit-level reporting include: 1. The level of reporting should match the level of concern. There are no acute or chronic impacts from these GHG “pollutants.” Therefore the level of reporting effort should not be overly complex. 2. NPRA members continue to have concerns regarding Confidential Business Information (CBI). Information on internal units, if disclosed, would have a significant detrimental anti-competitive impact on refiners. Adding this level of detail would spur many reporting facilities to necessarily make more expansive CBI claims, dramatically increasing the EPA’s recordkeeping burden and

possibly limiting access to data by agency contractors. 3. The additional information does not add value. EPA has not proposed to promulgate a carbon emission permitting standard, nor has it indicated it plans to promulgate control technology standards for individual emission sources. In fact, Section 103(g) of the Clean Air Act, cited by EPA in the rule proposal as its authority to request this inventory, specifically precludes use of the data obtained in an inventory under this provision from being used "to authorize the imposition on any person of air pollution control requirements." Legislation currently being considered clearly signals Congress' intent to manage GHG emissions either at the facility or the entity level on the basis that these emissions drive global – not local – climate change concerns. For these reasons GHG emissions should not reported at a granularity below the facility level. 4. Additional information adds significant cost to reporting. A calculation that must be made at a unit level has a much higher cost if it must be reported at a unit level.

Response: Regarding the level of detail required in the annual emissions report, see the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5. Additionally, regarding the comment that there are no acute or chronic impacts from GHGs, EPA provides a discussion of climate change and its potential effects on human health in section I.B. of the preamble to the proposed rule (74 FR 16488, April 10, 2009.) Regarding CBI, refer to the preamble for a summary of comments and responses on CBI.

Regarding the comment on the lack of legal authority to require reporting at the facility level, the commenter's legal assertions are incorrect. First, section 103(g) is only one of various provisions of the CAA that EPA is evaluating and for which EPA is collecting this information. Another section is 111 regarding new source performance standards, which are often set at the process unit level. Second, although section 103(g) of the Clean Air Act states that "Nothing in this subsection shall be construed to authorize the imposition on any person of air pollution control requirements," this language simply states that EPA cannot require control of CO2 or other emissions using section 103(g) as the legal basis. It does not prevent the collection of data for analyzing air pollution control strategies and technologies. If data collected under this rulemaking is eventually used as the basis for emissions control such control would be authorized by specific sections of the Act such as section 111. Note that if new legislation is adopted in the future, then EPA will revise the GHG reporting rule as appropriate to conform to the statutory requirements. For now, the FY08 Omnibus Appropriation that directed the development of this rule, and section 114 of the CAA provide EPA with the flexibility to require reporting at whatever level is needed to inform policy planning for future GHG control programs. See the responses to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20 in the recordkeeping requirements section of this volume and the preamble discussion of general reporting requirements for an explanation of the reporting detail needed.

Commenter Name: Edward N. Saccoccia
Commenter Affiliation: Praxair Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0977.1
Comment Excerpt Number: 25

Comment: EPA should limit amount of detail required Aggregated, facility-wide emissions data should be sufficient for any source category. The required activity or other data (e.g. fuel use, feedstock inputs) should only include information which is directly necessary to generate the emissions data. Any required quality assurance/control data should also be limited in scope. Limiting the amount of information required in reports will ease the burden of reporting and will

also reduce concerns about protection of business confidential information which is often not directly related to GHG emissions data. EPA may want to consider allowing a simple certification of emissions levels when the change from the previous year is less than some established threshold (e.g., 5%).

Response: Regarding the level of detail required in the annual emissions report, see the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5. Regarding the comment that EPA should allow a simplified report if emissions have not significantly changed, see the response to comment EPA-HQ-OAR-2008-0508-0399.1, excerpt 4.

Commenter Name: Christina T. Wisdom
Commenter Affiliation: Texas Chemical Council (TCC)
Document Control Number: EPA-HQ-OAR-2008-0508-0638.1
Comment Excerpt Number: 15

Comment: TCC urges EPA to amend the proposal with regard to the data that will have to be reported under the rule. EPA's proposed requirement that all supporting data also be submitted along with greenhouse gas emissions data so EPA can perform "quality assurance reviews" is inconsistent with other programs such as TRI and Title V. Other EPA and state programs require only that final data be submitted and certified. Requiring that the supporting data also be submitted is extremely burdensome for both the reporting companies and EPA and will also compromise the necessary legal privacy of Confidential Business Information (CBI).8 EPA should follow its existing practice and require only that the final greenhouse gas emission data, and not the supporting data, be submitted. Consistent with other reporting requirements, EPA should also require that the supporting data be maintained onsite and made available to the agency upon request.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5. Also see response to comment EPA-HQ-OAR-2008-0508-0981.1 relating supporting data and data kept as records.

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: 9

Comment: NPCA strongly supports self-implementation. Under current RCRA, TRI and various other EPA statutes, facilities need only maintain supporting documentation and submit final data along with verification. This self-implementing approach should continue to be used. Maintaining supporting documentation downstream eliminates the need for the overseeing agency to maintain this information, particularly that which is confidential, and correctly places the burden upon the facility to do so. There are significant penalties in place for not maintaining appropriate documentation and for non-certification. There is no justification to alter this scheme in any final rulemaking under this Proposed Rule. EPA should follow existing practice, a scheme that is very well known to the regulated community, and require only final emissions data to be submitted. As is the current practice, EPA should require that the supporting data be maintained onsite and made available upon request.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: Keith Adams
Commenter Affiliation: Air Products and Chemicals, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-1142.1
Comment Excerpt Number: 8

Comment: Air Products supports reporting a facility's total annual GH G emissions, in metric tons of CO_2-e, aggregated for all sources and supply categories within the subject facility. However, EPA should limit the required level of "break down" of the reported information and allow aggregated emissions data and not require reporting of individual units for any source category. The required activity or other data (e.g. fuel use, feedstock inputs) should not be required to be reported. While such information is relied upon to generate the emissions data, it is often confidential business information (CBI) for many source categories. The level of non-emission, supporting data required under the proposed rule represents a significant departure from other EPA programs. As is the norm in such programs as Toxic Release Inventory (TRI) or the air emission inventory under 40 CFR §51, Subpart A, EPA and the states require only that the final data be submitted and certified. Facilities are required to maintain all supporting documentation and to make it available to EPA or a state agency upon request. EPA has given no rationale as to why it seeks to abandon this approach and require that all supporting data be submitted so that EPA can perform "quality assurance reviews." Any required quality assurance/control data should be very limited in scope, instead relying on the agency's ability to conduct compliance audits to insure the integrity of the reporting process without compromising the competitive position of our businesses. While the agency has provisions for handling CBI, these provisions are burdensome to both the regulated community and the EPA, increasing the cost of compliance for the entire program. Limiting the amount of information required in reports will also ease the burden of reporting.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

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: 10

Comment: Requiring unit-level calculations/reporting will create a significant burden on covered facilities. EPA should only require facility-level summary reporting, with all other unit-level data not reported. Unit-level data would be available for verification purposes. Generally speaking, the level of reporting should match the level of concern. Because there are no acute or chronic impacts from GHGs, the level of reporting effort should not be overly complex. In addition, reporting at the unit-level raises significant CBI concerns.

Response: Regarding the level of detail required in the annual emissions report, see the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5. Regarding the comment that there are no acute or chronic impacts from GHGs, EPA provides a discussion of climate change and its potential effects on human health in section I.B. of the preamble to the proposed rule (74 FR 16488, April 10, 2009.)

Commenter Name: Laurie A. Lehmberg
Commenter Affiliation: Texas Instruments Incorporated (TI)
Document Control Number: EPA-HQ-OAR-2008-0508-0682.1
Comment Excerpt Number: 11

Comment: EPA should only require facility-level summary reporting, with all other tool-level data not reported. Tool-level data would be available for verification purposes. Generally speaking, the level of reporting should match the level of concern. Because there are no acute or chronic impacts from GHGs, the level of reporting effort should not be overly complex. In addition. reporting at the tool-level raises significant CBI concerns.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: Curt DeMille
Commenter Affiliation: Titanium Dioxide Stewardship Council (TDSC)
Document Control Number: EPA-HQ-OAR-2008-0508-0486.1
Comment Excerpt Number: 4

Comment: In the preamble to the Rule, EPA states: [T]he proposed rule would require the reporter to submit certain unit-level data for the stationary combustion units at each affected facility. This additional information would require reporting of the unit type, its maximum rated heat input, the type of fuel combusted in the unit during the report year, the methodology used to calculate CO_2 emissions for each type of fuel combusted, and the total annual GHG emissions from the unit. This would require that an enormous amount of information be retained and reported. Much of the reporting information required is CBI and EPA should require that only the annual GHG emission data be reported. The remainder of the information should be maintained onsite or offsite, and made available to EPA upon request.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

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: 10

Comment: In addition to reporting CO_2e emissions, the proposed rule, depending on the particular source category, mandates varying degrees of other information be reported. For example, the Petrochemical Production subcategory mandates significant production related data be reported, much if not most of which would be considered confidential business information. The WVMA members are concerned that the collection of this level of detail is excessive for the types of pollutants in a rule for reporting only. The WVMA requests that collection of information other than actual GHG emissions be kept to an absolute minimum.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: William C. Herz
Commenter Affiliation: The Fertilizer Institute (TFI)
Document Control Number: EPA-HQ-OAR-2008-0508-0952.1
Comment Excerpt Number: 60

Comment: As presently drafted, the NPRM would require facilities to include activity data in each annual report, in addition to actual emissions and calculations. By increasing the amount of public information required in the annual report, EPA increases the likelihood of frivolous citizen suits. EPA states in the Preamble to the NPRM that the rule does not include third-party verification systems to avoid increased expenses. This low-cost approach will be undone if activity data are included, because citizens suits will ultimately amount to an even more costly version of third-party verification. Additionally, by requiring reporting of activity data, the NPRM potentially increases the complexity and cost of SEC reporting, and the risk of disclosure of confidential business information. EPA should revise the NPRM to allow facilities to maintain records of activity data in case of inspection, but not require inclusion of activity data in the annual report.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: Dan F. Hunter
Commenter Affiliation: ConocoPhillips Company
Document Control Number: EPA-HQ-OAR-2008-0508-0515.1
Comment Excerpt Number: 13

Comment: We strongly encourage EPA to require submission of only annual emission data for sources (versus daily data). Companies will be required to maintain daily emission records as part of the recordkeeping requirements and EPA would have the option to review the daily data maintained at the facilities.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: Robert Rouse
Commenter Affiliation: The Dow Chemical Company
Document Control Number: EPA-HQ-OAR-2008-0508-0533.1
Comment Excerpt Number: 6

Comment: It is recommended that EPA review the list of information required for submission in the report and only require the information that would be useful in setting future policy decisions. EPA should also clarify how each piece of requested information will or could be used to inform future policy. Information such as calculation methods, instrument calibrations, and analytical results should be retained by the facilities and made available to EPA and the States upon request.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5. Each piece of additional information reported that is not directly used in a calculation is intended for use in verification.

Commenter Name: Christina T. Wisdom
Commenter Affiliation: Texas Chemical Council (TCC)
Document Control Number: EPA-HQ-OAR-2008-0508-0638.1
Comment Excerpt Number: 13

Comment: TCC respectfully requests that EPA modify the proposed reporting and recordkeeping requirements to make them less onerous. Again, given the vast number of Texas businesses that will have to comply with this rule and the accompanying reporting mechanisms for the first time, the reporting and recordkeeping requirements outlined in the proposal are overly burdensome and unnecessarily detailed. First, TCC prefers the reporting and recordkeeping model which is currently in place for the Texas EI and urges EPA to take a more simplified approach in this regard.[Footnote: 6 30 TAC § 101.10.]For those companies already reporting emissions to the TCEQ, such as chemical manufacturing plants, it will be easier for those companies to more readily comply with the mandatory greenhouse gas reporting rule once it is finalized, and we feel strongly that under this approach, the quality of data reported and retained will not be compromised.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: Stephen B. Kemp
Commenter Affiliation: Occidental Chemical Corporation (OCC)
Document Control Number: EPA-HQ-OAR-2008-0508-0644.1
Comment Excerpt Number: 4

Comment: Eliminate the proposed requirement to submit backup information associated with emissions estimates. The submission of massive quantities of emissions calculations is unduly burdensome on regulated entities, cannot possibly be subjected to a meaningful review by EPA, and would provide absolutely no benefit to the environment or the program. Many air quality programs allow regulated entities to retain emissions calculations on-site for agency review, and such an approach for GHG reporting would also be appropriate.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: See Table 2
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0433.1
Comment Excerpt Number: 4

Comment: Supports the proposed EPA GHG Reporting Rule in facility-level reporting for refineries under Subpart Y and Subpart C. NPRA believes the proposed rule should only require facility level summary reporting, with all other unit level data not reported (but available for the verification process).

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: Linda Farrington
Commenter Affiliation: Eli Lilly and Company (Lilly)

Document Control Number: EPA-HQ-OAR-2008-0508-0680.1
Comment Excerpt Number: 4

Comment: Lilly does have concerns with the large volume of information that is to be included in the electronic reporting format. We believe that a portion of the supporting data should be stored at the facility and made available to the EPA upon request. Specifically, the daily continuous emission monitoring system (CEMS) data, CEMS quarterly audit results, CEMS RATA results, and instrumentation calibration results should be retained onsite rather than be included in the electronic reporting format.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5.

Commenter Name: Renae Schmidt
Commenter Affiliation: CITGO Petroleum Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0726.1
Comment Excerpt Number: 6

Comment: CTIGO believes the record keeping requirements serve as the core documentation of this program and are subject to the verification process. CITGO believes that report information should focus on core facility information and GHG emissions. This would allow simplification and workability of any reporting system but insures that adequate documentation is available should compliance or management obligations be applied to these emissions.

Response: Regarding the level of detail required in the annual emission report, see the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5. Also, see the preamble for the response on the general recordkeeping requirements.

Commenter Name: Laurie Burt
Commenter Affiliation: Massachusetts Department of Environmental Protection
Document Control Number: EPA-HQ-OAR-2008-0508-0453.1
Comment Excerpt Number: 33

Comment: 98.3(c)(1): Massachusetts suggests that EPA add latitude and longitude measurements to the mandatory facility information.

Response: EPA has concluded that latitude and longitude of facilities will not be required as part of reporting for this rule. Latitude and longitude are generally used for dispersion modeling. Because GHG impacts are global in scope, there is no need for dispersion modeling.

Commenter Name: Thomas Siegrist
Commenter Affiliation: Koch Nitrogen Company LLC
Document Control Number: EPA-HQ-OAR-2008-0508-0351.1
Comment Excerpt Number: 26

Comment: The Proposed Rule would require individual facilities to report the total pounds of synthetic fertilizer produced each year, along with the total nitrogen contained in that fertilizer. Id. at 16614 (proposed § 98.3(c)(6)). According to the Preamble, this information would be used to estimate N_2O emissions from agricultural soils. Id. at 16467. As EPA acknowledges in this section of the Preamble, however, N_2O emissions from agricultural soils are highly dependent upon land management practices of individual users. Indeed, attempting to estimate such emissions without consideration of regional agricultural practices, imported fertilizer volumes (which account for approximately 55 percent of fertilizer used in the United States), manure application, and specific crop planting and uptake information, will inevitably fail to derive any useful estimate of N_2O emissions from agricultural land. Given these limitations in the proposed N_2O emissions estimate methodology, EPA should not require reporting of synthetic fertilizer production levels in the final rule.

Response: Because there are multiple pathways through which fertilizer production, use, and fate emit GHGs, EPA needs production levels to estimate the net effect. Below are summarized the different points of GHG generation: 1) Production of Ammonia: The Haber Process produces ammonia by reacting methane, water and air under high temperature and pressure. The net effect of this reaction is to take "sequestered" methane gas, transform it into carbon dioxide (CO_2) and release that CO_2 into the atmosphere (while some of the CO_2 may be reacted with the ammonia to produce urea, that also is quickly released upon application.) The energy required to produce the high heat and pressure result in additional GHG emissions mostly CO_2 and nitrous oxide (Some of the CO_2 may be incorporated at the facility into urea, however that also is quickly released upon application.) 2) Production of Ammonium Nitrate: The production of nitrate for AN requires the oxidation of ammonia, some oxidation will be incomplete and emit nitrous oxide. 3) Fertilizer Application and Fate: Applying fertilizer releases ammonia and AN into the environment where the ammonia, ammonium and nitrate undergo serial oxidation and reduction reactions, passing through nitrous oxide as an intermediate product. Depending on conditions this intermediate product is sometimes released to the atmosphere. Each of these pathways contribute to GHG emissions, the first two alone are estimate to contribute as much as 4 lbs of CO_2 equivalent for every pound of ammonia and AN produced. Without knowing how much is produced the EPA can not estimate the GHG production emissions. We agree that estimating the national and global releases of nitrous oxide from fertilizer use is uncertain because it is dependant on conditions in the immediate environment. This is no different from many emission estimates the EPA routinely quantifies. The EPA intends to be transparent in both methodology and uncertainty characterization to compensate for this common limitation.

Commenter Name: Roni Neff
Commenter Affiliation: Johns Hopkins University Bloomberg School of Public Health
Document Control Number: EPA-HQ-OAR-2008-0508-0595
Comment Excerpt Number: 10

Comment: EPA should also collect sales data or other information to enable some modeling about where fertilizers are used.

Response: The rule requires facilities that produce synthetic nitrogen-based fertilizers to report information on the amount and nitrogen content of fertilizers they manufacture. EPA plans to use these data to improve its understanding of N_2O sources such as agricultural soils. EPA has not required facilities to report fertilizer sales or other data on the location of fertilizer use. EPA has determined that reporting location data are not needed at this time to support these analyses.

Commenter Name: Jeff A. Myrom
Commenter Affiliation: MidAmerican Energy Holdings Company
Document Control Number: EPA-HQ-OAR-2008-0508-0581.1
Comment Excerpt Number: 62

Comment: MidAmerican submits that the reporting of total pounds of synthetic fertilizer produced at the facility and total nitrogen content contained in that fertilizer is so specific to a certain industry that it should not be included as a blanket reporting requirement for all facilities.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0212f, excerpt 1.

Commenter Name: William C. Herz
Commenter Affiliation: The Fertilizer Institute (TFI)
Document Control Number: EPA-HQ-OAR-2008-0508-0952.1
Comment Excerpt Number: 3

Comment: The requirement in the NPRM to collect information on the nitrogen in produced fertilizers (74 Fed. Reg. at 16,467) will not provide accurate results regarding the release of GHGs from fertilizer application for agricultural sources because it fails to include imported fertilizers, which represent more than one-half the nitrogen fertilizer used in the United States, as noted above. Additionally, such an approach fails because it does not address manure or biosolids application as a fertilizer, both of which release considerably more N_2O per unit nitrogen than commercial fertilizers. In the case of manure, methane, a listed GHG, may also be released. Further, nitrogen content of fertilizer products shipped from manufacturing facilities are not correlated to the nitrogen content of field-applied fertilizers, as the latter are typically blended into lower nitrogen content products. The reporting of nitrogen content in fertilizers may also lead to double counting of the representative tonnage. For example, if one ton of anhydrous ammonia (82 percent nitrogen) is initially reported, then sold, the purchaser may make three tons of aqueous ammonia (typically 10-30 percent ammonia) from this single ton of anhydrous ammonia. If that product is sold, six or eight additional tons of blended N-P-K fertilizer may be produced from this single, original ton of anhydrous ammonia. Therefore, this original ton of anhydrous ammonia could be counted up to as many as 12 to 15 tons of nitrogen fertilizer. This would lead to confusion in compilation, modeling and estimation of any trends related to N_2O evolution from fields. The NPRM also does not take into account soil best management practices, which peer reviewed research indicates can dramatically reduce N_2O emissions. [See DCN: EPA-HQ-OAR-2008-0508-0952.1 for document titled Fertilizer Nitrogen BMPs to Limit Losses that Contribute to Global Warming, International Plant Nutrition Institute (IPNI) 2008 publication.] In this regard, TFI and the International Plant Nutrition Institute (IPNI) are advancing the "4R stewardship system" as an environmental management platform based on agronomic science that involves using the right nutrient source at the right time, right rate and in the right place. The system has been endorsed by the Association of American Plant Food Control Officials; specific provinces in Canada; the International Fertilizer Industry Association; Certified Crop Advisors; and others. This system has also received Land Grant university support. Several Canadian provinces have embraced the 4R system as a viable, voluntary system to pay farmers on a per acre basis to implement N_2O emissions reductions. Importantly, the NPRM's failure to account for imported fertilizers and biosolids application is only part of the reason reporting on nitrogen content of fertilizers fails as a meaningful surrogate for agriculture source emissions. An accurate accounting of nitrogen content must consider not only imported

nitrogen fertilizers, but must exclude nitrogen fertilizers produced in the United States and exported elsewhere. Statistics on importing and exporting alone would be insufficient to provide accurate and meaningful information, as even those numbers would not account for nitrogen incorporated into industrial processes or products (and then potentially exported), and not used for agricultural purposes. The table below provides information regarding the enormous impact both imports and exports have on a final accounting of nitrogen content in fertilizers and its connection to accurate GHG reporting. [See DCN: EPA-HQ-OAR-2008-0508-0952.1 for table showing Diammonium Phosphate (DAP) and Monoammonium Phosphate (MAP) Exports (Short Ton Material).] The NPRM's requirement to report on the nitrogen content of produced fertilizers would generate no meaningful information on GHG emissions, as it fails to consider imported fertilizers, biosolid fertilizers, blending of field-applied fertilizers and soil management practices. The NPRM also fails to consider the many other uses to which commercial fertilizer products are used, and the ways in which they are blended and re-sold, outside of agriculture. Indeed, the NPRM provides no definition of "fertilizer." As such, this reporting requirement fails its stated purpose of acting as a representative surrogate for GHG emissions from agricultural sources, and therefore should be deleted from the NPRM. The EPA Greenhouse Gas Inventory utilizes the DAYCENT model to estimate GHGs from production agriculture; EPA should continue to use this far more sophisticated (and reliable) method for this purpose.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0212f, excerpt 1.

Commenter Name: Jennifer Reed-Harry
Commenter Affiliation: PennAg Industries Association
Document Control Number: EPA-HQ-OAR-2008-0508-0948.1
Comment Excerpt Number: 4

Comment: The requirement in the NPRM to collect information on the nitrogen in produced fertilizers (74 Fed. Reg. at 16,467) will not provide accurate results regarding the release of GHGs from fertilizer application for agricultural sources because it fails to include imported fertilizers. Further, nitrogen content of fertilizer products shipped from manufacturing facilities are not correlated to the nitrogen content of field-applied fertilizers, as the latter are typically blended at lower nitrogen content from a variety of nitrogen-containing inputs.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0212f, excerpt 1.

Commenter Name: Doug MacTaggart
Commenter Affiliation: C-Lock Technology, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0502.1
Comment Excerpt Number: 3

Comment: With respect to fertilizer reporting as it affects N_2O estimates, while we favor wider availability of fertilizer composition data (although this is already available to a large extent in state-level fertilizer reporting), we are skeptical that this will improve regional estimates of soil-derived N_2O. Even at the inventory level, estimation of soil N_2O emissions requires the intersection of data on typical N or manure application rates, landscape data (frequency of saturated soils on croplands), and crop management patterns. Without such modulators, the uncritical application of Intergovernmental Panel on Climate Change (IPCC) emission factors

has been demonstrated to significantly over-estimate annual N_2O emissions in many regions, compared to more complex models.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0212f, excerpt 1.

Commenter Name: William C. Herz
Commenter Affiliation: The Fertilizer Institute (TFI)
Document Control Number: EPA-HQ-OAR-2008-0508-0952.1
Comment Excerpt Number: 2

Comment: If data collected are to support comprehensive review of future policy options for regulating GHG emissions, then some mechanism must be included to capture the estimated GHG emissions associated with the manufacture of imported products. Imported fertilizer products represent more than 50 percent of the nitrogen fertilizer used in the United States. TFI has long advocated a level playing field for any future national GHG emissions reduction policy, and the absence of accurate data on imported products negates meaningful discussion of policy options. Reduction of GHG emissions via elimination of domestic manufacturing is detrimental to the U.S. economy and does not accomplish meaningful GHG emissions reductions. EPA has acknowledged the importance of accounting for releases to the environment in connection with imports in other environmental statutory data collection and reporting schemes. For example, under the Toxic Substances Control Act, EPA requires importers to certify compliance with U.S. regulatory standards and account for chemical imports. See 15 U.S.C. §§ 2607 and 2612; 40 C.F.R. § 707.20. Additionally, under Section 313 of the Emergency Planning and Community and Right-to-Know Act, facilities must report releases and waste management activities in connection with the toxic release inventory, including releases and waste management activities associated with imports. See 42 U.S.C. § 11001 et seq.; 40 C.F.R. Part 350. Consistent with its approach in these other statutory schemes, and to promote meaningful collection of GHG emissions data without unnecessary adverse impacts to the national economy, EPA should include data estimation and reporting requirements for importers of all products produced by specific source categories.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0212f, excerpt 1. EPA's approach regarding reporting of nitrogen in fertilizer was to collect information without adding to the number of reporters covered by the rule. Regarding the collection of information related to nitrogen-based fertilizers from sources already reporting under the rule, this data will help EPA evaluate the use of fertilizers as a source of N2O emissions. Such information will also inform potential upstream emissions analysis undertaken for fuels under section 211. EPA may subsequently gather additional information to hone its analysis, but EPA believes that this information, from sources such as ammonia and nitric acid manufacturing, will provide a good foundation for further evaluation of this source of GHG emissions.

Commenter Name: Edgar O. Morris
Commenter Affiliation: Mosaic Fertilizer Company LLC
Document Control Number: EPA-HQ-OAR-2008-0508-0687.1
Comment Excerpt Number: 1

Comment: EPA has invited comment on how and whether to apply GHG reporting rules to enable it to estimate the broad range of nitrous oxide (N_2O) emissions from agricultural soils.

See 74 Fed. Reg. at 16,467. EPA specifically invites comment on requiring importers to comply with GHG reporting requirements in order to develop a better understanding of the source of N_2O from fertilizer use. Mosaic believes that, in order fully to consider N_2O emissions from agricultural sources, the Agency must collect information regarding all sources of nitrogen that are applied agriculturally. At least forty-two percent of the U.S. supply of ammonia is imported (as of 2006), and imported ammonia is used downstream in agricultural applications in the same manner as domestically produced ammonia. See Wen-yuan Huang, Impact of Rising Natural Gas Prices on U.S. Ammonia Supply, A Report from the Economic Research Service, USDA WRS-0702, at 9 (Aug. 2007), available at http://www.ers.usda.gov/publications/WRS0702/wrs0702.pdf Furthermore, other sources of nitrogen applied agriculturally that may result in N_2O emissions include locally produced, processed and applied manure as well as bio-solids.[Footnote: Although the proposal would require GHG reporting of Manure Management Systems, see proposed 40 C.F.R. § 98.360, it is our understanding that this subsection applies only to the management of manure from livestock farms. The NPRM does not appear to apply to the application of manure to agricultural fields, which may emit N_2O. See 74 Fed. Reg. at 16,466.] Plainly, if EPA does not require reporting of nitrogen in imported ammonia and these other materials, the Agency will be missing a substantial portion of all nitrogen sources applied agriculturally, and will have difficulty estimating N_2O emissions in the United States. Collecting information only from domestic ammonia manufacturing while excluding these other sources would not appear to further EPA's goals and would cause misleading results. Accordingly, if EPA chooses to gather nitrogen data it should do so from all relevant sources. Only this kind of inclusive approach can provide the full picture of the totality of N_2O emissions associated with agricultural uses. Such an inclusive approach, especially for importers, is also consistent with EPA's approach in other data-gathering programs and in this NPRM for other imported materials that contribute to GHG emissions in the United States. For example, the Toxic Substances Control Act ("TSCA"), 15 U.S.C. §§ 2601-2692, imposes regulatory reporting requirements on importers of TSCA regulated substances. See 15 U.S.C. § 2612. The NPRM itself applies to importers of petroleum products, see proposed 40 C.F.R. § 98.390, see also 74 Fed. Reg. at 16,569-16,570, importers of liquefied natural gas, see proposed 40 C.F.R. § 98.230(f), and importers of coal, see 74 Fed. Reg. at 16,564, in order to achieve the very same objective of capturing the source of GHGs that would be emitted upon use of these products in the United States. Finally, in order for EPA to determine the amount of nitrogen in fertilizer (and ammonia) that is applied agriculturally in the United States and thus that could potentially be emitted as N_2O (depending on agricultural practices and conditions), EPA should also subtract the amount of fertilizer that is exported from the United States and ammonia that is exported or consumed in other industrial uses that do not result in N_2O emissions. For example, exports of nitrogen (in the form of monoammonium phosphate, or MAP, and diammonium phosphate, or DAP) were approximately 1.05 million tons in 2007 and 975,000 tons in 2008. See The Fertilizer Institute, US. Phosphate Materials Exports Report, April 2009. In other words, EPA should ensure that it has all of the relevant information to determine the amounts consumed agriculturally in the United States, meaning domestic production plus imports minus exports minus consumption in non-emitting uses. The rule should not require submission of part of this activity information (for example, domestic production), while ignoring other parts such as imports and exports.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0212f, excerpt 1 and the response to comment EPA-HQ-OAR-2008-0508-0952.1, excerpt 2.

Commenter Name: Roni Neff
Commenter Affiliation: Johns Hopkins University Bloomberg School of Public Health
Document Control Number: EPA-HQ-OAR-2008-0508-0595
Comment Excerpt Number: 9

Comment: We are hopeful that when EPA makes fertilizer data available to the public and researchers, that it also provides tools to calculate the sorts of proxy estimates EPA is suggesting.

Response: EPA plans to make all data that are not designated as confidential business information available to the public. However, it is impractical for EPA to publish all models that could be used to estimate the environmental impacts of GHG-related releases.

Commenter Name: Linda Farrington
Commenter Affiliation: Eli Lilly and Company (Lilly)
Document Control Number: EPA-HQ-OAR-2008-0508-0680.1
Comment Excerpt Number: 6

Comment: The language in §98.3(c)(6) requires facilities to report the total pounds of synthetic fertilizer produced at the facility and the total nitrogen content contained in that fertilizer, yet the EPA provides no rationale for requiring this additional information. As with the reporting of electricity generated onsite, Lilly believes the requirement to report fertilizer production is not consistent with the primary objective of this rulemaking: mandatory reporting of GHG emissions. Historically, Lilly has successfully implemented environmentally beneficial projects to recycle, reuse, or otherwise treat wastes from our pharmaceutical manufacturing processes. It is unclear whether or not some of these waste streams would be considered "synthetic fertilizer" and therefore subject to the reporting requirement in §98.3(c)(6). Three examples are provided below. a. Watery waste streams from a fermentation processes are applied directly to farmland as a biological fertilizer supplement in accordance with a Non-Site Specific Industrial Waste Products Land Application Permit issued by the State of Indiana. b. A pharmaceutical manufacturing process generates a waste stream that is transferred to another company to be used as a raw material in a fertilizer manufacturing process. c. A nutrient rich waste stream is mixed with coal fly ash to produce a soil amendment used for soil pH adjustment. This material is distributed to farmers and commercial compost operators in accordance with an Industrial Waste Product Marketing and Distribution Permit issued by the State of Indiana. The requirement to report quantity and nitrogen content of fertilizer produced may discourage companies from seeking environmentally beneficial options for the reuse or reclamation of waste streams like those described above. Lilly encourages the EPA to withdraw this particular reporting requirement, or at a minimum, provide a clear definition of the term "synthetic fertilizer" that excludes industrial waste products.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0212f, excerpt 1.

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2. ABBREVIATED EMISSION REPORT

Commenter Name: Rich Raiders
Commenter Affiliation: Arkema Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0511.1
Comment Excerpt Number: 20

Comment: EPA has recognized, in several regulatory programs, such as the MACT standards at 40 CFR 63, that existing facilities need significant amounts of time to adapt to and implement new regulatory initiatives. EPA understands that many new programs require facilities to identify, design, procure, install, and operate new equipment, new technologies, and establish new operating procedures to comply with the substantive requirements plus the monitoring, recordkeeping, and reporting systems required by the newly promulgated standards. EPA traditionally allows three years for compliance in the MACT program, and allowed significantly longer compliance periods for Resource Conservation and Recovery Act ("RCRA") hazardous waste treatment, storage, and disposal ("TSD") industry obligations. EPA should structure the reporting system where a facility has three years to develop and implement a full reporting system, including compliance with all of the parametric monitoring systems, recordkeeping requirements, and reporting obligations in proposed Part 98. We understand that the current international obligations of parties implementing the Kyoto Protocol end in 2013. The United States, having not ratified the Kyoto Protocol, will not have any new obligations beyond the UN Framework Convention on Climate Change reporting that EPA already completes annually based on macroeconomic modeling and measurements. Therefore this rule should allow a phased-in reporting system over three years, consistent with domestic needs, while allowing continued US reporting under the UNFCCC. In Section 17 below, we estimate that, to implement the current proposal, we would need to install hundreds of instruments, meters, and chromatographs at Arkema affected facilities. Based on the available data that could be gathered in time to report a cost estimate by the comment period end date, an implementation capital cost range from $25 to $30 million was developed, with at least a two years implementation timing. Many of the instruments that would be required can only be purchased with order to deliver lead times of between three and six months, provided that the other reporters complying with this regulation have not already ordered so many similar instruments that the manufacturers would need to extend order lead times beyond normal expectations. Companies will not authorize purchases of monitoring, recording, and reporting equipment until EPA promulgates a final regulation. Including the required engineering time, design efforts, procurement, and installation, major instrumentation projects often will only be developed and implemented over the course of two to three years. We offer several suggestions to streamline the instrumentation requirements below in comments addressing each specific subpart potentially impacting Arkema. Arkema appreciates the EPA intent of establishing baseline reporting for the 2010 reporting year. In proposed 98.3(d), EPA identified a need to justify an "abbreviated emissions report" for facilities reporting calendar year 2010 GHG emissions. EPA should extend this abbreviated reporting protocol through reporting year 2012. Reporters will not be ready to report in 2010, 2011, or 2012 GHG supplies or emissions using the full protocols identified in the proposal. Instead of not requiring any GHG reporting until calendar year 2013, EPA should use the abbreviated emission report concept to allow reporters to provide the best information available, using existing infrastructure. This time period would allow facilities to assess any applicable requirement changes and to amend any permits as needed. Some substantive requirements in this proposal overlap with many Clean Air Act requirements, and some RCRA and Clean Water Act obligations. In some cases, Arkema may be required to adjust construction and/or operating permits to address several potential regulatory overlaps with all three media regulatory programs. Such evaluations would not commence until after EPA promulgates a final GHG reporting rule. The standard three-year EPA implementation period is appropriate for a GHG reporting rule proposal modified to account for existing CAA infrastructure, technological and business practice realities, and suggested modifications described elsewhere in this comment.

Response: The abbreviated report specified under 40 CFR 98.3(d) would apply only to those facilities that are subject to 40 CFR 98.2(a)(3) and not to those facilities with source categories listed in 40 CFR 98.2 (a)(1) or (2). The provision for abbreviated reporting requirements has been included in the rule because there are potentially many facilities that are not in the listed industries, but are required to report solely due to stationary combustion sources at their facility. These include numerous and diverse sources in a wide variety of industries, some of which may not be as familiar with GHG monitoring and reporting. Such sources may often need more time to determine if they are above the threshold and subject to the rule and, if they are, to implement the full monitoring and reporting systems required. EPA has concluded that the provisions for an abbreviated report are not necessary for the listed source categories in the rule.

To provide more flexibility in the rule for all facilities subject to the rule, EPA has included provisions to allow for the use of best available monitoring methods for the first quarter of calendar year 2010. For the time period of January 1 through March 31, 2010, the rule allows use of best available monitoring methods for parameters that cannot reasonably be measured according to the monitoring and QA/QC requirements of the relevant subpart. Additionally, facilities that cannot acquire, install, and operate a required piece of monitoring equipment by April 1, 2010 may submit a request to EPA for an extension of their use of best available monitoring methods. EPA may approve such requests for a set time period, but will not approve the use of best available methods beyond December 31, 2010. EPA has concluded that the time period allowed under this schedule will allow facilities that do not currently have the required monitoring systems sufficient time to begin implementing the monitoring methods required by the rule. Refer to the preamble section on comments and responses on initial reporting year and best available monitoring methods.

Regarding the argument that EPA should allow a 3-year compliance period and extend the abbreviated report allowance through 2012, EPA would like to clarify that 40 CFR 98 is a reporting rule that requires the installation of monitoring devices, not emission control devices. EPA has traditionally allowed longer compliance periods for rules such as the MACT and RCRA programs that require the design and installation of emission control devices that require significant lead time. Allowing a 3-year compliance period, or an abbreviated report for 3 years is unnecessary and would not serve the purposes of the rule to provide good quality data using consistent protocols. Also, contrary to the commenter's assertion, compliance to the rule does not require facilities to obtain construction or operating permits at this time.

Regarding the schedule and cost of implementation of the rule for fluorinated GHG production facilities, 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 the cost of complying with this subpart at this time.

Regarding international obligations for reporting national level emissions, the US has a significant annual reporting obligation as a Party to the UNFCCC that is comparable to the obligation of Parties to the Kyoto Protocol. While not the main purpose of this rule, the data collected will lead to improvements in the quality of national reporting.

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

Comment Excerpt Number: 14

Comment: The Abbreviated Emission Report Option Should Be Available for All Sites For the Year 2010. Dow comments that EPA should consider allowing all entities to use the abbreviated emissions report. The proposed rule excludes facilities that are listed or covered by Sections 98.2(a)(1) and (a)(2) of this rule. Dow comments that the abbreviated emissions report (as outlined in Section 98.3(d)) of the proposed rule requires the reporting of all GHG emissions from stationary fuel combustion units, and that this level of detail would still provide meaningful GHG emissions data for EPA to review and use for policy purposes. Allowing the use of the abbreviated emissions report would allow regulated entities an additional year to fully implement the requirements of this rule for all sources of GHG emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0511.1, excerpt 20.

Commenter Name: Filipa Rio
Commenter Affiliation: Alliance of Automobile Manufacturers (Alliance)
Document Control Number: EPA-HQ-OAR-2008-0508-0630.1
Comment Excerpt Number: 25

Comment: EPA is allowing submittal of an abbreviated CY 2010 emission report for stationary fuel combustion sources with abbreviated monitoring requirements. These facilities will be required to submit a full GHG emissions report for each calendar year thereafter. At a minimum, the Alliance supports this proposal, but also suggests that EPA expand the abbreviated reporting to also abbreviate the monitoring requirements in a facility's first two reporting years. A facility may not be able to comply with monitoring requirements retroactively if reporting applicability cannot be determined until actual emissions are estimated at the end of the year. A second year of abbreviated monitoring is suggested as annual data often is not finalized until the following February or March. Thus, the first few months of a second reporting year may not be captured in terms of having monitoring procedures and equipment in place. Monitoring requirements will be particularly problematic for facilities that are not initially subject to the program, but due to changes which increase emissions will be subject in a subsequent calendar year. The Alliance recommends that monitoring requirements also be abbreviated the first two years of reporting to eliminate this potential non-compliance issue.

Response: EPA has determined that the one-year allowance for an abbreviated emissions report provided under 40 CFR 98.3(d) will be adequate. See the response to comment EPA-HQ-OAR-2008-0508-0511.1, excerpt 20 for further discussion of EPA's rationale for including a provision for an abbreviated emissions report. Regarding the issue of facilities requiring a full year to determine applicability to the rule, facilities can determine applicability before the first year of reporting starts. For further discussion, see the response to comment EPA-HQ-OAR-2008-0508-0439.1, excerpt 6 in the comment response document on Subpart A: Applicability and Reporting Schedule. As discussed, if there is uncertainty as to applicability in 2010, then a facility must monitor emissions in 2010 according to the rule to make this determination. Therefore, if reporting is required in 2011 and beyond, the necessary equipment will be in place and an abbreviated emission report is not needed. Regarding facilities not initially subject to the rule that have increased emissions in future years due to process changes, these facilities will not require an additional year to determine applicability of the rule. As part of the corporate planning process for the significant change, the facility would be evaluating the impact of the change on emissions in advance of implementing the change. Therefore, the facility would be aware of the

need to comply with the rule in sufficient time to acquire and install the necessary monitoring equipment by startup.

Commenter Name: Mike Aire
Commenter Affiliation: Newmont Mining Corporation (NMC)
Document Control Number: EPA-HQ-OAR-2008-0508-0378.1
Comment Excerpt Number: 7

Comment: Newmont requests clarification of the abbreviated reporting allowance as it conflicts with Tier 1 and Tier 2 calculation methodologies. Tier 1 and Tier 2 allow the use of default fuel-specific CO_2 emission factors as does the abbreviated report. However, Tier 1 and Tier 2 are not limited to the first year of reporting but abbreviated methodologies are. EPA needs to add more details to the abbreviated report allowance so that companies with a maximum heat input capacity of 250 mmBtu/hr or less can continue to use fuel-specific CO_2 emission factors. Otherwise, you are limiting Tier 1 and Tier 2 to one year.

Response: No clarification to the rule is needed. The provisions for an abbreviated emissions report allow existing facilities that were in operation as of January 1, 2010 and that are required to report only their stationary combustion source emissions to submit, in lieu of the full emissions report required under 40 CFR 98.3(c), an abbreviated emissions report for 2010 emissions. The abbreviated report contains total facility GHG emissions aggregated for all stationary combustion units calculated according to any of the methods in 40 CFR 98.33(a) and expressed in metric tons of CO_2, CH_4, N_2O, and CO_2e. As part of the abbreviated emissions report, the breakdown of emissions by individual combustion units and the activity data used to calculate the emissions do not need to be reported as is required under the full emissions report. Thus, the abbreviated report allows facilities that do not otherwise qualify to use the Tier 1 and Tier 2 calculation methodologies to use them in year 2010. In reporting year 2011, the facility must begin using whatever tier calculation method required by subpart C (General Stationary Fuel Combustion Sources). Facilities that qualify for Tier 1 and Tier 2 under subpart C may continue to use those methods.

Commenter Name: Jerry Call
Commenter Affiliation: American Foundry Society (AFS)
Document Control Number: EPA-HQ-OAR-2008-0508-0356.2
Comment Excerpt Number: 14

Comment: Clarification is needed on the 2010 Abbreviated Report Provision. In section 98.2(a)(3) of the proposed regulations EPA uses the word “may,” so AFS requests confirmation that use of the 2010 abbreviated report referenced in that section is elective only, and facilities with total heat capacity of 30 mmBTU/hour or more but have actual GHG emissions less than 25,000 metric tons per year are not required to report emissions for Reporting Year 2010.

Response: Neither the annual report specified under 40 CFR 98.3(c) nor the abbreviated emissions report specified under 40 CFR 98.3(d) are required for facilities that are not subject to the rule. Thus, facilities that have a total heat capacity equal to or greater than 30 mmBTU/hour but that have actual GHG emissions less than 25,000 tons/year would not be subject to the rule and would not be required to submit either of the two types of emissions reports. The use of "may" in this instance indicates that a facility is not obligated to submit an abbreviated report,

but may choose to submit a full report using the relevant calculation methodologies specified in subpart C.

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3. RECORDKEEPING REQUIREMENTS

Commenter Name: Sam Chamberlain
Commenter Affiliation: Murphy Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0625
Comment Excerpt Number: 10

Comment: EPA is proposing that each facility subject to annual GHG reporting keep an extensive set of records in addition to its GHG inventory data. Each facility would be required to retain all required records for at least 5 years. The rule also stipulates that, "The allowance of a variety of electronic and hard copy formats for records allows flexibility for facilities to use a system that meets their needs and is consistent with other facility records maintenance practices, thereby minimizing the recordkeeping burden". (74 FR 68, page 16476) According to the preamble page 16475, the amount of records to keep are burdensome to Murphy, simply due to the sheer number of records to be kept and the multitude of locations where the records are generated and stored. Because of the broad nature of the records being kept, i.e. process knowledge, engineering calculations, instrument records, etc, the size of a facility whether large or small makes it difficult to keep the records in a single location to be produced "in a timely manner" for EPA and to keep these in viewable fashion for 5 years. Typically, Murphy's offshore records are kept in Houston, but the logistics and timing of getting them to Houston are not predictable. Storage of our Exploration and Production records at remote field locations, for even a short time would make it hugely problematic for making these records immediately accessible for potential on-site inspections. In order to maintain accurate records and back-up documentation for demonstrating compliance, companies will have to rely on data centers and centralized archiving procedures in support of such remote locations as offshore production platforms, compressor stations, fuel supply terminals, to name just a few. And these are very costly. Murphy has two recommendations for EPA: 1) Keep records for the current emission reporting year plus one year. This would not be overly burdensome and still maintain an accurate up to date inventory for EPA's criteria. 2) Only keep records of sources that generate greater than 25,000 tonnes of CO_2e emission equivalents. This ties into the reporting threshold and facilitates a common basis for recordkeeping and minimizes the burden of extensive records to maintain.

Response: The rule does not require that records be kept at a single location. Records must be kept in a way that they can be produced in a timely manner if requested by EPA. The language in proposed §98.3(g) of the rule ("records shall be ... recorded in a form that is suitable for expeditious inspection and review") was drafted to allow flexibility. This language has not been changed in the final rule. EPA has changed the length of time required for record-keeping by reducing the term to 3 years. 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 subpart W at this time. Additionally, there is no requirement to keep records for facilities that do not have to report under this rule.

Commenter Name: Leslie Sue Ritts
Commenter Affiliation: National Environnemental Development Association
Document Control Number: EPA-HQ-OAR-2008-0508-0504.1
Comment Excerpt Number: 20

Comment: The proposed general rule requires records be maintained and available for inspection for five years. EPA states that these data are needed to verify the accuracy of reported GHG emission calculations and, if needed, to reproduce GHG emission estimates using the methods prescribed in the proposed rule. Therefore, the Agency reasons, "Since the above information must be collected in order to calculate GHG emissions, the added burden of maintaining records of that information should be minimal." Id., at 16476. NEDA/CAP objects to the requirements on the basis that the vast amount of this information is unnecessary, the costs of collecting it have not been properly accounted for by EPA, and much of the records prescribed would be a waste of valuable and limited resources to collect and maintain. First, the list of recordkeeping requirements swamp other documentation currently maintained for toxics and criteria air pollutants, which could be argued to have far more immediate potential public health and environmental effects. Second, with regard to reporting the individual requirements about the names and documentation of individuals involved in measuring or computing GHG emissions, EPA already has proposed a designated representative be liable on a criminal and civil basis. As we already have discussed above, a QAPP and calibration protocols will not be necessary since emission estimates will serve as an accurate and reasonable basis for emission reporting. Third, different information is kept in different ways by different facilities, but very few use log books preferring instead electronic means of calculating and keeping data. Therefore we strongly urge EPA to be more reasonable about how and what information needs to be collected and to provide a short list of minimal requirements in the final rule. Alternatively, EPA should rely on companies to keep the calculations and other data and assumptions that the company finds that it requires to substantiate its GHG reports.

Response: Records must be kept of all data used for the emissions calculations required under this rule for a period of three years. This is necessary for compliance, enforcement, and verification purposes. For our rationale on the level of detail required to be reported, see the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5 in the Content of the Annual Report section of this comment response document. See also the section of the final rule preamble on the general content of the annual GHG report.

We have made several changes to the recordkeeping requirements in section 98.3(g) to clarify and consolidate the proposed requirements, as well as to allow facilities to rely on electronic data and existing corporate documents to avoid duplicative efforts.

As part of these revisions, the final rule requires a "Monitoring Plan" rather than a "QAPP." To avoid duplicative efforts, the final rule explicitly states that the Monitoring Plan can rely on references to existing corporate documents. For further discussion about the required Monitoring Plan, see the preamble for the response on the general recordkeeping requirements.

For our rationale on the reporting of key facility personnel, see the response to comment EPA-HQ-OAR-2008-0473.1, excerpt 12.

The final rule does not require the use of a log book to store data. See the response to comment EPA-HQ-OAR-2008-0533.1, excerpt 15. If a logbook is not used to document procedural changes to GHG emission accounting methods or CEMS maintenance, a facility may use any

form of records for this purpose. Additionally, we have provided clarification in the final rule that the Monitoring Plan, as well as the other records required under section 98.3(g), may be stored electronically. We also changed the recordkeeping retention duration from 5 years to 3 years. For discussion about this change, see the preamble for the response on the general recordkeeping requirements. The resulting recordkeeping requirements will be sufficient to allow EPA to verify the accuracy of reported GHG emission calculations and will reduce the burden on facilities subject to the rule.

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: 12

Comment: EPA proposes to require a number of additional records, including lists of units, data categorized by fuel type, results of fuel analysis, emission factors, operating data, missing data calculations, a log book, and written quality assurance performance plan (QAPP), For units recording and reporting under Part 75, FOG requests that EPA specify that the records created under Part 75 are sufficient in themselves to satisfy those requirements with respect to CO_2. Part 75 already specifies how these types of information are to he recorded. Requiring ARP sources to create new or different records to support their CO_2 data are contrary to EPA's stated goals of building on (rather than duplicating) existing requirements. If there is a specific piece of information not required to be recorded under Part 75 that EPA deems necessary for this program, EPA should specify what that is. Among those additional records, EPA proposes to require recording of the "names and documentation of key facility personnel involved in calculating and reporting the GHG emissions." This requirement is neither necessary nor sufficiently specific. By virtue of the DR's certification, EPA has already required facilities to identify a person who is responsible for responding to Agency questions regarding calculation and reporting of data. The DR can, upon request, provide more specific information to the Agency, including the names or people involved in calculating and reporting emissions, as needed. Under Part 75, there could be dozens of individuals involved in the process of calculating emissions during any one year and it is not clear from this proposal which of them should be on this list or what kind of "documentation" should be included. Although most companies will, by virtue of a combination of Quality Assurance/Quality Control Plans, Standard Operating Procedures, and personnel records, have recorded information necessary to document those responsible for various tasks, it is not reasonable to require creation of a separate record for these purposes. If EPA is simply interested in having a contact other than the DR to answer technical questions regarding the data submitted, EPA could include an option for the DR to specify a technical contact in each report.

Response: The final rule calls for development of a "Monitoring Plan" rather than a QAPP (see section of this document on the Quality Assurance Project Plan). The Monitoring Plan provisions in the final rule explicitly state that the Monitoring Plan can rely on references to existing corporate documents, including QA programs under Appendix B to 40 CFR Part 75. Therefore, the records created under Part 75 will be sufficient to satisfy the QA requirements with respect to CO_2.

We agree with various commenters that the proposed requirement to keep a record of "the names and documentation of key facility personnel involved in calculating and reporting GHG emissions" was overly burdensome and unclear. In the final rule, this requirement has been

changed to the persons responsible (i.e., job titles) for collecting emissions data, replacing the proposed requirement to keep separate documentation and names of "key facility personnel involved in calculating and reporting GHG emissions." The purpose is to identify the positions at the facility (e.g., shift supervisor, process unit supervisor) that are charged with the management responsibility for conducting the monitoring and data collection required by the rule. The plan must identify staff position titles and not actual people. For further discussion of the Monitoring Plan, see the preamble for the response on the general recordkeeping requirements. For further discussion of EPA's response on the level of detail required to be kept on record and changes to the recordkeeping requirements, see the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: Robert Rouse
Commenter Affiliation: The Dow Chemical Company
Document Control Number: EPA-HQ-OAR-2008-0508-0533.1
Comment Excerpt Number: 15

Comment: Section 98.3 (g)(7) requires that the facility keep a list of key personnel involved in calculating and reporting GHG emissions. The term “key personnel” is open to broad interpretation and could include a lengthy list of personnel, such as technicians calibrating instruments and operators taking process readings. It is assumed that the purpose of this list is to be able to quickly identify the appropriate people during the verification process. The site representatives for each facility should have enough knowledge of the facility to do this without such a list. It is recommended that Section 98.3(g)(7) be removed from the final rule. Alternatively, it is recommended that the term “key personnel” be replaced with the "Responsible Official" or a "Duly Authorized Representative" as these individuals typically have overall management responsibilities for the site. Section 98.3(g)(9) requires that a log book be maintained to document procedural changes to GHG emission accounting methods and changes to the instrumentation critical to GHG emission calculation. This requirement of a separate log book is duplicative of other processes currently utilized to address procedural and process changes. Dow has an electronic Management of Change system at the unit level where changes like those described above are documented. The use of a system such as this should be allowed under the rule. It is suggested that Section 98.3(g)(9) be modified as follows: A logbook or other system to document procedural changes... Section 98.3 (g)(11)(i) requires that a maintenance log be kept for all maintenance activities associated with continuous monitoring systems, flow meters, and other instrumentation used to provide data for GHG emissions reporting. Dow comments that the proposed requirement should be slightly modified to reflect the option to maintain a maintenance log in an electronic format vs. a written log of each maintenance activity. The proposed rule is not clear with respect to the format for the maintenance log. Dow suggests the following regulatory text at the end of 98.3(g)(1 1)(i): A maintenance log shall be kept. The owner/operator can satisfy this requirement with electronic maintenance records, a written maintenance log, or a similar system that logs all maintenance activities associated with these systems.

Response: EPA agrees with the commenter that requiring a log book for recording data are too restrictive. The rule has been changed to allow any form of company records, whether written or electronic, to document maintenance activities and other information required by the rule. For EPA's response on the proposed provision to keep documentation about "key personnel," see the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12.

Commenter Name: Lauren E. Freeman
Commenter Affiliation: Hunton & Williams LLP
Document Control Number: EPA-HQ-OAR-2008-0508-0493.1
Comment Excerpt Number: 16

Comment: Under § 98.3(g), EPA proposes to require retention of "all required records for at least 5 years." UARG objects to this requirement to the extent it is intended to apply to records created under Part 75, which only requires retention of records for 3 years. 40 C.F.R. §§ 72.9(f)(ii), 75.57(a). This record retention period was adopted as a result of comments submitted by UARG in the initial Part 75 rulemaking. To mandate a longer period of retention, EPA must justify the increase for this program under the PRA. See 5 C.F.R. § 1320.5(d)(2)(iv) (requiring a showing of substantial need or statutory mandate to require retention of records for more than 3 years).

Response: EPA has changed the recordkeeping retention requirement in § 98.3(g) to 3 years. For EPA's rationale for this change, see the preamble for the response on the general recordkeeping requirements.

Commenter Name: L. Selbst
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0253.1
Comment Excerpt Number: 2

Comment: Another section I found troublesome was under §98.37; the requirement that each facility would have to retain records, lasts for only five years. If the goal is to track information over time, then perhaps this can be better accomplished by lengthening this record retention period. Nothing in the preamble elaborates as to why the retention period is so short in duration. I can only surmise that the EPA was concerned with burdening suppliers with additional costs. However, such costs are not substantial considering the goals at stake. The majority of the costs in establishing a record retention policy, occurs up front, meaning that once a system is in place, imposing on Reporters to retain records for a couple extra years, will not have a dramatic financial impact. I would recommend doubling this time period from five years to ten years.

Response: The primary reason for requiring record retention is for compliance and enforcement purposes. We have determined that 3 years is a sufficient retention period for this purpose. For our rationale for this change, see the preamble for the response on the general recordkeeping requirements.

Commenter Name: Bert Kalisch
Commenter Affiliation: American Public Gas Association (APGA)
Document Control Number: EPA-HQ-OAR-2008-0508-0403.1
Comment Excerpt Number: 4

Comment: EPA proposes in Section 98.3(g) of the Proposed Rule to require utilities to retain the following records: "(1) A list of all units, operations, processes, and activities for which GHG emission were calculated. The data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type. The results of all required fuel

analyses for high heat value and carbon content, the results of all required certification and quality assurance tests of continuous monitoring systems and fuel flow meters if applicable, and analytical results for the development of site-specific emissions factors. "(2) Documentation of the process used to collect the necessary data for the GHG emissions calculations. "(3) The GHG emissions calculations and methods used. "(4) All emission factors used for the GHG emissions calculations. "(5) Any facility operating data or process information used for the GHG emission calculations. "(6) Names and documentation of key facility personnel involved in calculating and reporting the GHG emissions. "(7) The annual GHG emissions reports. "(8) A log book, documenting procedural changes (if any) to the GHG emissions accounting methods and changes (if any) to the instrumentation critical to GHG emissions calculations. "(9) Missing data computations. "(10) A written quality assurance performance plan (QAPP). Upon request from regulatory authorities, the owner or operator shall make all information that is collected in conformance with the QAPP available for review during an audit. Electronic storage of the information in the QAPP is permissible, provided that the information can be made available in hard copy upon request during an audit. At a minimum, the QAPP plan shall include (or refer to separate documents that contain) a detailed description of the procedures that are used for the following activities: "(i) Maintenance and repair of all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHG emissions reported under this part. A maintenance log shall be kept. "(ii) Calibrations and other quality assurance tests performed on the continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHG emissions reported under this part." The first three items are routinely available as they are critical to the business of the utility. Items 4-6 are unnecessary if EPA accepts APGA's suggestion that EPA obtain these data from EIA. It will be EPA performing the calculation based on data it receives from EIA. Item 8 will also be unnecessary if calculations are done by EPA based on EIA data. Items 9-11 should not apply to gas billing meters.

Response: EIA data would not be sufficient for EPA to verify the data submitted in the annual emissions report. For further discussion of the emissions verification approach in the final rule, see the preamble for the response on the emissions verification approach. Regarding the comment that the recordkeeping requirements of proposed 98.6(g)(9) should not apply to gas billing meters, paragraph (g)(9) has been deleted from the rule, so it will not apply. Regarding the comment that the recordkeeping requirements of proposed 98.6(g)(10) should not apply to gas billing meters, the rule includes provisions under subpart NN, section 98.405, for missing data for flow meters. Regarding the comment that the recordkeeping requirements of proposed 98.6(g)(11), a written QAPP, should not apply to gas billing meters, the rule includes provisions under subpart NN, section 98.404, for calibration of flow meters, such that records must be kept. However, EPA has revised proposed 98.3(g)(11) in the final rule, replacing a QAPP with a GHG Monitoring Plan. For a discussion of this change, see the preamble for the response on the general recordkeeping requirements. Additionally, the provisions for flow meter calibration have been revised in subpart NN of the final rule. For a summary of these changes, see the preamble section III. Reporting and Recordkeeping Requirements for Specific Source Categories, NN. Suppliers of Natural Gas and Natural Gas Liquids.

Commenter Name: Keith Adams
Commenter Affiliation: Air Products and Chemicals, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-1142.1
Comment Excerpt Number: 9

Comment: EPA should follow its existing practice to require only that the GHG emission data be submitted. EPA should require that the supporting data be maintained by the facility and made available to the Agency upon request. When EPA makes such requests, EPA should allow facilities more than 7 days to respond. Requiring a response to a written request within 7 days is completely impossible to meet. A person might be on vacation, and might not even see the request in that time period. While the records will be readily available, it will take a bit of time to compile them and send them. EPA should allow a minimum of 30 days to fulfill a data submission request, with an option for an extension if the facility has extenuating circumstances. Further, EPA should not submit data requests only electronically. Personnel change and email addresses change and are deactivated, and a company should not be held responsible for responding to requests that it did not receive.

Response: Regarding the issue that emissions data be reported without supporting documentation, refer to the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5, in the comment response document on Subpart A: Content of the Annual Report. Regarding the issue of how many days advance notice a facility should receive from EPA for providing records, the language of the final rule does not specify a set time period. The final rule requires that records be retained in a form suitable "for expeditious inspection and review." EPA anticipates that required records generally will be available on site for review. However, for some source categories, records might be retained off site. In such cases, EPA will work with a reporter to determine a reasonable time for the facility to provide records. The requirement to provide records within 7 days, which appeared in the proposed rule for subpart C (General Stationary Fuel Combustion Sources), has been removed. Regarding the issue of EPA submitting information requests electronically by email, the EPA is accountable to ensure that any requests for information are delivered to a company.

Commenter Name: Michael DiMauro
Commenter Affiliation: Massachusetts Municipal Wholesale Electric Company (MMWEC)
Document Control Number: EPA-HQ-OAR-2008-0508-0580
Comment Excerpt Number: 17

Comment: Section IV.I of the Preamble to the Proposed Rule provides a listing of general recordkeeping requirements for the GHG Reporting Program. Certain of these items should be eliminated as being redundant or inappropriate and other items should be clarified. In particular: a) The names of personnel involved in the GHG Reporting process. This information should not be required. The documentation of involved personnel is objected to on a practical basis, as sites may not assign a dedicated person to perform this GHG reporting activity, and contributions of information and support may be requested of various staff persons who are not necessarily tracked as being part of the process. Documentation of involved personnel is also objected to on a regulatory basis; it is the responsibility of the Designated Representative, not EPA to check up on the persons performing this GHG Reporting work. b) Maintain a Logbook documenting key procedural and instrumentation changes: This information is redundant, and should be eliminated from this set of recordkeeping requirements. i. Modifications to key procedures supporting the monitoring, recordkeeping and reporting of GHG emissions would presumably be documented in the QAPP ii. Key instrumentation will require periodic calibration or other QA audits that will be documented, and can serve as a means of determining if an instrument has been replaced. Requiring this information to be redundantly recorded in a Logbook is unnecessary and burdensome. (c) Missing Data computations: it should be clarified that this recordkeeping consists of: (a) a description of missing data procedures (presumably in the QAPP); and (b) a

listing of missing data hours for each reporting year. However, no hour by hour documentation of CO_2 substitution values for missing data hours should be required

Response: Regarding reporting names of personnel, see the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12. Regarding maintaining a log book, see the response to comment EPA-HQ-OAR-2008-0508-0533.1, excerpt 15. Regarding the comment requesting clarification about the missing data computations required to be maintained on record, the final rule has been changed to specify that for each missing data event, facilities must retain the missing data computations, a record of the duration of each missing data event, actions taken to restore malfunctioning monitoring equipment, the cause of the event, and the actions taken to prevent or minimize occurrence in the future. We agree that hour by hour documentation of substitution values for missing data hours will not be required.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 23

Comment: Under §98.3(g)(9), reporters are required to maintain a log book documenting procedural changes to the GHG emissions accounting methods and changes to the instrumentation critical to GHG emissions calculations. Documenting the information in a log book is redundant. Under §§98.3(g)(2), (3), (4) and (6), the reporter is required to document the results of all quality assurance tests for continuous monitoring systems and flow meters, the process used to collect the necessary data for the GHG emissions calculations, the GHG emissions calculations, the methods used, and the operating data and process data used for the GHG emissions calculations. The documentation under §§98.3(g)(2), (3), (4) and (6) will show if there was a change to the emissions accounting methods and the instrumentation used to calculate emissions. Finally, the concept of a “log book” is antiquated and not representative of the variety of current day adequate record retention methods. If EPA does not delete §98.3(g)(9), it should be changed. The words A log book,´ should be deleted and replaced with Records.´

Response: We agree that the reporting requirements of section 98.3(g) in the proposed rule contained some redundant requirements. As a result, we have removed the proposed 98.3(g)(9) requirement to specifically record changes to the emissions accounting methods and the instrumentation used to calculate emissions, because this information would be required to be maintained as part of the Monitoring Plan that is required by 98.3(g). We also have removed 98.3(g)(3), which requires documentation of the process used to collect emissions data, because it is redundant to the requirements of the Monitoring Plan required by 98.3(g). The requirement for maintaining records in the form of a log book has been removed in the final rule. See the response to comment EPA-HQ-OAR-2008-0508-0533.1, excerpt 15.

Commenter Name: Robert Naerebout
Commenter Affiliation: Idaho Dairymen's Association, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0314.1
Comment Excerpt Number: 6

Comment: No need exists to require that all reporting sources keep records for five years onsite and to keep the records open for inspection. By the terms of the proposed rule, the EPA will have the information electronically, so this requirement is unnecessary and unduly burdensome.

Response: In the final rule, EPA has made several changes to the recordkeeping section of the proposed rule, including reducing the record retention requirement to 3 years. For more discussion on these changes, see the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20. The records that must be retained in the final rule are necessary for fully documenting the methods and data used for estimating GHG emissions, but not all of these data will be reported to the electronic data reporting system. For example, the rule requires retention of information on all missing data computations, but all of these data are not reported to EPA. For many of the source categories covered by the rule, the rule does not require that the annual emissions report include all of the input data that are developed to support the emissions calculations. In some cases, daily, weekly, or monthly tests on fuels or process feedstocks must be conducted, but the rule does not require that test reports be submitted. Instead, the rule requires reporting of summary data but requires that records of all data used for the emission estimates be retained for inspection. For example, facilities subject to Subpart JJ, the rule requires retention of daily average volumetric flow rate of CH_4 from a digester to the combustion device, but these data are not reported to EPA; rather, such facilities use these data to calculate volumetric biomass flow, CH_4 emission, and other data required to be reported on an annual basis. These recordkeeping procedures are designed to ensure that a credible GHG reporting system is integrated into the routine business practice, and the associated records must be retained for a reasonable period so that the program can be effectively verified by the EPA.

Commenter Name: John W. Fainter
Commenter Affiliation: Association of Electric Companies of Texas (AECT)
Document Control Number: EPA-HQ-OAR-2008-0508-0833.1
Comment Excerpt Number: 3

Comment: AECT supports a three (3) year record retention requirement AECT requests that the requirement that the records required by the GHG reporting rules be retained for five (5) years be reduced to three {3) years. AECT notes that the Acid Rain Program requires that owners or operators maintain records for three (3) years only. Likewise, the Energy Information Administration’s GHG emissions voluntary reporting program provides for a three (3) year record retention period. AECT requests that EPA either change the proposed record retention period from five (5) years to three (3) years, or that it provide adequate support as to why a five {5) year record retention period is necessary.

Response: EPA has changed the recordkeeping retention requirement in § 98.3(g) to 3 years. For EPA's rationale for this change, see the preamble for the response on the general recordkeeping requirements.

Commenter Name: Michael Carlson
Commenter Affiliation: MEC Environnemental Consulting
Document Control Number: EPA-HQ-OAR-2008-0508-0615
Comment Excerpt Number: 12

Comment: Records should be retained for a period of three (3) years, not five (5) years as proposed by the agency. Three years is the normal record retention period for most environmental regulatory reports, and would be, as the agency points out, “consistent with other facility records maintenance practices” (16476).

Response: EPA has changed the recordkeeping retention requirement in § 98.3(g) to 3 years. For EPA's rationale for this change, see the preamble for the response on the general recordkeeping requirements.

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: 11

Comment: Under § 98.3(g), EPA proposes to require retention of "all required records for at least 5 years." It is not clear why records need to be maintained for "at least 5 years". The Preamble provides no reasons for this expanded timeframe and, there are no cost estimates in section III of the Preamble concerning this increase to five years and no explanation as to the basis for the statement that the "burden" of such maintenance should be "minimal". For the ARP owners or operators must maintain "all measurements, data, reports, and other information...for at least three (3) years" (see 40 C .F.R. § 75.57). Similarly, the Energy Information Administration’s 1605(b) voluntary reporting of GHG emissions and reductions program also requires a minimum 3-year period. FCG urges EPA to adopt a record-keeping period of 3 years.

Response: EPA has changed the recordkeeping retention requirement in § 98.3(g) to 3 years. For EPA's rationale for this change, see the preamble for the response on the general recordkeeping requirements.

Commenter Name: Kevin Fay
Commenter Affiliation: International Climate Change Partnership (ICCP)
Document Control Number: EPA-HQ-OAR-2008-0508-0490.1
Comment Excerpt Number: 2

Comment: ICCP agrees that a five year record retention period is reasonable.

Response: EPA has changed the recordkeeping retention requirement in § 98.3(g) to 3 years. For EPA's rationale for this change, see the preamble for the response on the general recordkeeping requirements.

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: 8

Comment: We believe there is no valid reason for why EPA should need five years to verify compliance and identify and resolve potential issues related to a facility’s emission reporting. The NGFA strongly recommends that EPA reduce the record retention time period proposed

with its rule from five years to three years. We believe that up to three years is more than an adequate time frame for EPA to verify facility compliance and resolve reporting issues. Further, a three year record retention time period would correspond to the recordkeeping requirements designated within EPA's Toxic Release Inventory regulations.

Response: EPA has changed the recordkeeping retention requirement in § 98.3(g) to 3 years. For EPA's rationale for this change, see the preamble for the response on the general recordkeeping requirements.

Commenter Name: Caroline Choi
Commenter Affiliation: Progress Energy
Document Control Number: EPA-HQ-OAR-2008-0508-0439.1
Comment Excerpt Number: 13

Comment: Under 98.3(g), EPA proposes to require retention of "all required records for at least 5 years." It is not clear why records need to be maintained for "at least 5 years." The Preamble provides no reasons for this expanded timeframe and there are no cost estimates in section 111 of the Preamble concerning this increase to five years and no explanation as to the basis for the statement that the "burden" of such maintenance should be "minimal." For the ARP owners or operators must maintain "all measurements, data, reports, and other information...for at least three (3) years" (see 40 C .F.R. § 75.57). Similarly, the Energy Information Administration's 1605(b) voluntary reporting of GHG emissions and reductions program also requires a minimum 3-year period. Progress Energy urges EPA to adopt a record-keeping period of 3 years.

Response: EPA has changed the recordkeeping retention requirement in § 98.3(g) to 3 years. For EPA's rationale for this change, see the preamble for the response on the general recordkeeping requirements.

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: 7

Comment: EPA's proposed rule would require each facility that would be required to submit an annual GHG report to also keep specified records to substantiate its reporting. EPA proposes that facilities must retain such records in an electronic or hard copy format for a period of five years and make them available to the agency upon request. EPA states that records would be maintained for this period so that a history of compliance could be demonstrated and questions about past emission estimates could be resolved, if needed. The NGFA strongly believes that mandating facilities to maintain required records for a period of five years is an unnecessary and excessive burden. We disagree with EPA's assertion that records need to be maintained for such a period of time so that EPA can verify compliance and resolve issues related to past emission estimates. The cost to facilities to retain records, whether in an electronic or hard copy format, is significant and burdensome.

Response: EPA has changed the recordkeeping retention requirement in § 98.3(g) to 3 years. For EPA's rationale for this change, see the preamble for the response on the general recordkeeping requirements.

Commenter Name: Keith Epperson
Commenter Affiliation: American Feed Industry Association (AFIA)
Document Control Number: EPA-HQ-OAR-2008-0508-0399.1
Comment Excerpt Number: 6

Comment: EPA's proposed rule states that each facility required to submit an annual GHG report would also maintain specified records to substantiate its reporting. EPA proposes that facilities must retain such records in an electronic or hard copy format for a period of five years and make them available to the agency upon request. EPA states that a history of compliance could be demonstrated, and questions about past emission estimates could be resolved, if needed. AFIA strongly believes that mandating that facilities maintain records for a period of five years is an unnecessary and an excessive burden. We disagree with EPA's assertion that records need to be maintained for this period of time so that EPA may verify compliance and resolve issues related to past emission estimates. The cost to facilities to retain records, whether in an electronic or hard copy format, is significant and burdensome. We believe there is no valid rationale for such a five-year records retention requirement. AFIA urges EPA to reduce the record retention time period proposed with its rule from five years to three years. We believe three years is an adequate time frame for EPA to verify facility compliance and resolve reporting issues. Further, a three year record retention time period would correspond to the recordkeeping requirements designated within EPA's Toxic Release Inventory regulations and would reduce the records maintenance costs by at least 40% without a significant change in EPA's ability to determine essential emission information.

Response: EPA has changed the recordkeeping retention requirement in § 98.3(g) to 3 years. For EPA's rationale for this change, see the preamble for the response on the general recordkeeping requirements.

Commenter Name: See Table 4
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-1021.1
Comment Excerpt Number: 12

Comment: It is not clear why records need to be maintained for five years or longer, particularly when, in the case of the ARP, owners or operators must maintain "all measurements, data, reports, and other information... for at least three (3) years." See 40 C.F.R. § 75.57. Similarly, DOE's 1605(b) program also only requires a minimum three-year retention period. See 10 C.F.R. § 300.9(d). EPA provides no reasons for this expanded timeframe, and there is neither a cost estimates in section III of the preamble concerning this increase in record retention time nor an explanation as to the basis for the statement that the "burden" of such maintenance should be "minimal." Consistent with the ARP and other reporting programs, the records retention period for the proposed rule also should be three years.

Response: EPA has changed the recordkeeping retention requirement in § 98.3(g) to 3 years. For EPA's rationale for this change, see the preamble for the response on the general recordkeeping requirements.

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: 4

Comment: The record-keeping requirements in Subpart A are largely consistent with that contained in Part 75 and thus, it does not appear to represent an additional burden for electric generation facilities that will be subject to the Proposed Rule.

Response: EPA thanks the commenter for their input.

Commenter Name: Filipa Rio
Commenter Affiliation: Alliance of Automobile Manufacturers (Alliance)
Document Control Number: EPA-HQ-OAR-2008-0508-0630.1
Comment Excerpt Number: 28

Comment: The overall level of recordkeeping proposed in the NPRM appears to be out of sync with recordkeeping requirements for equally significant regulatory compliance programs (e.g., NSR, MACT, TRI, etc.) and annual state air emission reporting for criteria and other air pollutants. In particular, the requirements to document the process used to collect necessary data for GHG emission calculations, maintain a log book of any procedural changes to GHG accounting methods and instrumentation, and completion of a written QAPP are significantly more rigorous than recordkeeping requirements of other EPA regulatory programs. The requirements would place the facility in a continual mode of maintaining and updating such rigorous records. Other Clean Air Act programs do not require such measures if emissions data are self-certified. This is particularly unusual when considering that what EPA is proposing is a reporting program rather than a compliance program. Accordingly, we support a level of recordkeeping commensurate with other environmental reporting programs where the responsibility generally falls on the facility to report complete and accurate data and to support such data upon request.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: Lauren E. Freeman
Commenter Affiliation: Hunton & Williams LLP
Document Control Number: EPA-HQ-OAR-2008-0508-0493.1
Comment Excerpt Number: 17

Comment: EPA proposes to require creation and retention of a number of additional records, including lists of units, data categorized by fuel type, results of fuel analysis, emission factors, operating data, missing data calculations, a log book, and a written quality assurance performance plan ("QAPP"). Proposed § 98.3(g)(1) - (10). For units recording and reporting under Part 75, UARG requests that EPA specify that the records created under Part 75 are sufficient in themselves to satisfy those requirements with respect to CO_2 and heat input. Part 75 already specifies how these types of information are to be recorded. Requiring ARP sources to create new or different records to support their GHG data reporting is contrary to EPA's stated goals of building on (rather than duplicating) existing requirements. If there is a specific piece of

information not required to be recorded under Part 75 that EPA deems necessary for this program, EPA should specify what that is.

Response: The rule has been revised and clarified such that available company records can be used to satisfy the requirements of the Monitoring Plan. Therefore, any part 75 quality assurance records for continuously monitored CO_2 emissions and heat input can be used to satisfy the corresponding requirements of part 98. No additional data for these elements is required.

Commenter Name: Dan Elwell
Commenter Affiliation: Aerospace Industries Association (AIA)
Document Control Number: EPA-HQ-OAR-2008-0508-1140.1
Comment Excerpt Number: 13

Comment: As proposed, the recordkeeping requirements, both substance and duration, are excessive and unwarranted. The requirement exceeds what is needed for verification of estimates, and it is much greater than that needed for other pollutant reporting regimens.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: Brad Bateman
Commenter Affiliation: Western States Dairy Producers Trade Association
Document Control Number: EPA-HQ-OAR-2008-0508-0365.1
Comment Excerpt Number: 12

Comment: The recordkeeping rules require dairy cattle and milk production facilities to retain and make available to EPA the following records for five years: (i) a list of all units, operations, processes and activities for which GHG emissions are calculated; (ii) the data used to calculate the GHG emissions; (iii) documentation of the process used to collect the necessary data for the GHG emissions calculations; (iv) the GHG emissions calculations and methods used; (v) all emission factors used for the GHG emissions calculations; (vi) any facility operating data or process information used for the GHG emissions calculations; (vii) names and documentation of key facility personnel involved in calculating and reporting the GHG emissions; (viii) the annual GHG emissions reports; (ix) a log book documenting any procedural changes to the GHG emissions accounting methods and any changes to the instrumentation critical to GHG emissions calculations; (x) missing data computations; (xi) a written Quality Assurance Project Plan; and (xii) any other data specified in any applicable subpart of the proposed rule. This level of paperwork is extremely burdensome. EPA seems to be maximizing and not minimizing paperwork contrary to the express requirement of the Paperwork Reduction Act, 44 USC Section 3501, et seq.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: See Table 3
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 38

Comment: EPA proposes that each facility subject to annual GHG reporting keep an extensive set of records in addition to its GHG inventory data. Each facility would be required to retain all required records for at least five years. It also stipulates that, “The allowance of a variety of electronic and hard copy formats for records allows flexibility for facilities to use a system that meets their needs and is consistent with other facility records maintenance practices, thereby minimizing the recordkeeping burden”. (74 FR 68, page 16476) API comments: Although EPA is not soliciting specific feedback on the issue, API would like to address this within the context of the extra burden and complicated logistics that would be required in view of all the supplemental reporting and recordkeeping requirements. Despite the flexibility noted by EPA due to the variety of formats acceptable for recordkeeping, the large volume of records required is not amenable to storage at remote field locations, such that the records could be immediately accessible for potential on-site inspections. In order to maintain accurate records and back-up documentation for demonstrating compliance, companies will have to rely on data centers and centralized archiving procedures in support of such remote locations as offshore production platforms, compressor stations, fuel supply terminals, to name just a few. API is recommending that EPA tailor the documentation and recordkeeping procedures – for this rule – to be compatible with other ICRs under Section 114. EPA would have the opportunity to reevaluate its documentation and recordkeeping requirements at the time of promulgating potential future GHG mitigation regulations. In 98.3(g), EPA proposes records be kept that contain the "names and documentation of key facility personnel involved in calculating and reporting the GHG emissions" and a "log book documenting any procedural changes to the GHG emissions accounting methods and any changes to the instrumentation critical to the GHG emissions calculations." These two requirements are vague and thus overly broad. In the case of the former, many personnel are arguably involved in calculating and reporting the GHG emissions from the programmer who set up the systems to monitor, calculate, and record values to the administrative assistant who helped with the report’s mailing. In the case of the latter, it too is vague and overly broad. In the first place, "any changes to instrumentation" has no limitation in application. Secondly, the requirement to keep a log of "procedural changes" is duplicative given the requirement to record the "GHG emissions calculations and methods." For these reasons, we request that these two items be either removed or limited in scope.

Response: We presume that the comment about the difficulty of data storage for remote locations refers to oil and gas production facilities. 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 subpart W at this time. Regarding the allowable location of records for other subparts, see the response to comment EPA-HQ-OAR-2008-0508-0625, excerpt 10. For EPA's rationale on the level of detail required to be retained in records, see the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: Caroline Choi
Commenter Affiliation: Progress Energy
Document Control Number: EPA-HQ-OAR-2008-0508-0439.1
Comment Excerpt Number: 14

Comment: EPA also proposes to require a number of additional records, including lists of units, data categorized by fuel type, results of fuel analysis, emission factors, operating data, missing data calculations, a log book, and written quality assurance performance plan (QAPP). For units recording and reporting under Part 75, Progress Energy requests that EPA specify that the

records created under Part 75 are sufficient in themselves to satisfy those requirements with respect to CO_2. Part 75 already specifies how these types of information are to be recorded. Requiring ARP sources to create new or different records to support their CO_2 data are contrary to EPA's stated goals of building on (rather than duplicating) existing requirements. If there is a specific piece of information not required to be recorded under Part 75 that EPA considers necessary for this program, the Company requests that EPA specify what that is.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0493.1, excerpt 17.

Commenter Name: Joseph A. D'Amico
Commenter Affiliation: Foundation Coal Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0421.2
Comment Excerpt Number: 3

Comment: The paperwork requirements described in the proposed Rule are extremely burdensome and represent largely what was seen after the enactment of the Sarbanes Oxley Act. The EPA has not provided a thorough explanation for such volume of reporting required and the extent to which the EPA is broadening its scope of the collection of information. The volume of records and supporting documents for calculations that must be kept for 5 years requires additional personnel, including key individuals knowledgeable to the Rule, and administrative staff to format, organize and maintain the paperwork.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: Ram K. Singhal
Commenter Affiliation: Rubber Manufacturers Association (RMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0600
Comment Excerpt Number: 16

Comment: EPA objects strenuously to the amount of recordkeeping in the proposed rule and questions whether EPA has adequately considered the benefit and the cost of such data acquisition procedures. We suggest at a minimum that it is not necessary to submit documentation of the process used to collect the necessary data for emissions calculations, the names and document of key personnel involved in such calculations and reporting or a written QAPP. Furthermore, EPA should recognize that log books are generally not maintained, because information on throughput is generally documented electronically, even in relatively small operations. We strongly urge EPA to amend these requirements accordingly to remove unnecessary information.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: Michael Carlson
Commenter Affiliation: MEC Environnemental Consulting
Document Control Number: EPA-HQ-OAR-2008-0508-0615
Comment Excerpt Number: 11

Comment: The agency lists 12 items which are required to be maintained to satisfy the proposed recordkeeping requirement (16475). The agency concludes: Since the above information [12 items] must be collected in order to calculate GHG emissions, the added burden of maintaining records of that information should be minimal (16463, 16476). It should be pointed out that a written QAPP and a log book documenting procedural changes do not have to be collected or prepared in order to calculate GHG emissions. These redundant items, which are costly to prepare and maintain, are not essential and should not be included in the list of record-keeping requirements.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: Paul R. Pike
Commenter Affiliation: Ameren Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0487.1
Comment Excerpt Number: 9

Comment: EPA proposes in § 98.3(g), to require retention of "all required records for at least 5 years." Ameren objects to this requirement to the extent it applies to records created under Part 75, which only requires retention of records for 3 years. 40 C.F.R. §§ 72.9(f)(ii), 75.57(a). The 3 year record retention period was adopted in the initial Part 75 rulemaking and EPA should justify the increase for this program to mandate a longer period of retention EPA is also proposing § 98.3(g)(1) (10)., to require a number of additional records, including lists of units, data categorized by fuel type, results of fuel analysis, emission factors, operating data, missing data calculations, a log book, and written quality assurance performance plan ("QAPP"). Part 75 units already have recording and reporting requirements and EPA should specify that the records created under Part 75 are sufficient in themselves to satisfy those requirements with respect to CO_2. Requiring ARP sources to create new or different records to support their CO_2 data are contrary to EPA's stated goals of building on (rather than duplicating) existing requirements. EPA is also proposing to require recording of the "names and documentation of key facility personnel involved in calculating and reporting the GHG emissions." § 98.3(g)(7). By virtue of the DR's certification, EPA has already required facilities to identify a person who is responsible for responding to Agency questions regarding calculation and reporting of data. The DR can, upon request, provide more specific information to the Agency, including the names or people involved in calculating and reporting emissions, as needed. There could be dozens of individuals involved in the process of calculating emissions during any one year and it is not clear from this proposal which of them should be on this list or what kind of "documentation" should be included. Although most companies will, by virtue of a combination of Quality Assurance/Quality Control Plans, Standard Operating Procedures, and personnel records, have recorded information necessary to document those responsible for various tasks, it is not reasonable to require creation of a separate record for these purposes. If EPA is simply interested in having a contact other than the DR to answer technical questions regarding the data submitted, EPA could include an option for the DR to specify a technical contact in each report.

Response: See the responses to comments EPA-HQ-OAR-2008-0508-0504.1, excerpt 20 and EPA-HQ-OAR-2008-0508-0493.1, excerpt 17.

Commenter Name: Lauren E. Freeman
Commenter Affiliation: Hunton & Williams LLP
Document Control Number: EPA-HQ-OAR-2008-0508-0493.1
Comment Excerpt Number: 18

Comment: EPA proposes to require recording of the "names and documentation of key facility personnel involved in calculating and reporting the GHG emissions." Proposed § 98.3(g)(7). This requirement is neither necessary nor sufficiently specific. By virtue of the DR's certification, EPA has already required facilities to identify a person who is responsible for responding to Agency questions regarding calculation and reporting of data. The DR can, upon request, provide more specific information to the Agency, including the names of people involved in calculating and reporting emissions, as needed. Under Part 75, there could be dozens of individuals involved in the process of calculating emissions during any one year, and it is not clear from this proposal which of them should be on this list or what kind of "documentation" should be included. Although most companies will, by virtue of a combination of Quality Assurance/Quality Control Plans, Standard Operating Procedures, and personnel records, have recorded information necessary to document those responsible for various tasks, it is not reasonable to require creation of a separate record for these purposes. If EPA is simply interested in having a contact other than the DR to answer technical questions regarding the data submitted, EPA could include an option for the DR to specify a technical contact in each report.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12.

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: 7

Comment: A regulated facility that is required to report GHGs must retain all required records for at least 5 years including but not limited to; the data used to calculate GHG emissions, the process used to collect the data and calculate emissions, all emissions factors, and the "names and documentation of key personnel involved in calculating and reporting GHG emissions." In light of the fact that reporters must certify each report, we believe retention of documentation of staff whom collected data, performed calculations and reported the emissions is excessive and inconsistent with existing Clean Air Act (CAA) regulations, none of which are this stringent.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: Michael W. Stroben
Commenter Affiliation: Duke Energy Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0407.1
Comment Excerpt Number: 6

Comment: Among the records that the Agency proposes that each reporting facility be required to keep are the "names and documentation of key facility personnel involved in calculating and reporting the GHG emissions." This requirement is neither necessary, nor sufficiently specific. By virtue of the designated representative's certification, EPA has already required facilities to identify a person who is responsible for responding to Agency questions regarding calculation

and reporting of data. The designated representative (DR) can, upon request, provide more specific information to the Agency, including the names or people involved in calculating and reporting emissions, as needed. There could be dozens of individuals involved in the process of calculating emissions during any one year and it is not clear from this proposal which of them should be on this list or what kind of “documentation” should be included. Although most companies will, by virtue of a combination of Quality Assurance/Quality Control Plans, Standard Operating Procedures, and personnel records, have recorded information necessary to document those responsible for various tasks, it is not reasonable to require creation of a separate record for these purposes. If EPA is simply interested in having a contact other than the DR to answer technical questions regarding the data submitted, EPA could include an option for the DR to specify a technical contact in each report.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 22

Comment: Section 98.3(g)(7) requires reporters to retain a record of the names and documentation of key facility personnel involved in calculating and reporting the GHG emissions. This requirement is excessive given the requirement for reporters to certify each report and inconsistent with the existing Clean Air Programs that require reports to be certified but do not require reporters to retain documentation of personnel involved in gathering emissions data and preparing reports.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12.

Commenter Name: Caroline Choi
Commenter Affiliation: Progress Energy
Document Control Number: EPA-HQ-OAR-2008-0508-0439.1
Comment Excerpt Number: 15

Comment: EPA proposes to require recording of the "names and documentation of key facility personnel involved in calculating and reporting the GI IG emissions." This requirement does not appear to be necessary, and it is not sufficiently specific. By virtue of the DR’s certification, EPA has already required facilities to identify a person who is responsible for responding to Agency questions regarding calculation and reporting of data. The DR can, upon request, provide more specific information to the Agency, including the names or people involved in calculating and reporting emissions, as needed. Under Part 75, there could be dozens of individuals involved in the process of calculating emissions during any one year, and it is not clear from this proposal which of them should be on this list or what kind of "documentation" should be included. Although most companies will, by virtue of a combination of Quality Assurance/Quality Control Plans, Standard Operating Procedures, and personnel records, have recorded information necessary to document those responsible for various tasks, the Company believes that it is not reasonable to require creation of a separate record for these purposes. If EPA is interested in having a contact other than the DR to answer technical questions regarding the data submitted,

Progress Energy recommends that EPA include an option for the DR to specify a technical contact in each report.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12.

Commenter Name: [name not given]
Commenter Affiliation: Graphic Arts Coalition (GAC)
Document Control Number: EPA-HQ-OAR-2008-0508-0701.1
Comment Excerpt Number: 7

Comment: In the proposed rule a regulated facility that is required to report GHGs must retain all required records for at least 5 years including but not limited to; the data used to calculate GHG emissions, the process used to collect the data and calculate emissions, all emissions factors, and the "names and documentation of key personnel involved in calculating and reporting GHG emissions."5 In light of the fact that reporters must certify each report, we believe retention of documentation of staff that collected data, performed calculations and reported the emissions is excessive and inconsistent with existing Clean Air regulations.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12.

Commenter Name: See Table 3
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 51

Comment: §98.3(g)(7) requires reporters to retain a record of the names and documentation of key facility personnel involved in calculating and reporting the GHG emissions. This requirement is excessive given the requirement for reporters to certify each report. This requirement is also inconsistent with other programs that require reports to be certified but do not require reporters to retain documentation of personnel involved in gathering data, performing calculations, and preparing reports.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12.

Commenter Name: Sarah B. King
Commenter Affiliation: The DuPont Company
Document Control Number: EPA-HQ-OAR-2008-0508-0604.1
Comment Excerpt Number: 17

Comment: §98.3(g)(7) requires reporters to retain a record of the names and documentation of key facility personnel involved in calculating and reporting the GHG emissions. This requirement is excessive given the requirement for reporters to certify each report and inconsistent with the existing Clean Air Programs that require reports to be certified but do not require reporters to retain documentation of personnel involved in gathering emissions data and preparing reports.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12.

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 23

Comment: Marathon opposes the unnecessarily extensive and burdensome recordkeeping requirements. Specifically, Marathon opposes unnecessary recordkeeping requirements such as listing the names of personnel involved in emissions calculations and creating a logbook to document procedural changes. These requirements are broad and therefore could encompass many issues. Marathon requests that because listing the names of personnel are unnecessary (especially since this is being certified) and ambiguous and procedural changes will be documented through another record-keeping requirement, that EPA remove these from the record-keeping requirements.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12.

Commenter Name: See Table 3
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 52

Comment: Under §98.3(g)(9), reporters are required to maintain a log book documenting procedural changes to the GHG emissions accounting methods and changes to the instrumentation critical to GHG emissions calculations. Documenting the information in a log book is redundant. Under §98.3(g)(2), (3), (4) and (6), the reporter is required to document the results of all quality assurance tests for continuous monitoring systems and flow meters, the process used to collect the necessary data for the GHG emissions calculations, the GHG emissions calculations, the methods used, and the operating data and process data used for the GHG emissions calculations. The documentation under §98.3(g)(2), (3), (4) and (6) will show if there was a change to the emissions accounting methods and the instrumentation used to calculate emissions.

Response: Regarding the proposed requirement for a logbook, see the response to comment EPA-HQ-OAR-2008-0508-0533.1, excerpt 15. For a discussion of EPA's changes to the recordkeeping requirements under proposed §98.3(g), see the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: Lisa D. Schmidt
Commenter Affiliation: Dow Corning Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0562
Comment Excerpt Number: 5

Comment: Other aspects of the proposed rules such as, maintaining log books that document changes in calculations for emissions or installation of different instrumentation would result in excessive burden to our facilities. The recordkeeping necessary for submitting final emission data can serve the same purpose.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0533.1, excerpt 15.

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: 15

Comment: GrafTech recommends that all recordkeeping references to “log”, e.g. “log book” in §98.3(g)(9) and “maintenance log” in §98.3(g)(1 1)(i), be eliminated, as this is archaic terminology and, to reduce the burden of compliance, each facility should be given the flexibility to retain the required documentation in any format and/or location that meets the other specified criteria under the rule. For example, many companies today use maintenance software to track, schedule and document preventive maintenance and repair activities on critical equipment, so these records should provide sufficient documentation for maintenance, repair, calibrations, etc.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0533.1, excerpt 15.

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: 16

Comment: Documentation of procedures for calculation methods should not require a log book with overly specific requirements but instead utilize similar procedures as current emission inventories (e.g., documentation of any method changes).

Response: See the response to comment EPA-HQ-OAR-2008-0508-0533.1, excerpt 15.

Commenter Name: Kyle Pitsor
Commenter Affiliation: National Electrical Manufacturers Association (NEMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0621.1
Comment Excerpt Number: 12

Comment: The NEMA Carbon/Manufactured Graphite EHS Committee recommends that all recordkeeping references to "log", e.g. "log book" in §98.3(g)(9) and "maintenance log" in §98.3(g)(11)(i), be eliminated, as this is archaic terminology and, to reduce the burden of compliance, each facility should be given the flexibility to retain the required documentation in any format and/or location that meets the other specified criteria under the rule. For example, many companies today use maintenance software to track, schedule and document preventive maintenance and repair activities on critical equipment, so these records should provide sufficient documentation for maintenance, repair, calibrations, etc.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0533.1, excerpt 15.

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 24

Comment: Marathon supports giving flexibility to regulated entities to allow current methods of internal recordkeeping to meet the requirements. Additionally, Marathon supports that records be allowed to be maintained in any reasonable format (including electronic or paper records). These records should not be required to he onsite. They should be accessible should EPA require them to be brought forward for an audit.

Response: EPA agrees and has made changes to clarify that records may be retained in electronic or paper format. See the responses to comments EPA-HQ-OAR-2008-0508-0533.1, excerpt 15, and EPA-HQ-OAR-2008-0508-0504.1, excerpt 20. Regarding the allowable location of records, see the response to comment EPA-HQ-OAR-2008-0508-0625, excerpt 10.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 141

Comment: Although §§98.3(g) and 98.3 17 do not specifically require that records be maintained on-site, the preamble does indicate such intent: "A full list of records that must be retained onsite is included in proposed 40 CFR part 98, subparts A and EE.´ (preamble page 16553, section EE.6)" Many companies use central purchasing systems including off-site data and filing systems for material purchases including coke. These purchase order copies, etc., are not available from the site as the central groups only provide the summary data in plant cost sheets. We recommend that EPA revise the proposed language to ensure that any request for these records allow for a reasonable time frame within which to produce them.

Response: The rule does not require that records be kept on site. See the response to comment EPA-HQ-OAR-2008-0508-0625, excerpt 10.

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 23

Comment: BP is concerned with the extra burden and complicated logistics that would be required by the supplemental data that EPA seeks under the reporting rule. Despite the flexibility noted by EPA in the variety of formats acceptable for recordkeeping, the large volume of records required is not amenable to storage at remote field locations, and hence made immediately accessible for potential on-site inspections. For example, maintaining all of the required records and back-up data at our North Slope Alaska, Offshore Gulf of Mexico, or dispersed lower 48 exploration and production operations would be extraordinarily difficult. In order to maintain accurate records and back-up documentation for demonstrating compliance, companies will have to rely on data centers and centralized archiving procedures in support of such remote locations as offshore production platforms, compressor stations, fuel supply terminals, to name just a few.

BP recommends that EPA allow recordkeeping and data storage at any company location in the U.S. as long as the data can be made reasonably available to EPA.

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 subpart W at this time.

Commenter Name: Brad Bateman
Commenter Affiliation: Western States Dairy Producers Trade Association
Document Control Number: EPA-HQ-OAR-2008-0508-0365.1
Comment Excerpt Number: 11

Comment: No need exists to require that all reporting sources keep records for five years onsite and to keep the records open for inspection. By the terms of the proposed rule, the EPA will have the information electronically, and has no need to require dairy farms to keep records.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0493.1, excerpt 16.

Commenter Name: John M. Batt
Commenter Affiliation: Airgas, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0408.1
Comment Excerpt Number: 11

Comment: We support the EPA's proposal that required records can be kept in an electronic or hardcopy format. In many cases, electronic recordkeeping is often a more efficient and effective way to maintain many records.

Response: EPA thanks the commenter for their input.

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: 7

Comment: The proposed rule requires a variety of records to be kept, including written quality assurance performance plan (QAPP), log book, documentation of personnel, etc. The Department would like EPA to clarify whether these requirements would need to be added to the General Conditions of a Part 70 Operating Permit.

Response: At this time, the requirements of this reporting rule do not have to be incorporated into a Part 70 operating permit. Any such requirement would be adopted as part of a future rulemaking.

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

Comment Excerpt Number: 31

Comment: In 98.3(g)(9), there is no need for a log book. The calculations are already documented and retained. See § 98.3(g)(4) and (g)(5). Specification of redundant requirements simply increases the chance that facilities will somehow fail to keep all of the multiple copies of information up-to-date and create enforcement opportunities for paperwork violations. Duplicative regulation and duplicative violations is not a legitimate basis for establishing regulations. EPA has what is needed in the data, factors, and emissions calculations. It does not need anything more.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0533.1, excerpt 15.

Commenter Name: Steven J. Rowlan
Commenter Affiliation: Nucor Corporation (Nucor)
Document Control Number: EPA-HQ-OAR-2008-0508-0605.1
Comment Excerpt Number: 28

Comment: In 98.3(g)(3), the requirement to retain "documentation of the process used to collect the necessary data for the GHG emissions calculations" should be deleted because (1) the data are presented; (2) the calculations are presented and this is sufficient to enable verification if needed. Documentation of the process used is vague, provides insufficient guidance to the regulated community as to what is required, is burdensome to write for each unit or activity that may be present at a facility, will likely be obsolete very quickly, requiring continuous upkeep, and diverts resources away from actually completing the task at hand and all other environmental regulatory functions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20 and EPA-HQ-OAR-2008-0508-0423.2, excerpt 23.

Commenter Name: Steven J. Rowlan
Commenter Affiliation: Nucor Corporation (Nucor)
Document Control Number: EPA-HQ-OAR-2008-0508-0605.1
Comment Excerpt Number: 29

Comment: In 98.3(g)(6), facility operating data are already encompassed within proposed § 98.3(g)(2). These categories should be combined or else (g)(6) should be eliminated.

Response: Section 98.3(g) has been clarified to remove this redundant requirement.

Commenter Name: Steven J. Rowlan
Commenter Affiliation: Nucor Corporation (Nucor)
Document Control Number: EPA-HQ-OAR-2008-0508-0605.1
Comment Excerpt Number: 27

Comment: In 98.3(g)(1), it is not clear what benefit the "list of all units, operations, processes, and activities for which GHG emission were calculated" confers. This information is directly

available from the "GHG emissions calculations and methods used" required under proposed § 98.3(g)(4). Duplicative requirements should be eliminated.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0504.1, excerpt 20.

Commenter Name: Steven J. Rowlan
Commenter Affiliation: Nucor Corporation (Nucor)
Document Control Number: EPA-HQ-OAR-2008-0508-0605.1
Comment Excerpt Number: 26

Comment: In 98.3(g), revise as follows: "For records that are electronically generated or maintained, during the five year record retention period the equipment or software....

Response: The requirement specified in proposed 98.3(g) clearly states that facilities must keep records for 5 years. It is not necessary for EPA to reiterate this retention period in the sentence specified by the commenter. The proposed 5-year retention period has been changed in the final rule to a 3-year retention period.

Commenter Name: Steven J. Rowlan
Commenter Affiliation: Nucor Corporation (Nucor)
Document Control Number: EPA-HQ-OAR-2008-0508-0605.1
Comment Excerpt Number: 30

Comment: In 98.3(g)(7), the names of the individuals involved are not relevant to reviewing the calculation methodologies and answers that are obtained. If the facility is large or decentralized, the number of individuals involved rapidly becomes extremely large, particularly for reporting. Nucor recommends that this requirement be eliminated entirely. If that is not feasible, then this requirement should be limited to the individual(s) performing the calculations. Otherwise, every production employee in the plant would need to be listed if routine production records that the employees enter as part of their job is considered "reporting" GHG emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12.

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4. QAPP CONTENTS

NOTE: The final rule requires the development of a GHG Monitoring Plan rather than a Quality Assurance Project Plan (QAPP). For more information on the requirements of the Monitoring Plan, see the preamble section on general recordkeeping requirements.

Commenter Name: Renae Schmidt
Commenter Affiliation: CITGO Petroleum Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0726.1
Comment Excerpt Number: 7

Comment: Finally, CITGO strongly believes that sufficient time should be allowed to develop and put into practice procedures to ensure accuracy of measurement. It is recommended that a

facility be given to at least the end of year 2010 for development and implementation of written quality assurance performance plan (QAPP).

Response: The EPA is not incorporating the commenter's suggestion that sources be given until the end of 2010 to develop a Monitoring Plan (see note at the top of this section). The EPA expects that the Monitoring Plan will be developed by no later than April 1, 2010, which is the date when the full monitoring approach will be implemented by most sources. The purpose of plan is to document the process and procedures for collecting and reviewing the data needed to estimate annual GHG emissions. Therefore, this plan needs to be in place prior to collecting data to ensure that consistent and accurate data are collected. The EPA estimates that 3 months is a reasonable time for a source to develop this plan since, as explained in the preamble to the final rule, the plan does not have to be complex and can rely on existing corporate documents like SOPs and Monitoring Plans developed for compliance with other air programs. While some facilities may use best available methods (BAM) to estimate GHG emissions for a period beyond 3 months (after April 1, 2010), facilities still need to have a plan developed for the basic procedures that will be used to collect data. A facility's data collection methods may change and evolve as the facility gains experience with monitoring equipment and develops more effective procedures for data management. Under the final rule, the Monitoring Plan must be revised to reflect these changes.

Commenter Name: Steven J. Rowlan
Commenter Affiliation: Nucor Corporation (Nucor)
Document Control Number: EPA-HQ-OAR-2008-0508-0605.1
Comment Excerpt Number: 33

Comment: In 98.3(g)(11), Nucor strongly objects to the detailed QAPP and related procedures. This is an emissions reporting program. There is no cap-and-trade program; no limitation on CO_2 emissions, no allowances or other basis requiring such detailed provisions. The five-year record retention requirement should be affirmatively restated in this section. Nucor particularly objects to the idea that its maintenance activities somehow become “regulatory requirements” because of the presence of a QAPP. EPA should expressly disavow any intention of making activities listed in a QAPP “regulatory required” unless already required by an applicable regulation or standard.

Response: See the preamble section on general recordkeeping requirements for the response on the QAPP. As discussed, the Monitoring Plan paragraph in the final rule explicitly states that the Monitoring Plan (which replaces the proposed QAPP) can rely on references to existing corporate documents. The Monitoring Plan will be necessary for EPA to verify reported data. For further discussion of EPA's verification approach and the need for the records required under the rule, see the preamble for the response on emissions verification approach and the response to comment EPA-HQ-OAR-2008-0508-0604.1, excerpt 5 in the comment response document on Subpart A: Content of Annual Report. Additionally, the period of time that all records must be maintained is clearly stated in paragraph 98.3(g) and does not need to be reiterated elsewhere in section 98.3(g).

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

Comment Excerpt Number: 34

Comment: In 98.3(g)(11)(i), Nucor objects to the maintenance log requirement to the extent that it is an additional document beyond what is already maintained. Nucor objects to "other instrumentation used to provide data" because it is not clear what those data are (does this include all production equipment that may be used to record production data considered during the calculation process? Does this mean that all maintenance activities on all plan DAR systems are now required to be included in the QAPP?). The agency has moved far beyond its congressional mandate.

Response: See the preamble section on general recordkeeping requirements for the response on the QAPP. As discussed, the Monitoring Plan paragraph in the final rule explicitly states that the Monitoring Plan (which replaces the proposed QAPP) can rely on references to existing corporate documents and maintenance records.

Commenter Name: Steven J. Rowlan
Commenter Affiliation: Nucor Corporation (Nucor)
Document Control Number: EPA-HQ-OAR-2008-0508-0605.1
Comment Excerpt Number: 35

Comment: In 98.3(g)(11)(ii), Nucor objects to the requirement for "calibrations and other quality assurance tests performed on ... other instrumentation". It is not clear how one calibrates or conducts quality assurance tests on DAR systems, for example.

Response: The commenter did not define what a DAR system is, and therefore, we cannot respond to this comment. However, the calibration requirements are specified in each subpart and apply to the instruments that measure the specific data elements (e.g., flow, mass) required by the subpart.

Commenter Name: Filipa Rio
Commenter Affiliation: Alliance of Automobile Manufacturers (Alliance)
Document Control Number: EPA-HQ-OAR-2008-0508-0630.1
Comment Excerpt Number: 23

Comment: The requirement to maintain a written quality assurance performance plan ("QAPP") is unnecessarily burdensome for a reporting effort of this nature and runs contrary to existing self-certification programs such as the annual TRI reports submitted by industry. A QAPP is not required for TRI reports and we are not aware of any data quality issues under this program. In the case of stationary fuel combustion sources, the facility would be required to document the procedures to ensure the accuracy of fuel usage estimates via calibration of fuel flow meters and other measurement devices. This will be particularly problematic for many facilities as flow meters are typically owned by the fuel supplier. Not only would it present difficulties collecting and providing records of calibration, but facilities would not be capable of enforcing its internal quality assurance procedures on outside fuel suppliers. Many existing EPA programs rely upon fuel use for compliance and do not require such rigorous monitoring and QA/QC requirements. Our members report that their facilities have never experienced problems of any significance with the accuracy of fuel flow meters. In fact, fuel suppliers routinely monitor and calibrate such meters to ensure accurate metering. It appears that EPA recognized this unnecessary burden at §

98.34(d)(1) (74 FR 16636), which states that calibration of gas billing meters is specifically excluded for sources which utilize the Tier 3 calculation methodology. The proposed rule does not clearly state that calibration of gas billing meters is excluded for Tiers 1 and 2. At a minimum, EPA should carry this exclusion over to the Tier I and Tier 2 calculation methodologies to specifically exclude calibration of gas billing meters used to estimate fuel usage. With regard to the monitoring and reporting of emissions related to the use of liquid fuels, we ask that the agency clarify that our current practices of determining use from purchases and tank inventories will be acceptable. It would be very costly and of no added value to meter and record use for individual engines and heaters. To the extent that a liquid fuel such as distillate is used at a site both in reportable units and excluded units, we would also ask for clarification that hours of operation of engines can be used to allocate usage between reportable and excluded operations. Overall, the Alliance recommends that detailed monitoring and QA/QC requirements, including associated recordkeeping, be eliminated altogether from the proposed rule for end-users.

Response: See the preamble section on general recordkeeping requirements for the response on the QAPP. Regarding calibration of gas billing meters for Tier 1 and Tier 2, these tiers allow the use of "company records" for determining fuel use. Gas billing records would constitute a company record. The rule specifies no calibration requirements for fuel flow for Tiers 1 and 2. The final rule clarifies that oil tank drop measurements are allowed for determining fuel use. If consumption of fuel from any exempt equipment (e.g., emergency equipment and portable equipment) is necessary for determining fuel flow for covered units, then the reporter is responsible for determining fuel by using the best available company data. The method would be documented in the GHG Monitoring Plan. If equipment operating hours can credibly be correlated to fuel use and is documented in the GHG Monitoring Plan, then that method should be acceptable.

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: 14

Comment: Considering that this will be a self-certifying program, the requirement to maintain a QAPP is inconsistent with other self-certification programs, such as the TRI report, state annual emission inventory reports, Title V certification and deviation reports, and others, and additionally will be unduly burdensome. In the gathering of data and preparation of such self-certifying reports, the regulated entities have mature programs in place that have proven successful and upon which GHG inventory emission reporting requirements can be added. EPA should therefore recognize that these programs are in place and should not mandate additional elements such as those proposed for the development of a QAPP. This requirement could entail considerable cost because it must include procedures for maintenance and repair and calibrations for all CEMS, flow meters, and other instrumentation used to provide data for GHG emissions. For example, for combustion units, this could include steam flow meters and other parameters allowing back-calculation of coal input where gravimetric feeders are not available or fuel flow meters for each combustion unit. Standard industry practices should be acceptable for these purposes. In addition, flow meters provided by the utility for commercial billing purposes are typically maintained and calibrated by the utility. In these cases the facility should not be required to develop a QAPP for the utility's equipment, and utility-owned meters used for commercial purposes should suffice entirely. Most of these are "sealed" and may be subject to

state or county auditor programs for accuracy. Hence, CIBO recommends that the QAPP and QA/QC requirements, including the detailed monitoring and recordkeeping elements be removed from the proposed rule.

Response: For calibrations pertaining to boilers, the final subpart C rule (General Stationary Fuels Combustion sources) allows reporters to use "corporate records" for fuel consumption at small facilities. For larger facilities that must use flow meters, the rule provides flexibility to use either calibration procedures specified by the flow meter manufacturer, industry-accepted standards, or a consensus standard. Fuel billing meters are not required to be calibrated in most situations. With such flexibility, the Monitoring Plan serves to document the specific procedures that a facility chooses to use to gather the input data is needed to estimate emissions, and to ensure that consistent procedures are over time. As explained in the preamble section on content of the annual report, the Monitoring Plan need not be burdensome and can rely on any existing, relevant corporate documents and records currently used for QA/QC purposes.

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: 3

Comment: Please reconsider the necessity for much of the highly prescriptive language primarily for quality assurance and recordkeeping, and the more burdensome requirements as EPA completes its review of public comments and finalizes the GHG reporting rule.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 26

Comment: 1. Section 98.3 (g)(7) requires reporters to retain a record of the names and documentation of key facility personnel involved in calculating and reporting the GHG emissions. This requirement is excessive given the requirement for reporters to certify each report. This requirement is also inconsistent with other programs that require reports to be certified but do not require reporters to retain documentation of personnel involved in gathering data, performing calculations, and preparing reports. 2. Section 98.3 (g)(1 1) requires reporters to maintain a written quality assurance performance plan (QAPP) and information collected under the QAPP. At a minimum, the QAPP must include (or refer to separate documents that contain) a detailed description of the procedures that are used for the maintenance, repair, and calibrations and other quality assurance tests performed on the continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHG emissions report. For continuous monitoring systems, compliance with standard industry practices will assure sufficient maintenance, and hence a separate QAPP is unnecessary. Also, "detailed descriptions of the procedures" implies that all possible failure modes can be foreseen, which is not realistic. Sometimes repair procedures are ad hoc because the incident could not be anticipated and the repair is based on trouble shooting results and mechanic knowledge of the equipment. Requiring

a separate QAPP for “all” instrumentation used to provide data for the GHG emissions report is excessive and duplicative with equipment manufacture instructions and standards (such as API, ANSI) which address measurement, instrument calibration, and maintenance; and unnecessarily burdensome. 3. Section 98.3 (g)(1 1)(ii): In the proposed rule, flow meters would have to be calibrated or verified by January 1st 2010. This requirement is technically impossible to meet due to the number of flow meters at facilities, coupled with the projected finalization of the reporting rule in November of 2009. Also, some instrumentation may require maintenance that prevents calibration, where such maintenance cannot be conducted until a shutdown. BP does not believe EPA should require a shutdown of a facility to calibrate these instruments.

Response: For a response on retaining the names and documentation of key facility personnel, see the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12 in the recordkeeping requirements section of this volume. For a response on Monitoring Plan requirements, see the response to comment EPA-HQ-OAR-2008-0508-0605.1, excerpt 34. The Monitoring Plan does not require procedures for unforeseen failure modes for monitors. The Monitoring Plan is intended to address the approach for routine maintenance, calibration, and repair. The plan can incorporate by reference any existing corporate documents used for maintenance and QA/QC of monitoring equipment. For a response on the flow meter comment, see preamble summary of comments and responses on initial reporting year and best available methods.

Commenter Name: Karyn Andersen
Commenter Affiliation: RR Donnelley
Document Control Number: EPA-HQ-OAR-2008-0508-0345.1
Comment Excerpt Number: 2

Comment: The written QAPP would be an extensive process of tracking maintenance, repair, calibration and testing on any systems involved in measuring or monitoring the data reported. This will end up being very labor intensive.

Response: See the preamble for the response on the general recordkeeping requirements.

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: 2

Comment: 40 CFR, Part 98, Subpart A requires a written quality assurance performance plan (QAPP) as part of the recordkeeping requirements for facilities subject to the reporting rule. Does the QAPP require approval from the EPA? If so, when? How does a facility which discovers that it may meet one of the complex criteria during a year or that it may, in a given year, exceed the 25,000 ton threshold, have such a plan, when the year is already in progress? The rule should provide some guidance as to the time allowed to produce the Plan dating from a clear triggering event.

Response: See the preamble for the response on the general recordkeeping requirements. The Monitoring Plan required by the final rule would not need to be approved by the EPA, but would need to be kept up to date and be available during facility audits. A facility that becomes subject to the rule during a reporting year would need to prepare a Monitoring Plan at the same time it

begins to collect the data needed to calculate GHG emissions. In cases described in the comment, the data collection procedures and level of detail in the plan may evolve over time, but a plan must be in place to document the procedure being used to collect data.

Commenter Name: Jeffrey A. Sitler
Commenter Affiliation: University of Virginia (UVA)
Document Control Number: EPA-HQ-OAR-2008-0508-0675.1
Comment Excerpt Number: 1

Comment: §98.3(g)(11) requires a written quality assurance performance plan (QAPP) that must, at minimum include procedures related to "maintenance and repair of all continuous monitoring systems" and "calibrations and other quality assurance tests performed on the continuous monitoring systems." For those facilities that are not using continuous monitoring systems data in their calculations, is a QAPP still required and if so, what procedures should it contain?

Response: See the preamble for the response on the general recordkeeping requirements. Those facilities that do not use monitoring systems, such as those that use a mass balance approach for estimating emissions, would still need to complete a Monitoring Plan for data collection.

Commenter Name: Sam Chamberlain
Commenter Affiliation: Murphy Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0625
Comment Excerpt Number: 17

Comment: Throughout the reporting rule, references are made regarding the requirements for a QAPP. This section stipulates calibration requirements related to providing data for GHG emission calculations, and that procedures be developed for determining the accuracy of each. The QAPP at a minimum, must include; a description of procedures used for maintenance, and repair of all CEMS, flow meters, other instrumentation for GHG reporting, a maintenance log, calibrations, and other QA tests performed on CEMS, flow meter and other instrumentation. Murphy believes that we have preventive maintenance records, work orders and other data management systems, in an electronic format that can be readily accessible. We consider these systems in place as compliant with a QAPP plan. However to be absolutely certain, we are meeting the intent and specifics of the regulation, a GAP analysis will need to be conducted. It is impossible to conduct a GAP analysis for QAPP compliance on or before January 1, 2010 in preparation for the intended reporting period to begin. Murphy is also evaluating opportunities to consolidate the flow measurements into a single flow measurement device to reduce compliance costs. Murphy recommends EPA not require a QAPP the first year of reporting. This will give time for Murphy and other companies to conduct a GAP analysis of their existing systems compared to the QAPP requirements. This GAP analysis is estimated to cost between $100,000-$200,000per reporting facility.

Response: See the preamble for the response on the general recordkeeping requirements. See the response to commenter EPA-HQ-OAR-2008-0508-0726.1, excerpt 7 with respect to the schedule for developing the Monitoring Plan in the final rule. In addition, the EPA disagrees with the commenter that the Monitoring Plan should not be completed in the first year because of the need to perform GAP analysis. The monitoring requirements are clearly identified in each

subpart and are based on current monitoring practices, whenever possible and on readily available information and data when they are in addition to common industry monitoring. In addition, the commenter indicates that they have been determining a company-wide GHG emissions inventory since 2001. Since this GHG reporting rule is based on existing GHG inventory approaches, it is reasonable to assume that the commenter is already monitoring most or all of the parameters needed for this rule. Relatively few gaps should exist between their current monitoring and the monitoring specified in this rule. Under the "best available monitoring methods" procedures in subpart A of the final rule, reporters can obtain additional time, if needed, to upgrade monitoring equipment or perform the required QA procedures.

Commenter Name: Kyle Pitsor
Commenter Affiliation: National Electrical Manufacturers Association (NEMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0621.1
Comment Excerpt Number: 11

Comment: The NEMA Carbon/Manufactured Graphite EHS Committee agrees with the calibration requirements contained in §98.3(g)(11)(ii). However, requirements for maintaining a maintenance log as stipulated in §98(g)(11)(i) seem unnecessary as they would not enhance the accuracy of measurements from flow meters and other instrumentation used to provide data for GHG emissions reported under this part. Calibration records provide ample documented evidence of the accuracy of flow measurements and should be sufficient to assure accurate reporting. The added burden of maintaining a log of maintenance activities on flow measurement devices appears redundant and is not justified in terms of assuring accurate reporting of GHG emissions beyond that obtained from documented calibration records for the instrumentation involved.

Response: The final rule does not require retention of a separate, written maintenance log, but does require reporters to retain maintenance records for flow meters and other instruments used to collect data for GHG reporting. These records can be kept in electronic or written format, and can rely of existing company recordkeeping systems for maintenance and QA/QC. Such records are required to verify the accuracy of GHG estimates.

Commenter Name: Kyle Pitsor
Commenter Affiliation: National Electrical Manufacturers Association (NEMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0621.1
Comment Excerpt Number: 13

Comment: The NEMA Carbon/Manufactured Graphite EHS Committee recommends that the requirement for a written quality assurance performance plan under §98.3(g)(11) be eliminated as excessively burdensome for the type of equipment used for measuring fuel use, monitoring GHG emissions, etc. This language can be replaced with the more typical language under existing permitting provisions under the CAA for priority pollutants and hazardous air pollutants, i.e., that all required measuring and/or monitoring equipment shall be maintained in good operating order. For facilities with CEMS that are currently required under previous environmental regulations, this issue is likely to already be sufficiently addressed under the existing provisions.

Response: See the preamble for the response on the general recordkeeping requirements.

Regarding the comparison to other Clean Air Act programs, many emission standards contain QA/QC procedures similar to those required by the GHG reporting rule. The requirement to maintain monitoring equipment in good operating order is a general requirement that applies in addition to the QA/QC procedures in individual subparts.

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: 14

Comment: GrafTech agrees with the calibration requirements contained in §98.3 (g)(11)(ii). However, requirements for maintaining a maintenance log as stipulated in §98(g)(11)(i) seem unnecessary as they would not enhance the accuracy of measurements from flow meters and other instrumentation used to provide data for GHG emissions reported under this part. Calibration records provide ample documented evidence of the accuracy of flow measurements and should be sufficient to assure accurate reporting. The added burden of maintaining a log of maintenance activities on flow measurement devices appears redundant and is not justified in terms of assuring accurate reporting of GHG emissions beyond that obtained from documented calibration records for the instrumentation involved. GrafTech recommends that the requirement for a written quality assurance performance plan under §98.3 (g)(11) be eliminated as excessively burdensome for the type of equipment used for measuring fuel use, monitoring GHG emissions, etc. This language can be replaced with the more typical language under existing permitting provisions under the CAA for priority pollutants and hazardous air pollutants, i.e., that all required measuring and/or monitoring equipment shall be maintained in good operating order. For facilities with CEMS that are currently required under previous environmental regulations, this issue is likely to already be sufficiently addressed under the existing provisions.

Response: See the preamble for the response on the general recordkeeping requirements. With respect to the comment that a maintenance log is not needed, see the response to comment EPA-HQ-OAR-2008-0508-0621.1, excerpt 11.

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: 17

Comment: APPA recommends that the record retention requirements outlined in part 98.3(g) be replaced by those specified in Part 75. APPA is specifically concerned about the provisions in part 98.3(g) that would require a Quality Assurance Performance Plan which is not defined in the rule. In addition, APPA is not sure if requiring the names of facility personnel who did the calculations, etc. adds any value to data that EPA receives.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0473.1, excerpt 12 in the recordkeeping requirement section of this volume. For a further discussion on Monitoring Plan requirements, see the preamble for the response on the general recordkeeping requirements.

Commenter Name: Sarah B. King

Commenter Affiliation: The DuPont Company
Document Control Number: EPA-HQ-OAR-2008-0508-0604.1
Comment Excerpt Number: 19

Comment: §98.3(g)(11) requires reporters to maintain a written quality assurance performance plan (QAPP) and information collected under the QAPP. At a minimum, the QAPP must include (or refer to separate documents that contain) a detailed description of the procedures that are used for the maintenance, repair, and calibrations and other quality assurance tests performed on the continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHG emissions report. This requirement is overly burdensome and could entail considerable cost to facilities; it is also duplicative for CEMS because the rules that trigger their installation already mandate a quality assurance plan. For other continuous monitoring systems, compliance with standard industry practices will assure sufficient maintenance and repair. Also, detailed descriptions of the procedures imply all possible failure modes can be foreseen, and that is an unrealistic expectation. Sometimes repair procedures are ad hoc because the incident could not be anticipated and the repair is based on trouble shooting results and mechanic knowledge of the equipment. Standard industry practices and existing quality assurance plans should be acceptable for QAPP purposes. Pertinent supporting information should be available and provided upon request.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: See Table 3
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 53

Comment: §98.3(g)(11) requires reporters to maintain a written quality assurance performance plan (QAPP) and information collected under the QAPP. At a minimum, the QAPP must include (or refer to separate documents that contain) a detailed description of the procedures that are used for the maintenance, repair, and calibrations and other quality assurance tests performed on the continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHG emissions report. This requirement is duplicative for CEMS because the rules that trigger their installation already mandate a quality assurance plan. For other continuous monitoring systems, compliance with standard industry practices will assure sufficient maintenance and repair. Also, “detailed descriptions of the procedures” implies that all possible failure modes can be foreseen, which is not realistic. Sometimes repair procedures are ad hoc because the incident could not be anticipated and the repair is based on trouble shooting results and mechanic knowledge of the equipment. Requiring a separate QAPP for “all” instrumentation used to provide data for the GHG emissions report is excessive; duplicative with equipment manufacture instructions and standards (such as API, ANSI) which address measurement, instrument calibration, and maintenance; and unnecessarily burdensome.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: See Table 3
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1

Comment Excerpt Number: 54

Comment: §98.3(g)(11)(ii) In the proposed rule, flow meters would have to be calibrated by January 1st 2010. This requirement is technically impossible to meet due to the number of flow meters at facilities, coupled with the projected finalization of the reporting rule in November of 2009. Also, some instrumentation may require maintenance that prevents verification and/or calibration, where such maintenance cannot be conducted until a shutdown. API does not believe EPA would or should require a shutdown of a facility to calibrate or verify these instruments. For meters and instrumentation which cannot be calibrated or verified without a facility or unit shutdown, API requests an exemption from a calibration compliance date and a provision for them to be calibrated or verified on a schedule consistent with good industry practice.

Response: The final rule does not require that flow meters be calibrated by January 1, 2010. Calibration of flow meters is required by April 1, 2010. In cases where it is infeasible to meet this date, facilities can petition EPA for additional time under the provisions for using best available monitoring methods (98.3(d)). In subpart C for stationary fuel combustion sources, sources that must upgrade existing CEMS to add flow meters have until January 1, 2011 to install and calibrate flow meters. With respect to the issue of calibration frequency and the fact that some instruments cannot be calibrated except during shut-downs, instruments generally only need to be calibrated at the frequency recommended by the equipment manufacturer or on an annual basis, and no specific date is specified. Therefore, these calibrations can be scheduled during shut downs, if necessary. See also the preamble for the response on the selection of the initial reporting year.

Commenter Name: Scott Evans
Commenter Affiliation: CleanAir Engineering (Clean Air)
Document Control Number: EPA-HQ-OAR-2008-0508-0696.1
Comment Excerpt Number: 4

Comment: There are many affected units under this proposed rule that are not required to install CEMS. Instead, these units are required to calculate emissions based on various parametric measurements such as fuel Flow, fuel carbon content, various raw material feed rates, etc. In order to ensure that data from these sources is reliable and comparable between units in a given source category, quality assurance for these various measurements is essential. We support EPA's decision to require a Quality Assurance Performance Plan (QAPP) for all affected sources. We feel that the "plan approach" to QA/QC proposed in this rule (as opposed to a more prescriptive approach to QA/QC) maximizes the flexibility for affected sources while still ensuring highly reliable data. Indeed, the QAPP will form the basis of any subsequent verification activity conducted at the source.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: Scott Evans
Commenter Affiliation: CleanAir Engineering (Clean Air)
Document Control Number: EPA-HQ-OAR-2008-0508-0696.1
Comment Excerpt Number: 5

Comment: The description and specification of the QAPP in the proposed rule lacks the specificity needed to ensure that all areas of QA/QC are adequately addressed. It is important that the QAPP be thorough enough to allow for meaningful verification. To that end, we suggest that the requirements for the QAPP in the rule be more specific to include the following:

1. Identification of each measurement system 2. Identification of parameter being measured.

3. Description of measurement system, including the following elements: type of sensor, major mechanical components, major electrical components and major data acquisition components.

4. Description of the expected precision and accuracy of generated data.

5. Description of any calculations used to convert the raw measurement to the required engineering units (i.e. tons CO_2/yr) including description of any averaging period

6. Description of measurement location.

7. For new installations, manufacturer recommendations or certifications that installed equipment meets ISA, ISO, or other applicable standards.

8. Corrective action procedures to be followed if verification or QA/QC procedures indicate the measurement system is not producing data of acceptable quality.

9. The range of measurement covered by the measurement system.

10. Performance criteria the measurement system must meet to ensure proper operation.

11. A verification procedure to ensure the measurement system is operating properly after initial installation and after repair or replacement of critical components. The plan should also identify the frequency of calibration or accuracy audit checks.

12. Quality assurance and control practices to ensure the continuing validity of data.

13. Description of any special preventive maintenance for the measurement system.

14. Description of temporary monitoring procedures (if any) for periods of downtime due to measurement system maintenance and repairs. We feel that if these elements are included in each QAPP, it will ensure more consistent data, reduce system downtime and provide verifiers (whether EPA or third-party) the information they need to conduct meaningful verifications.

Response: See the preamble for the response on the general recordkeeping requirements. The EPA disagrees that the level of detail described by the commenter is needed in the final Monitoring Plan requirements in the rule. In combination with the Monitoring Plan requirements, the QA/QC requirements specified for each subpart (which are based on and incorporate EPA methods and voluntary consensus standards for many types of monitoring systems) are sufficient to ensure that consistent and reproducible data will be collected. The information requirements recommended by the commenter are already incorporated in each subpart. The rule allows that corporate QA/QC documents can be incorporated by reference into the Monitoring Plan, and it

would be burdensome to require that these procedures be extracted and placed in the Monitoring Plan. Therefore, the level of detail recommended for the monitoring plan itself by the commenter has not been incorporated into the final rule.

Commenter Name: Scott Evans
Commenter Affiliation: CleanAir Engineering (Clean Air)
Document Control Number: EPA-HQ-OAR-2008-0508-0696.1
Comment Excerpt Number: 6

Comment: One comment on the calibration requirements in the proposed rule. The rule states that re-calibrations for all instruments must be conducted at least annually or more frequently if specified by the manufacturer. However, the rule is silent on how often to check the calibration and what happens when a calibration check fails. EPA may want to be specific on this issue since it will inevitably arise at some point. A standard way to deal with this situation is to investigate, initiate a corrective action, and increase the frequency of the calibration interval until it is clear that the problem has been resolved. These issues should be addressed in the QAPP. What to do with the data between the last successful calibration and the failed calibration is a policy issue that EPA may want to consider. Is this missing data subject to the missing data requirements of the rule?

Response: The EPA disagrees with the commenter that the rule is silent on how often to check monitoring instrument calibration. The subparts generally specify that the instruments must be recalibrated annually, or more frequently if specified by the manufacturer. This is the only time at which the calibration must be checked. If missing data requirements must be used when a calibration check exceeds specification, then that requirement would be included in the applicable subpart.

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: 8

Comment: RMA recommends that the EPA exclude the requirement for a written quality assurance plan from the proposed rule. Again, RMA recommends that EPA mirror the requirements in Title V in the area of recordkeeping. These provisions are familiar to industry and work well under Title V, which is the permitting and compliance structure for substantive regulatory limits under the Clean Air Act. It must be noted that the subject NPRM here would mandate reporting, not compliance with regulatory limitations. Since the Title V framework works well in the context of compliance with regulatory limitations, the framework surely would provide suitable compliance assurance for a reporting program. Title V does not require the owner or operator of a facility to maintain a written quality assurance plan. The record keeping requirements under Title V require only that an owner or operator: “establish and maintain such records; make such reports; install, use, and maintain such monitoring equipment, and use such audit procedures, or methods; sample such emissions; keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; submit compliance certifications in accordance with subsection (a)(3) of this section; and provide such other information as the Administrator may reasonably require.” The proposed rule expands on the quality assurance provisions in Title V to require that facilities

maintain a written quality assurance performance plan. (§98.3(g)(1 1)). Owner or operators of a facility are required to include in the QAPP a "detailed description of the procedures that are used for the following activities:

(i) Maintenance and repair of all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHG emissions reported under this part. A maintenance log shall be kept.

(ii) Calibrations and other quality assurance tests performed on the continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHG emissions reported under this part." These additional requirements under the proposed rule place additional burdens on facilities that already maintain compliance with Title V procedures. Again, RMA recommends that EPA exclude the requirement for a written quality assurance plan from the proposed rule.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 24

Comment: Section 98.3(g)(11) requires reporters to maintain a written quality assurance performance plan (QAPP) and information collected under the QAPP. At a minimum, this QAPP must include (or refer to separate documents that contain) a detailed description of the procedures that are used for the maintenance, repair, and calibrations and other quality assurance tests performed on the continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHG emissions report. This requirement is duplicative for CEMS because the rules that trigger their installation already mandate a quality assurance plan. For other continuous monitoring systems, compliance with standard industry practices will assure sufficient maintenance and repair. Also, detailed descriptions of the procedures imply all possible failure modes can be foreseen. This is unrealistic. Sometimes repair procedures are ad hoc because the incident could not be anticipated and the repair is based on trouble shooting results and mechanic knowledge of the equipment. We recommend that EPA recognize and permit the usage of existing QAPPs already in place at facilities.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0631.1, excerpt 26.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0395.1
Comment Excerpt Number: 6

Comment: The proposed rule does not include required elements of a QAPP. This requirement can have a major time and expense impact on businesses. Some estimate that a QAPP would result in significant costs. EPA has greatly underestimated the costs of complying with this reporting rule for manure management facilities if a QAPP is required. TCFA strongly urges the EPA to rethink the need for this requirement.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: Lisa D. Schmidt
Commenter Affiliation: Dow Corning Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0562
Comment Excerpt Number: 6

Comment: A written quality assurance performance plan will require time and additional resources, and will already be accomplished through our established preventative maintenance procedures.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: Rechelle Hollowaty
Commenter Affiliation: Tyson Foods, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0379.1
Comment Excerpt Number: 8

Comment: Although many of the records EPA is proposing seem somewhat acceptable to proving the basis for a facilities GHG emission rates, the requirement of developing and maintaining a QAPP seems excessively unreasonable. This new type of requirement is not currently in placed at facilities required to submit annual emissions inventories for other pollutants. All facilities' air permits in general through the Title V program have put in a place a means of documenting compliance and retaining records. These same records will also suffice in showing compliance with the GHG reporting requirements. Therefore, Tyson urges EPA to eliminate their proposal requiring the development of a QAPP.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: Leslie Sue Ritts
Commenter Affiliation: National Environnemental Development Association
Document Control Number: EPA-HQ-OAR-2008-0508-0504.1
Comment Excerpt Number: 12

Comment: NEDA/CAP questions the benefit and the cost inherent in the proposed requirements for written quality assurance performance plans ("QAPP"), especially one as detailed as the one plan in this proposed reporting rule. Not only is the proposal unnecessary because many reports will be based on more accurate, non-instrumental engineering calculations, but it is entirely inconsistent with reporting programs for nonattainment emissions inventories, TRI reports, Title V certifications and deviation reports, and other state annual emission inventory reporting. Requiring a QAPP, as outlined in the proposed rule, is not necessary for the successful implementation of the proposed reporting rule and EPA has failed to establish why it expects data quality issues, especially in view of the success of these other data reporting programs. Therefore, NEDA/CAP respectfully urges EPA to remove the detailed monitoring and related detailed QAPP and QA/QC requirements from the final GHG reporting rule.

Response: See the preamble for the response on the general recordkeeping requirements. The monitoring requirements and QA/QC requirements in the final rule are consistent with those found in all other state, regional, or international GHG reporting protocols and for the CEMS requirements for other air programs. Although they are consistent with other air programs and GHG reporting protocols, they are being included in this GHG reporting rule for those sources that may not be subject to those requirements because they are not subject to or participating in other programs.

Commenter Name: Angela Burckhalter
Commenter Affiliation: Oklahoma Independent Petroleum Association (OIPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0386.1
Comment Excerpt Number: 15

Comment: EPA proposes that reporting entities maintain a written QAPP. EPA states that, "At a minimum the QAPP shall include a detailed description of the procedures that are used for the following activities: (i) Maintenance and repair of all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHG emissions reported under this part. A maintenance log shall be kept. (ii) Calibrations and other quality assurance tests performed on the continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHG emissions reported under this part." Requiring a reporting entity to develop a QAPP is excessive and unreasonable, especially on small businesses. Many reporting entities will hire consultants to conduct maintenance, repair, and calibration of equipment because they don't have the manpower or expertise. We request EPA re-evaluate this requirement and develop a more reasonable and streamlined, easy to implement quality assurance process.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: Stewart T. Leeth
Commenter Affiliation: Smithfield Foods, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0553.1
Comment Excerpt Number: 17

Comment: Smithfield believes that the development of a written Quality Assurance Project Plan (QAPP) (Section 98.3 (g)) is excessive and overly burdensome. A QAPP is not a document that is developed in the ordinary course of business. Furthermore, preparing a QAPP is beyond the capabilities of most food processing and livestock operations without costly third party support. EPA should reduce the record keeping and QAPP requirements.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0425.1
Comment Excerpt Number: 20

Comment: According to Section III.E of the proposed rule, facilities subject to reporting requirements would be required to develop a Quality Assurance Project Plan (QAPP) for sample collection, handling, processing, etc. The proposed rule does not include required elements of a QAPP, but this requirement can have a major time and expense impact on businesses. EPA has greatly underestimated the costs of complying with this reporting rule for manure management facilities if a QAPP is required. Therefore, CIA strongly recommends the requirement for a QAPP be removed from the proposed rule.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: See Table 1
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0440.1
Comment Excerpt Number: 22

Comment: Recordkeeping The proposal is written such that each facility that would be required to submit an annual GHG report would also keep many different records, most of which appear reasonable. However, the requirement to develop a written Quality Assurance Project Plan (QAPP) (74 Fed. Reg. 16475) is excessive and overly burdensome.'° Typically, EPA requires a QAPP when some types of new environmental data are collected as part of a grant-funded project. A QAPP is not a document that is developed in the ordinary course of business. Given that the reporting requirement is not a voluntary or grant-funded effort, EPA should delete the requirement to develop a QAPP. The Title 5 program has an established set of precedents on how to manage reporting and quality control of air emissions data, and this program is an example of what is necessary to assure proper data quality. The quality of data obtained can best be managed through the application of standardized assumptions and emission factors provided by EPA.

Response: See the preamble for the response on the general recordkeeping requirements.

Commenter Name: J. Southerland
Commenter Affiliation: None
Document Control Number: EPA-HQ-OAR-2008-0508-0165
Comment Excerpt Number: 28

Comment: The EPA QAPP is mentioned several times in the proposal but if it was defined I overlooked it. This requirement can be a major drain on time and dollars, so should not be taken lightly and be thought through before projecting implementation. It would be a tough fit for this sort of process and in my opinion should be avoided where possible.

Response: See the preamble for the response on the general recordkeeping requirements.

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
James Greenwood	Valero Energy Corporation	EPA-HQ-OAR-2008-0508-0571.1 EPA-HQ-OAR-2008-0508-0571.2
Charles T. Drevna	National Petrochemical and Refiners Association	EPA-HQ-OAR-2008-0508-0433.1 EPA-HQ-OAR-2008-0508-0433.2

Table 3

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 4

COMMENTER	AFFILIATE	DCN
Chris Hobson	The Southern Company	EPA-HQ-OAR-2008-0508-1645.1
Quinlan J. Shea, III	Edison Electric Institute (EEI)	EPA-HQ-OAR-2008-0508-1021.1

Table 5

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

Table 6

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